

The Role of the Occupational Health Nurse in Workplace Health Management



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ABSTRACT

This document describes the role of the occupational health nurse in Europe, and whilst recognizing the wide variation that exists in occupational health nursing practice between different countries this document reflects the standards that have already been achieved in those countries where occupational health nursing is at its most advanced.

Within the WHO European Member States the discipline of occupational health is undergoing rapid development. This is largely due to the new demands and expectations from employers, employees and their representative bodies as they recognize the economic, social and health benefits achieved by providing these services at the workplace. The rapid development of occupational health services has also, in part, been driven by the expanding program of EU legislation in the areas of health, safety and environmental protection and the need by employers to respond to this legislation.

In addition occupational health services, provided at the workplace to address the health care needs of working populations have been identified as an important component of the public health strategy. These services can also make a significant contribution to other government initiatives, such as; reducing health inequalities, reducing social exclusion and sickness absence, and by protecting and promoting the health of the working population occupational health services can help to reduce the overall burden of ill health in Europe.

Occupational health nurses, as the largest single group of health care professionals involved in delivering health care at the workplace, have responded to these new challenges. They have raised the standards of their professional education and training, modernized and expanded their role at the workplace, and in many situations have emerged as the central key figure involved in delivering high quality occupational health services to the working populations of Europe. Occupational health nurses, working independently or as part of a larger multiprofessional team, are at the frontline in helping to protect and promote the health of working populations.

Keywords

OCCUPATIONAL HEALTH NURSING
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Target audience for this document includes:

- Policy-makers in the Ministries of Health, Education, Labour, Employment, and Environment as well as workplace health practitioners in Public Health, Health and Safety, and Economic Development institutions within WHO European Member States.
- Employers and employees and their representative bodies.
- The document will also be of interest to purchasers and providers of occupational health services, occupational health nurses, educators and other specialists in the field of occupational health

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Foreword

The occupational health services, provided by employers or governmental authorities in all countries of the WHO European Region to address the health promotion, health protection and health care needs of working populations have been identified as an important component of the public health system. These services can make a significant contribution to essential governmental initiatives, such as; increasing health equality, improving social cohesion, and reducing sickness absence. They help to reduce the overall burden of diseases in Europe. The rapid development of workplace health protective and preventive services has been driven by the WHO strategies and recommendations, the conventions of ILO as well as by the European Union legislation in the areas of health and safety at work and by the European Commission programme in public health. This was also largely due to the new demands and expectations from employers, employees and their representative bodies as they recognize the economic, social and health benefits achieved by providing these services at the workplace. These services provide the available knowledge and evidence necessary for the continuous improvement of workplace health management, but they also participate in this process.

Comprehensive workplace health management is a process involving all stakeholders inside and outside the enterprise. It aims at empowering them to take control over their own health and their family's health considering environmental, lifestyle, occupational and social health determinants and quality of health care. It is based on health promotion principles and it creates a great challenge to health, environment and safety professionals providing services, advice, information and education to social partners at work. It involves also taking care of considerable socioeconomic interest of all involved stakeholders. It has been shown in several instances that the enterprises acting on the well-regulated market can gain competitive advantage by:

- Protecting human health against health and safety hazards occurring in the work environment

- Promoting human health, workplaces for all ages and healthy aging by appropriate work culture, work organization and support to social cohesion
- Promoting mental health, healthy life style and preventing major non-communicable diseases using specific workplace health policies and management tools
- Maintaining work ability thus also employability throughout working life
- Reducing health care costs caused by employees' and employers' injuries, diseases, illnesses and premature retirement resulting from or influenced by occupational, environmental, life style and social health determinants
- Using resources effectively and efficiently and protecting the natural environment and creating health supportive environment.
- Improving societal communication and literacy on health, environment and social cohesion.

This document describes the panorama of various roles undertaken by the occupational health nurses in Europe. Whilst recognizing the wide variation that exists in occupational health nursing practice between different countries this document reflects the roles that have already been achieved in some countries where occupational health nursing is at its most advanced. However it has to be recognized that the level of education and professional skills, the existing national legislation determines what role can be actually undertaken by occupational health nurse in various countries. Even more important is to remember that none out of the existing workplace health professions is now capable to meet all health needs of the working population. Many as the optimal approach to workplace health management advocate the concerted action of various professional and social partners at work. In Europe the workplace health services use the skills of many professionals such as physicians, safety engineers, occupational hygienists, nurses, ergonomists, physiotherapists, occupational therapists, middle-grade safety experts, laboratory technicians, psychologists and

other specialists. The role and tasks actually performed for the enterprises by representatives of different health and safety professions vary greatly in the European countries depending upon legislation, scope of the workplace health concept perceived by major stakeholders, enforcement practice, the level of their education, position in the occupational health infrastructure, actions undertaken by insurance institutions and many other factors.

Occupational health nurses, as the largest single group of health professionals involved in delivering health services at the workplace, have important role to play in the workplace health management. They are at the frontline in helping to protect and promote the health of working populations.

Editors would like to express appreciation to all the participants in this workshop who have contributed to the preparation, review and amending of this document. Editors are also grateful to many of our colleagues who, although they were not able to participate in the workshop, submitted their remarks and suggestions for improvement of the first draft. Their careful and valuable comments have, as far as possible, been incorporated into the final version.

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1. Introduction

This document describes the role of the occupational health nurse in workplace health management, a new and exciting concept that is designed to improve the management of health and health related problems in the workplace (1). Specialist occupational health nurses can play a major role in protecting and improving the health of the working population in Europe as part of this strategy.

Occupational health nurses can also make a major contribution to the sustainable development, improved competitiveness, job security and increased profitability in enterprises and communities by addressing those factors which are related to the health of the working population. By helping to reduce ill health occupational health nurses can contribute to the increased profitability and performance of organizations and reduce health care costs. Occupational health nurses can also help to reduce the externalization of costs onto the taxpayer, by preventing disability and social exclusion, and by improving rehabilitation services at work. By protecting and promoting the health of the working population, and by promoting social inclusion, occupational health nurses can also make a significant contribution towards building social capital in Europe.

This document provides guidance to employers and employees on establishing workplace health management systems within their own organizations. On how to determine and develop the role and functions of the occupational health nursing specialist within each enterprise and where to go for additional help and advice in relation to occupational health nursing.

1.1.Changing nature of working life and the new challenges

The world of work has undergone enormous change in the last hundred years. To a large extent the very heavy, dirty and

dangerous industries have gone, and the burden of disease, which came with them, in most European countries, has declined (2). However, the new working environments and conditions of work that have replaced them have given rise to new and different concerns about the health of the working population (3). Exposure to physical, chemical, biological and psychosocial risk factors at work are now much more clearly linked to health outcomes in the mind of the general public. Expectations of society in regard to health at work have also changed, with increasing demands for better standards of protection at work and for the improvement of the quality of working life. Employers are also recognising that health-related issues, such as sickness absence, litigation and compensation costs, increasing insurance premiums, are expensive, ignoring them can lead to serious economic consequences. The best employers' emphasise the important message that good health is good business, and that much can be achieved in this field simply by introducing good management practices (4).

1.2. The need for improved workplace health management

There are approximately 400 million people who work in the WHO European Member States. The majority of whom spend more than one half of their waking life at work. However, fatal accidents at work are still common. The standardized incident rates per 100,000 workers in the European Union (5) show that the fatal accident rate varies between 1.6 in the UK to 13.9 in Spain, with Austria, Greece, France, Italy and Portugal all above 5.0%. In the entire European region there are approximately 200 to 7500 non-fatal accidents per 100,000 employees per year, of which around 10% are severe leading to over 60 days absence from work, and up to 5%, per year, lead to permanent disability (6).

It has been estimated that the total cost to society of work related injuries and ill health in the European Union is between

185 billion and 270 billion ECU per year, which represents between 2.6% to 3.8% of Gross National Product (GNP) in member states. These figures are comparable to the total Gross Domestic Product (GDP) of Austria (198 billion) and Belgium (214 billion) in 1999 (7). The cost of workplace accidents and ill health, in both financial and human terms, remains an enormous, largely unrecognized, burden in Europe. The majority of those accidents and diseases could have been prevented if appropriate action had been taken at the workplace. Many responsible employers have consistently demonstrated that by paying attention to these issues this type of harm and the subsequent costs can be avoided, to the benefit of everyone concerned.

Of increasing concern in Europe is the growing awareness of occupational stress. Up to 42% of workers in a recent survey complained about the high pace of work (8). Job insecurity, fear of unemployment, lack of a regular salary and the potential loss of work ability are all additional sources of stress, even for those in employment (9). The wide ranging social and health effects of occupational stress on the health of the working population are well documented, for example in the second European survey on working conditions, 23% of workers surveyed claimed that they had been absent from work for work related health reasons in the previous twelve months. (10).

The resulting cost of sickness absence in Europe is considered to be substantial (11):

- In the UK 177 million working days were lost in 1994 as a result of sickness absence; this has been assessed at over £11 billion (**13.2 billion ECU**) in lost productivity.
- In Germany employers paid up to DM 60 billion (**30.5 billion ECU**) in 1993 for social security insurance to cover the costs of payments to their workers for absence from work.

- In Belgium, with an absence rate of about 7%, paid 93 Billion BFR (**2.4 billion ECU**) on sickness benefits in 1995 and 21 billion BFR (**0.6 billion ECU**) on benefits for work accidents and occupational diseases, which is altogether about 1.000 ECU per employee.
- The two thousand largest enterprises in Portugal lost 7.731 million working days as a result of illness and 1.665 million working days as a result of accidents in 1993. This is 5.5% of all working days at these companies.
- In the Netherlands the absence rate was 8.3% in 1993, and the number of disabled persons increased up to 921,000 (14.2 % of the work force). The costs of the benefits for these conditions were about 35 billion NLF (**16.6 ECU**) 4.1 billion ECU for benefits on sickness absenteeism and 12.5 billion ECU for disability benefits.

Much of this burden of ill health and the resulting sickness absence is caused, or is made worse, by working conditions. Even where the ill health is not directly caused by work, but by other non occupational factors such as smoking, lifestyle, diet etc. interventions designed to improve the health of the working population, delivered at the workplace, may help to reduce still further the burden of ill health in Europe. At present the socioeconomic impact of environmental pollution caused by industrial processes on the working population is uncertain, but it is likely to contribute further to the burden of ill health in some communities.

1.3. The role of the World Health Organization and International Labour Organisation

To assist countries in addressing these problems the 49th World Health Assembly endorsed the Global Strategy: Occupational Health for All (12). Preventing occupational accidents and

diseases, protecting workers health and improving the quality of working life is one of the priority objectives of the International Labour Organisation (ILO). The ILO Conventions, particularly 155 (13) and 161 (14) as well as the Recommendations and Resolutions in the field of occupational health and safety represent important agreements between nations on strategies to improve workers health and safety, and by so doing contribute to sustainable economic and social development within those nations.

The Twelfth Session of the Joint ILO/WHO Committee on Occupational Health revised the definition of occupational health in 1995 (previously agreed in 1950) to focus primarily on three key objectives (16):

1. The maintenance and promotion of workers' health and working capacity.
2. The improvement of working environment and work to become conducive to safety and health; and
3. The development of work organization and working cultures in a direction, which supports health and safety at work and in doing so also, promotes a positive social climate and smooth operation and may enhance the productivity of the undertaking.

The concept of working culture is intended, in this context, to mean a reflection of the essential value systems adopted by the undertaking concerned. Such a culture is reflected in practice in the managerial systems, personnel policies, and principles for participation, training policies and quality management of the undertaking.

This change demonstrates a broadening of the concept of occupational health from its traditional primary role in preventing occupational injury and disease, which is still important, to extend further to include both occupational and non-occupational workplace preventable diseases. Efforts to

maintain work ability, prevent disability, promote early rehabilitation and address all of the factors, which have an impact on the health of the working population, now fall clearly within the remit of occupational health.

It is recognized that state authorities, or inspection and enforcement agencies alone cannot address these problems, but government agencies, industry, trade unions, employees and health care professionals must be involved in a partnership approach. By demonstrating that good Workplace Health Management (1) is a key part of good business management, with many economic, health and social benefits, including increased productivity, reduced staff turnover, improved attendance and better motivation within the enterprise, it is hoped that all enterprises will recognize the important benefits which this approach is intended to achieve.

1.4. The London Declaration - a new political commitment

The Third Ministerial Conference on Environment and Health organized by the WHO Regional Office for Europe in London in June 1999 (17) introduced and supported a holistic concept of health, environment and safety management in industrial and other enterprises. The Ministers stated in the London Declaration:

“We recognize the importance of instituting workplace measures to meet public health needs and goals, and the right of workers to be involved in the decision-making process on those measures. We will promote good practice in health, environment and safety management in enterprises, in collaboration with stakeholders in our countries such as local authorities, enforcement agencies, business (including small and medium-sized enterprises), trade unions, NGOs, social and private insurance institutions, educational and research institutions, auditing bodies, and providers of prevention services. The

current regulatory frameworks and economical appraisal related to health and safety should be, if necessary, strengthened for this purpose and self-regulatory mechanisms (voluntary initiatives and agreements) should be used as complementary measures. We invite WHO and the International Labour Organization to work together to assist countries in developing processes, involving all stakeholders, for implementation of environmental practice which also promotes public health, and to develop close co-operation with the European Commission to assist the candidate countries for membership of the European Union to meet their obligations.”

There is growing awareness of the great potential for the new reoriented occupational health to assist in achieving the major objectives of the national public health and environmental health agenda in Europe (18). This can be achieved through the development of good practice in health, environment and safety management in the enterprises (in short - Workplace Health Management) that is underpinned by new workplace health policies developed to address the enterprise level (1).

2. Workplace Health Management

There are four key components of workplace health management:

- Occupational Health and Safety
- Workplace Health Promotion
- Social and lifestyle determinants of health
- Environmental Health Management

In the past occupational health policy was frequently driven solely by compliance with legislation. Thus in some countries like the Countries of Central and Eastern Europe (CEE) or Newly Independent States (NIS) health and safety legislation was very detailed with an attempt to describe almost every

procedure needed for appropriate health and safety practice. In the new approach to workplace health management, policy development is driven by both legislative requirements and by health targets set on a voluntary basis by the working community within each enterprise.

In order to be effective Workplace Health Management needs to be based on knowledge, experience and practice accumulated in three disciplines: occupational health, workplace health promotion and environmental health. It is important to see workplace health management as a *process* not only for continuous improvement and health gain within the enterprise, but also as framework for involvement between various agencies in the community. It offers a platform for co-operation between the local authorities and business leaders on community development through the improvement of public and environmental health and contributes towards the development of social capital. Social capital is understood here as the capacity of the local community to provide all of its citizens with a good living and working life in a sustainable way.

Workplace health management implies that industrial enterprises and other organizations actively manage their health, environment and safety performances. The Agenda 21 (19) endorsed at the United Nations Conference on Environment and Development, in Rio de Janeiro (1992) pointed out in Chapter 6 that; the linkage of health, environmental and socioeconomic improvement requires intersectional efforts. Such efforts, involving education, housing, public works and community groups, including businesses, schools and universities and religious, civic and cultural organizations, are aimed at enabling people in their communities to ensure sustainable development. Further on in Chapter 30 of the Agenda 21 it is emphasized that business and industry, including transitional corporations, should recognize environmental management as among the highest priorities and as a key determinant to sustainable development”.

2.1. The Healthy Workplace setting - a cornerstone of the Community Action Plan

The Luxembourg Declaration of the European Union Network for Workplace Health Promotion (WHP) (November 1997) (20) defined WHP as the combined effort of employers, employees and society to improve the health and wellbeing of people at work

This can be achieved through a combination of:

- improving the work organization and the working environment
- promoting active participation of employees in health activities
- encouraging personal development

Workplace health promotion is seen in the EU network Luxembourg Declaration as a modern corporate strategy which aims at preventing ill health at work and enhancing health promoting potential and wellbeing in the workforce. Documented benefits for workplace health programs include decreased absenteeism, reduced cardiovascular risk, reduced health care claims, decreased turnover, decreased musculo-skeletal injuries, increased productivity, increased organizational effectiveness and the potential of a return on investment (21,22). However, many of these improvements require the sustained involvement of employees, employers and society in the activities required to make a difference. This is achieved through the empowerment of employees enabling them to make decisions about their own health. Occupational Health Nurses are well placed to carry out needs assessment for health promotion initiatives with the working populations they serve, to prioritize these initiatives alongside other occupational health and safety initiatives which may be underway, and to coordinate the activities at the enterprise level to ensure that initiatives which are planned are delivered (23,24)

In the past occupational health services have been involved in the assessment of fitness to work and in assessing levels of disability for insurance purposes for many years. The concept of maintaining working ability, in the otherwise healthy working population, has been developed by some innovative occupational health services. In some cases these efforts have been developed in response to the growing challenge caused by the aging workforce and the ever-increasing cost of social security. Occupational health nurses have often been at the forefront of these developments.

There is a need to develop further the focus of all occupational health services in Europe to include efforts to maintain work ability and to prevent non-occupational workplace preventable conditions by interventions at the workplace. This will require some occupational health services to become more pro-actively involved in workplace health promotion, without reducing the attention paid to preventing occupational accidents and diseases. Occupational health nurses, with their close contact with employees, sometimes over many years, are in a good position to plan, deliver and evaluate health promotion and maintenance of work ability interventions at the workplace.

Health promotion at work has grown in importance over the last decade as employers and employees recognize the respective benefits. Working people spend about half of their non-sleeping day at work and this provides an ideal opportunity for employees to share and receive various health messages and for employers to create healthy working environments. The scope of health promotion depends upon the needs of each group. Some of the most common health promotion activities are smoking cessation, healthy nutrition or physical exercise programs, prevention and abatement of drug and alcohol abuse. However, health promotion may also be directed towards other social, cultural and environmental health determinants, if the people within the enterprise consider that these factors are important for the improvement of their health, wellbeing and

quality of life (25). In this case factors such as improving work organization, motivation, reducing stress and burnout, introducing flexible working hours, personal development plans and career enhancement may also help to contribute to overall health and wellbeing of the working community.

2.2. The Healthy Community setting

In addition to occupational health and workplace health promotion there is also another important aspect to Workplace Health Management. It is related to the impact that each enterprise may have on the surrounding ambient environment, and through pollutants or products or services provided to others, its impact on distant environments. Although the environmental health impact of enterprises is controlled by different legislation to that which applies to health and safety at work (26), there is a strong relationship between safeguarding the working environment, improving work organization and working culture within the enterprise, and its approach to environmental health management. Many leading enterprises already combine occupational health and safety with environmental health management to optimally use the available human resources within the enterprise and to avoid duplication of effort. Occupational health nurses can make a contribution towards environmental health management, particularly in those enterprises that do not employ environmental health specialists.

The strengthening of environmental management in enterprises in order to promote a process of continuous improvement was one of major commitments reached at the Fourth Ministerial "Environment for Europe" Conference, Aarhus, Denmark, June 1998 (27). As specified in the Policy Statement on Environment Management in Enterprises in CEEC/NIS prepared by the Environmental Action Plan (EAP) Task Force Secretariat the commitment should involve all relevant Ministries or preferably the government as a whole. The governments should invite all relevant stakeholders to commit themselves to support

this process as well as establish a policy framework that provides appropriate incentives for enterprises to adopt good environment management practices in enterprises.

The UNEP International Declaration on Cleaner Production in 1998 (28) defines it as “the continuous application of an integrated, preventive environmental strategy applied to processes, products and services to produce economic, health, safety and environmental benefits”. The Declaration promotes the use of sustainable production and consumption practices. It is certain that workplace health management in enterprises can be used to help fulfil the above commitments reached in Aarhus and by those who sign the UNEP Declaration.

Workplace health management, as defined in the new workplace health policies developed at the enterprise level, are therefore seen to be vital for the improvement of living and working conditions in Europe, for building human resources, and for the eco-efficient use of natural resources. Improving and sustaining the use of human and natural resources and being innovative and competitive, is not only important for the success of the enterprise itself, but also for the health and safety of its employees, the quality of working life and for the protection of the local and wider environment.

3. New Workplace Health Policies

3.1. Key steps in developing workplace health policies

The direct commitment of senior management and the participation of employees in the development of workplace health policies are an essential prerequisite to the successful implementation of policies that are designed to address the real needs of the working community.

The following main steps and/or activities should be considered in the development and implementation of workplace health management at the enterprise level:

- develop a short policy statement from the employer or senior executive that explicitly states senior management's commitment to and acceptance of responsibility for the workplace health management strategy within the enterprise.
- educate managers and workers on the impact of environmental, occupational and lifestyle determinants on their health and social wellbeing and on the economic situation and competing ability of the enterprise to facilitate their participation in workplace health management
- determine the role of the medical, nursing, environmental and safety experts and other professionals needed to assist in the implementation of the workplace health management strategy in the enterprise
- discuss economic appraisal of existing and projected outcomes to health, safety, and environmental health from the activities of the enterprise (the material flow analysis guidelines of UNEP may be particularly useful).
- train staff in quality management principles and standards to be used for the workplace health management system. These are the same as those applied to quality assurance in the management of manufacturing, servicing or marketing operations
- assure participation of management and employees in the development and implementation of workplace health management systems in the enterprise
- develop adequate tools for monitoring and evaluation of health, safety, social, economic and environmental

outcomes (resources used and pollution/waste created = material flow) to determine the impact on wellbeing of employees and competitiveness of the enterprise

- introduce systematic internal auditing and evaluation to be able to make necessary adjustments to the workplace health management system of the enterprise.
- external audit by a recognized certifying body, if necessary.

3.2. Key steps in implementing workplace health policies

The prerequisite for establishing good practice in workplace health management in enterprises is the conscious and creative support as well as the fullest possible participation of senior management, employees and their trade union representatives. They would co-operate in the development of the workplace health policy and in its implementation with the assistance of appropriate experts, e.g. from occupational health services, environmental health services or health promotion agencies, preferably from multidisciplinary preventive services. Quality management systems and internal and external auditing is believed to be supportive to the creation and maintenance of a healthy enterprise (29).

Leading enterprises are increasingly integrating their health management and environment management into the overall corporate management system. The health and environment policy of the enterprise determines targets, define processes, and assure financial and human resources necessary to act on the health determinants and improve social and physical environments in order to:

- create the greatest gain in health and working ability for the entire staff,
- and if possible, also for their families

- provide a safe and healthy working environment for employees
- while preserving the general environment and health of people living outside the premises
- provide healthy and environmentally friendly products and services
- ensure human rights of the entire staff
- build up social capital.

4. Key benefits of workplace health management

Economic growth has been fundamental to the general improvement in health in the Region during the last century. Health gain was achieved within a process of building up social capital and also as a result of increasing investment in improving the working environment, housing, nutrition, education, and health care and by addressing the other needs of the whole population. Economic development has also recently been associated with increased investments to reduce or eliminate pollution of different environmental media. However, major differences in health status and economic development still persist between countries of the European Region, and these differences are largely associated with the economic and social policies dominating in a particular country (30).

The average age of the work force is increasing very rapidly in several European countries (31). With the current disability pension systems, a major proportion of the aged work force fraction will be assumed to leave working life, and this trend will inevitably be enforced by a higher rate of long-term unemployment amongst the elderly work force. There is a need for a major reconsideration of the social policy and social insurance policy in Europe, with an investment in protecting and

promoting the working ability of the economically active working population. The current trends will otherwise lead to considerable problems in financing social security systems and maintaining the important safety net that they provide. This will require changes to the social security systems which operate in Europe to include systems of incentives that reward active participation in working life and early return to work following any period of illness or infirmity. The active participation of employers, and their occupational health services, will be required to achieve these goals. Occupational health nurses are well placed to initiate, support and evaluate interventions which can be used to promote early, safe and successful rehabilitation programs at the workplace. Investment in protection and promotion of health, may not only support the wellbeing of the individual, but can be justified on purely economic grounds. The World Development Report (32) indicates that improved health can contribute to economic growth in four ways.

1. it reduces production losses caused by worker illness;
2. it permits the use of natural resources that had been totally or nearly inaccessible because of disease;
3. it increases the enrolment of children in school and makes them better able to learn and increase their opportunity to have higher income in future; and
4. it frees for other uses resources that would be spent on treating illness.

The implementation of the new workplace health management in the enterprises that respond to national policies in public health, health and safety, workplace health promotion and environmental health management, as part of a comprehensive workplace health management system can expect to reap some or all of the following benefits.

Economic benefits

- improves sustainable development at a national and enterprise level
- helps to protect the economic independence of the working population
- improved integration of disabled people into the economically active workforce
- increased productivity, competitiveness and profitability
- increased probability of economic investment
- improved self-regulation and adjustment of insurance system to seek benefits of preventives activities
- increase probability of reduce social insurance premium
- increase probability of reduced costs of health care system
- more efficient use of existing knowledge and skills
- improved economic stability

Health benefits

- increase life expectancy
- increase disability-free life expectancy
- increase working ability
- increased age of employees' working potential
- increase proportion of employees free from occupational and work related diseases and injuries
- increase percentage of employees and pensioners free from serious disability due to chronic communicable diseases
- increased proportion of society with healthy lifestyle

- increased equity in health between different professions, economic sectors and countries

Social and wellbeing benefits

- improved social image of enterprise
- improved self-esteem of employees
- increased quality of working life
- improved compliance with existing legislation
- increase employment opportunities for people with slight work disability due to chronic diseases or injuries
- increased participation of employees in organization of their own work
- increased awareness of society on social, environmental, occupational and lifestyle health and wellbeing determinants
- increase knowledge on effective use on natural resources
- increased professional skills of employees
- increase managerial skills of employees
- increase ability of employees to cope with demands of working life
- increased knowledge of employees on legal requirements and their rationale concerning health and safety at work and environment management in enterprises
- increase employability
- increase potential for social justice
- increase awareness of characteristics and social value of good enterprise management

- increased transparency in HESM evaluation and decision making process
- broader role of enterprise in social capital development
- increased efficiency in using scientific research results in building up social capital
- increase society awareness of determinants of sustainable production and consumption
- increased efficiency of building up social capital through better understanding, confidence and mutual support of political, social and economic society leaders

Environmental benefits

- increased efficiency in using natural recourses
- increased number of enterprises with improved pollution prevention mechanisms and reduced wastes
- increased number of enterprises managing environmental issue in compliance with legal requirements
- increased number of enterprises managing environmental issue using principles and methods of such strategies as Cleaner Production, Eco-efficiency, Green Productivity, and Pollution Prevention

Occupational health nurses, working independently or as part of a multiprofessional occupational health service can make a significant contribution to the achievement of these goals. As occupational health nurses are the single largest group of health care professionals involved in delivering occupational health services in Europe their active participation in and support of Workplace Health Management (1) is essential if this strategy is to succeed.

5. The development of multiprofessional occupational health services

During the last fifty years a need to reduce the rate of occupational accidents and diseases, and to address the economic burden that arises from workplace accidents and diseases onto the tax payer through the externalization of costs, has forced the social partners (employers, employees, governments) to establish infrastructures for occupational health within member states. These infrastructures are supported by specific legislation in most European countries, such e.g. as Finland, Germany, Netherlands, France, Poland, Portugal, Russian Federation and many others.

The organization of the national infrastructure to support employers to fulfil their legal obligation in health and safety at work was to a large extent guided by the ILO conventions. The ILO Occupational Safety and Health Convention, No 155 (13) and its Recommendation, No 164 (14), provide for the adoption of a national occupational safety and health policy and prescribe the actions needed at the national and at the enterprise levels to promote occupational safety and health and to improve the working environment. The ILO Occupational Health Services Convention, No. 161 and its Recommendation, No. 171 (33), provide for the establishment of occupational health services, which will contribute to the implementation of the occupational safety and health policy and will perform their functions at the enterprise level.

EU Legislation. The framework Council Directive (80/391/EEC) (15) on the introduction of measures to encourage improvement in the safety and health of workers at work defines the employer's responsibilities for providing all of the necessary information concerning safety and health risks, and the protective and preventive measures required (Article 10), obligation for consultation with and the participation of workers in health and safety (Article 11), the employer's responsibility

for providing training (Article 12) and health surveillance (Article 14). The framework Directive also states that the employer shall enlist competent external services or persons if appropriate services cannot be organized for lack of competent personnel within the undertaking (Article 7).

Therefore, the framework Directive greatly strengthened the concept of addressing the issue of health and safety at work by using multiprofessional occupational health services, and in encouraging the active participation of employers and employees in improving working conditions and environments.

The organization and scope of occupational health is constantly changing within member states to meet new demands from industry and society, therefore the infrastructures which have been created for occupational health are also undergoing continuous improvement.

Occupational health is primarily a prevention-orientated activity, involved in risk assessment, risk management and pro-active strategies aimed at promoting the health of the working population. Therefore the range of skills needed to identify, accurately assess and devise strategies to control workplace hazards, including physical, chemical, biological or psychosocial hazards, and promote the health of the working population is enormous. No one professional group has all of the necessary skills to achieve this goal and so co-operation between professionals is required. Occupational health is not simply about identifying and treating individuals who have become ill, it is about taking all of the steps which can be taken to prevent cases of work related ill health occurring. In some cases the work of the occupational hygienist, engineer and safety consultant may be more effective in tackling a workplace health problem than the occupational health nurse or physician. The multiprofessional occupational health team can draw on a wide range of professional experience and areas of expertise

when developing strategies, which are effective in protecting and promoting the health of the working population.

Because 'Occupational Health' largely evolved out of what was industrial medicine there is often confusion between the terms 'Occupational Health' and 'Occupational Medicine'. The distinction between the two has recently been clarified in the WHO publication Occupational Medicine in Europe: Scope and Competencies (34) In this document it states that

"Occupational medicine is a speciality of physicians, occupational health covers a broader spectrum of different health protective and promotional activities."

It is clear that the medical examination, diagnosis and treatment of occupational disease are the sole preserve of the occupational physician. It is only the physicians who have the necessary skills and clinical experience to perform this function in the occupational health team. However, with increasing attention being paid to the prevention of hazardous exposure and improved risk management there should be less need for extensive routine medical examinations and hopefully fewer occupational diseases to diagnose in the future. Therefore, it is likely that more occupational physicians will want to move into the broader modern field of preventative occupational health than in the past. However, at this point, where the physician stops using the skills learnt in medical school and starts to enter the workplace to examine working conditions, there is a much greater overlap between the core areas of knowledge and competence between occupational physicians, now practising occupational health, and other occupational health experts, such as occupational hygienists, safety engineers and an increasing number of occupational health nurses.

The occupational physicians, in their scope and competencies document, acknowledge that there is no longer any requirement for the physician to be automatically chosen to manage the

occupational health team. The person, from whatever discipline, with the best management skills should manage the multiprofessional occupational health team in order to ensure that the skills of all of the professionals are valued and fully utilized.

5.1. The occupational health team

The professionals involved in the occupational health team includes, some or all of the following:

1. occupational health nurses
2. occupational health physicians
3. industrial hygienists
4. safety engineers
5. work organization specialists
6. psychologists
7. counsellors
8. physiotherapists.
9. ergonomists
10. health economists
11. academic researchers and others.

Occupational health services in Europe vary widely, however, the majority of services are still predominantly composed of occupational health nurses and physicians with other specialists employed in smaller numbers or on a part time basis. In some countries occupational health services and safety services within the same enterprise are not combined. However, the modern approach to workplace health management requires close co-operation and collaboration between all of the experts, company management and employees (35).

Increasingly commercial organizations have also recognized the economic, social and health benefits achieved by providing protective and preventive services at the workplace and have, even where no legal requirement exists, developed their own in house services to address these problems. These independent health services, funded by the enterprises, are often linked through national or regional professional groups and can help to support national programmes aimed at improving the health of the population.

5.2. Nursing staff

There are at least three types of ‘nurses’ commonly found working in occupational health services.

Nursing assistants

The nursing assistant or nursing aid is a person without a professional nursing qualification who works as an assistant to, and under the supervision of, a qualified nurse. Nursing assistants are often involved in delivering basic nursing care, under supervision, and can play an important role in supporting nurses.

Registered nurses

The Registered Nurse is a fully trained nurse, with a professional qualification, but without specialist training in occupational health. These nurses, by virtue of their general nurse education, training and clinical experience can play a valuable part in the delivery of nursing services within the clinical setting. However, it would be beyond the level of competence that could be expected of these nurses to offer advice on issues that are, for example, related to working conditions, occupational exposure or employment legislation, without them having had the opportunity to undergo the necessary training and education to perform this role safely.

In some countries the professional bodies that govern nursing stipulate that the Registered Nurse should only perform those roles for which they have been trained and are competent to perform in order to safeguard the interest of the public.

Occupational health nurses

The Specialist Occupational Health Nurse is a fully trained Registered Nurse who, in addition to their general nursing education and training, will have undertaken an additional period of formal study in occupational health, leading to a recognized specialist qualification in occupational health nursing, most often at University degree level.

The role of the specialist occupational health nurse is primarily orientated towards:

- a) the prevention of occupational injury and disease through a comprehensive pro-active occupational health and safety strategy
- b) the promotion of health and work ability, by focusing on non-occupational, workplace preventable conditions that, whilst not caused directly by work, may affect the employees ability to maintain attendance or performance at work, through a comprehensive workplace health promotion strategy.
- c) Improving environmental health management, by reducing risk to the working population and the wider community, which contributes to the wider public health agenda

Occupational health nurses are the single largest group of health care professionals involved in workplace health management in Europe. In some WHO European Member States occupational health nurses are required by legislation. Even in those countries where there is no specific legal requirement to provide occupational health, such as in the UK, the practical nature and

level of expertise required to deliver high quality occupational health services, to large populations, means that large numbers of occupational health nurses are involved.

Whilst there is variation in the standards of nurse education between countries in Europe and differences in the preparation of occupational health nurses within different member states, some indication of the content of occupational health nursing education and training courses is offered at the end of this document. It should be recognized clearly that nurses in different member states operate within different health care systems and different health care cultures, and therefore not all nurses in Europe will have been prepared to practice at the same level.

6. Role of the Occupational Health Nurse in Workplace Health Management

The occupational health nurse may fulfil several, often inter related and complimentary, roles in workplace health management, including:

- Clinician
- Specialist
- Manager
- Co-ordinator
- Adviser
- Health educator
- Counsellor
- Researcher

6.1. The occupational health nurse as a unique 'frontliner'

Basic nursing education concerned as it is with the human being, lays a foundation for a nursing professional who can make a unique contribution to the health of the working population. Because of the nurse's direct access to workers, often on a daily basis, the nurse becomes the first point of contact for many health-related questions and problems. Workers will readily seek advice from an approachable, accessible health care professional that consciously makes the time to talk to them about their concerns. Occupational health nurses are skilled listeners and because of their independent role can often gather information from both management and staff, and help to seek the common ground between both when they are discussing matters related to health, social wellbeing and quality of working lives.

Questions asked of an occupational health nurse often go far beyond the traditional remit of occupational health. Workers will seek advice from their occupational health nurse on matters such as, whether they or their spouse should seek attention for some non work related condition, or ask how to access the best advice possible to help them resolve a health issue or personal problem at home, or may raise concerns about the health or safety performance of their managers or colleagues at work. Whilst these issues are not directly related to work, an emerging view is that any concerns that the worker has about his own or other health is relevant if it might affect his ability to concentrate, attend or perform well at work and by providing early advice and intervention long term problems can be avoided. The occupational health nurse needs to be able to respond to a wide range of questions and health related issues if they are to meet the needs of workers and some of this will be by having established close contacts with other nursing specialists in the community.

One of the unique characteristics in the role of the occupational health nurse is that the nurse is present at the place of work, readily accessible to the worker on the day that they have a problem. The workers know that the occupational health nurse is concerned with protecting and promoting the health of people at work, and therefore they do not need to have a specific 'medical complaint' in order to see the nurse or ask advice. Early intervention, providing the right advice and being in a position to support the worker can help to overcome many obstacles and because of the occupational health nurses close involvement with the working community, often over many years, they are in a good position to help workers return to work and normal functioning after a prolonged illness.

6.2. Variation in roles of occupational health nurses within member states

As has been discussed occupational health is organized in different ways throughout Europe and there is wide variation in the role, responsibilities and professional status of occupational health nurses employed in different countries. This variation is largely due to different levels of education and training for occupational health nurses in different countries, variation in the nurses social and professional status, academic qualifications, expertise, as well as the different legal requirements and health care cultures which exists in member states (37). However, the broad trend in Europe over the last 20 years has been away from the nurse acting as an assistant to the physician and towards the nurse working as an independent, autonomous professional who is responsible and accountable for his or her own professional practice (36). However, all health and safety professionals are interdependent, and the collaboration between occupational health nurse and occupational health physician is essential due to their common medical background. This does not prevent nurses from working as a member of a multiprofessional team, but rather can enhance their performance within that team,

alongside other professionals who are also professionally accountable for their own practice.

Even within different organizations within the same country there is often variation in the role of the occupational health nurse in workplace health management. This variation can be due to different needs and demands from within the organization or different expectations from management and to some extent on the ability of the organization to recognize and utilise fully the expertise available to them through their occupational health nursing staff (24).

7. Core areas of knowledge and competence

It is not possible to describe a highly complex and dynamic process such as occupational health nursing simply in terms of core activities or tasks. Occupational health nurses are constantly learning new skills, adapting current practices to meet new needs and developing new approaches to solving problems and therefore their practice is not static but is constantly improving based upon a core range of skills (38, 39, 40, 41). However, within this limitation it is possible to describe those core areas of knowledge and competence that occupational health nurses use. The following list is not intended to be exhaustive, but rather to give an indication of the wide range of competencies that occupational health nurses demonstrate in practice.

7.2. Clinician

Primary prevention

The occupational health nurse is skilled in primary prevention of injury or disease. The nurse may identify the need for, assess and plan interventions to, for example modify working environments, systems of work or change working practices in order to reduce the risk of hazardous exposure. Occupational

health nurses are skilled in considering factors, such as human behaviour and habits in relation to actual working practices. The nurse can also collaborate in the identification, conception and correction of work factors, choice of individual protective equipment, prevention of industrial injuries and diseases, as well as providing advice in matters concerning protection of the environment. Because of the occupational health nurses close association with the workers, and knowledge and experience in the working environment, they are in a good position to identify early changes in working practices, identify workers concerns over health and safety, and by presenting these to management in an independent objective manner can be the catalyst for changes in the workplace that lead to primary prevention.

Emergency care

The occupational health nurse is a Registered Nurse with a great deal of clinical experience and expertise in dealing with sick or injured people. The nurse may, where such duties form part of their job, provide initial emergency care of workers injured at work prior to transfer of the injured worker to hospital or the arrival of the emergency services. In many instances, where hazardous conditions exist at work, or where the workplace is far removed from other health care facilities, this role will form a major part of an occupational health nurse's job. Occupational health nurses employed in mines, on oil rigs, in the desert regions or in areas where the health care systems are not yet fully developed will be familiar with a wide range of emergency care techniques and may have developed additional skills in order to fulfil this role. For others, who are working in situations where the emergency services are on hand, they may simply provide an additional level of support beyond that provided by the industrial first aider.

Treatment services

In some countries occupational health services provide curative and treatment services to the working population, in other countries such activities are restricted. Where treatment services

are provided the occupational health nurse will be involved in delivering and monitoring these services, often in close contact with other primary care providers, such as the family doctor or general practitioner, or company physician, who is responsible for prescribing the particular course of treatment.

Nursing diagnosis

Occupational health nurses are skilled in assessing client's health care needs, establish a nursing diagnosis and formulating appropriate nursing care plans, in conjunction with the patient or client groups, to meet those needs. Nurses can then implement and evaluate nursing interventions designed to achieve the care objectives. The nurse has a prominent role in assessing the needs of individuals and groups, and has the ability to analyse, interpret, plan and implement strategies to achieve specific goals. By using the nursing process the nurse contributes to workplace health management and by so doing helps to improve the health of the working population at the enterprise level. Nursing diagnosis is a holistic concept that does not focus solely on the treatment of a specific disease, but rather considers the whole person and their health care needs in the broadest context. It is a health based model rather than a disease based model and nurses have the skills to apply this approach with the working populations they serve.

Individual and group care plan

The nurse can act on the individual, group, enterprise or community level. Where an individual health care plan is designed to meet specific objectives the occupational health nurse will, where appropriate and with the patients informed consent, liaise with their primary health care provided in order to ensure a comprehensive approach is maintained.

General Health advice and health assessment

The occupational health nurse will be able to give advice on a wide range of health issues, and particularly on their relationship

to working ability, health and safety at work or where modifications to the job or working environment can be made to take account of the changing health status of employees. In many respects employers are not solely concerned with only those conditions that are directly caused by work, but do want their occupational health staff to help address any health related problems that may arise that might influence the employees attendance or performance at work, and many employees appreciate this level of help being provided to them at the workplace because it is so convenient for them. In particular the development of health care services to men at work, younger populations and those from ethnic groups can be most effective in reaching these sometimes difficult to reach populations.

Research and the use of evidence based practice

In addition to utilising information and knowledge produced by research in various fields to support activities that relate to the occupational health component of their role, occupational health nurses will also utilise fully research information available from many fields to help support the general health of the working population.

7.2. Specialist

Occupational health policy, and practice development, implementation and evaluation

The specialist occupational health nurse may be involved, with senior management in the enterprise, in developing the workplace health policy and strategy including aspects of occupational health, workplace health promotion and environmental health management. The OH nurse is in a good position to advise management on the implementation, monitoring and evaluation of workplace health management strategies and to participate fully in each of these stages. Possibility to perform that role will depend upon level of nurse education, skills and experience.

Occupational health assessment

Occupational health nurses can play an essential role in health assessment for fitness to work, pre employment or pre placement examinations, periodic health examinations and individual health assessments for lifestyle risk factors. Collaboration with occupational physician may be necessary in many instances, depending upon existing legislation and accepted practice. The nurse can also play an important role in the workplace where informal requests for information, advice on health care matters and health related problems come to light. The nurse is able to observe the individual or group of workers in relation to exposure to a particular hazard and initiate appropriate targeted health assessment where necessary. These activities are often, but not exclusively, undertaken in conjunction with the medical adviser so that where problems are identified a safe system for onward referral exists.

Health surveillance

Where workers are exposed to a degree of residual risk of exposure and health surveillance is required by law the occupational health nurse will be involved in undertaking routine health surveillance procedures, periodic health assessment and in evaluating the results from such screening processes. The nurse will need a high degree of clinical skill when undertaking health surveillance and maintain a high degree of alertness to any abnormal findings. Early referral to an occupational health physician or other appropriate specialist will be the responsibility of the occupational health nurse where any abnormality is detected. The nurse will be involved in supporting the worker throughout any further examination or investigation, and may help to monitor their health on return to work. Once alerted to the possibility of an adverse health effect occurring the occupational health nurse is in a good position to co-ordinate efforts to re-evaluate working practices in order to help protect others who may be similarly affected.

Sickness absence management

Occupational health nurses can contribute by helping managers to manage sickness absence more effectively. The nurse may be involved in helping to train line managers and supervisors in how to best use the occupational health service, in how to refer staff, what type of information will be required, what to expect from occupational health. By developing transparent referral procedures, ensuring that medical confidentiality is maintained and that the workers rights are respected the occupational health nurse can do much to ensure that employees referred for assessment due to sickness absence are comfortable with the process. Occupational health nurses, with their close relationship with workers, knowledge of the working environment and trends in ill health in the company are often in a good position to advise management on preventing sickness absence.

Rehabilitation

Planned rehabilitation strategies, can help to ensure safe return to work for employees who have been absent from work due to ill health or injury. The occupational health nurse is often the key person in the rehabilitation programme who will, with the manager and individual employee, complete a risk assessment, devise the rehabilitation programme, monitor progress and communicate with the individual, the occupational health physician and the line manager. Occupational health nurses have also become involved in introducing proactive rehabilitation strategies that aim to detect early changes in health before such conditions result in absence from work. Improving and sustaining working ability benefits many groups, the individual, the organization and society, as costly absence and other health care costs are avoided. In many cases the occupational health nurse has to work within the organization as the clients advocate in order to ensure that managers appreciate fully the value of improving the health of the workforce. Occupational health nurses have the skills necessary to undertake this work and may develop areas of special interest.

Maintenance of work ability

The occupational health nurse may develop pro-active strategies to help the workforce maintain or restore their work ability. New workers, older workers, women returning to work following pregnancy or workers who have been unemployed for a prolonged period of time may all benefit from health advice or a planned programme of work hardening exercises to help maintain or restore their work ability even before any health problems arise. Increasingly the problems faced by industry are of a psychosocial nature and these can be even more complex and costly to deal with. Occupational health nurses, working at the enterprise level, are in a good position to advise management on strategies that can be adopted to improve the psycho-social health and wellbeing of workers.

Health and safety

The occupational health nurse can have a role to play in developing occupational health and safety strategies. Where large, or high risk, organizations have their own in house health and safety specialists the occupational health nurse can work closely with these specialists to ensure that the nurses expertise in health, risk assessment, health surveillance and environmental health management is fully utilized into the health and safety strategy. Occupational health nurses are trained in health and safety legislation, risk management and the control of workplace health hazards and can therefore make a useful contribution to the overall management of health and safety at work, with particular emphasis on 'health' risk assessment.

Hazard identification

The occupational health nurse often has close contact with the workers and is aware of changes to the working environment. Because of the nurses expertise in health and in the effects of work on health they are in a good position to be involved in hazard identification. Hazards may arise due to new processes or working practices or may arise out of informal changes to

existing processes and working practices that the nurse can readily identify and assess the likely risk from. This activity requires and presupposed regular and frequent work place visits by the occupational health nurse to maintain an up to date knowledge and awareness of working processes and practices.

Risk assessment

Legislation in Europe is increasingly being driven by a risk management approach. Occupational health nurses are trained in risk assessment and risk management strategies and, depending upon their level of expertise and the level of complexity involved in the risk assessment, the nurse can undertake risk assessments or contribute towards the risk assessment working closely with other specialists.

Advice on control strategies

Having been involved in the hazard identification and risk assessment the occupational health nurse can, within the limits of their education and training, provide advice and information on appropriate control strategies, including health surveillance, risk communication, monitoring and on the evaluation of control strategies.

Research and the use of evidence based practice

Occupational health nurses utilise research findings from a wide range of disciplines, including nursing, toxicology, psychology, environmental health and public health in their daily practice. The principal requirement for an occupational health nurse in practice is that they have the skills to read and critically assess research findings from these different disciplines and to be able to incorporate the findings into evidence based approach to their practice. Research in nursing is already well established and there is a small, but growing, body of evidence being created by occupational health nursing researchers who investigate occupational health nursing practices. Occupational health

nurses should ensure that they have access to and the skills necessary to base their practice on the best available evidence.

At the enterprise level occupational health nurses may be involved in producing management reports on for example sickness absence trends, accident statistics, assessment of health promotion needs and in evaluating the delivery of services, the effectiveness of occupational health interventions. Research skills and the ability to transfer knowledge and information from published research to practice is an important aspect of the role.

Ethics

Occupational health nurses, along with other health, environment and safety professionals in the workplace health team, are in a privileged position in society. They have access to personal and medical information relating to employees in the enterprise that would not be available to any other group. Society has imposed, by law, additional responsibilities on clinical professionals to protect and safeguard the interest of patients. The ethical standards for each discipline are set and enforced by each of the professional bodies. Breaches of these codes of conduct can result in the professional being removed from the register and prevented for practising.

Nurses have a long and well-respected tradition in society of upholding the trust placed in them by patients. This level of trust in the occupational health nurses professional integrity means that employees feel that they can be open, honest and share information with the nurse in the confidence that the information will not be used for other purposes. This allows the nurse to practice much more effectively than would ever be possible if that trust was not there. The protection of personal information enables a trusted relationship between employees and the nurse to be developed and facilitates optimum working relationships and partnership.

The International Commission on Occupational Health (ICOH) has published useful guidance on ethics for occupational health professionals' (42). This guidance is summarized in the following three paragraphs;

Occupational Health Practice must be performed according to the highest professional standards and ethical principles. Occupational health professionals must serve the health and social wellbeing of the workers, individually and collectively. They also contribute to environmental and community health

The obligations of occupational health professionals include protecting the life and the health of the worker, respecting human dignity and promoting the highest ethical principles in occupational health policies and programs. Integrity in professional conduct, impartiality and the protection of confidentiality of health data and the privacy of workers are part of these obligations.

Occupational health professionals are experts who must enjoy full professional independence in the execution of their functions. They must acquire and maintain the competence necessary for their duties and require conditions which allow them to carry out their tasks according to good practice and professional ethics.

7.3. Manager

Management

In some cases the occupational health nurse may act as the manager of the multidisciplinary occupational health team, directing and co-ordinating the work of other occupational health professionals. The OH nurse manager may have management responsibility for the whole of the occupational health team, or the nursing staff or management responsibility for specific programmes. The nurse manager may be the budget holder for the department and would have the skills necessary to

sit alongside other line managers within the organization and contribute to organizational development.

Administration

The occupational health nurse can have a role in administration. Maintaining medical and nursing records, monitoring expenditure, staffing levels and skill mix within the department, and may have responsibility for managing staff involved in administration.

Budget planning

Where the senior occupational health nurse is the budget holder for the occupational health department they will be involved in securing resources and managing the financial assets of the department. The budget holder will also be responsible for monitoring and reporting within the organization on the use of resources.

Marketing

Where the occupational health service is managed on an internal market system or undertakes commercial work the occupational health nurse will be involved in marketing services to customers. Even where no direct financial market exists the customers or users of an occupational health service will need information and advice on the best use of services to meet their needs – often within financial constraints. The occupational health nurse is well placed to discuss customers needs and expectations.

Service level agreements

Service level agreements are increasingly used in decentralized organizations in-order to ensure that both the user and provider of services has a clear agreement about the provision of services. The occupational health nurse may be involved in setting the service level agreements with internal or external customers and

in monitoring the delivery of services against pre determined service level agreements.

Quality assurance

As part of the delivery of a modern comprehensive occupational health service systems for quality assurance and quality improvement are essential. The occupational health nurse may be involved in quality assurance, audit and quality improvement initiatives, both for the delivery of services and for improving the professional standards within the department. Modern nursing practice is based on a philosophy of quality assurance and continuous quality improvement and therefore nurses can contribute to this development.

Professional audit

Audit and continuous quality improvement is an essential component of professional practice. The occupational health nurse will be involved in auditing the nursing practices within the department or in the wider clinical audit where all of the clinical team participate in multidisciplinary audit.

Continuing Professional development

The scope of professional practice in occupational health nursing is constantly developing. New information, new research, changes in legislation, improved practices, technology are all areas of constant growth. The occupational health nurse has an obligation to constantly update their knowledge and skills in order to maintain competence, deliver high quality services and meet the needs of the enterprises they serve. Within the profession a commitment to life long learning is expected in order to protect the client's safety; ensure the delivery of high quality nursing services and to maintain the appropriate level of competence for clinical practice. The nurse manager will be well placed to identify their own and their staffs' continuing professional development needs and to ensure that these are met in order to maintain the competencies of staff employed.

7.4. Co-ordinator

Occupational health team

The occupational health nurse, acting as a coordinator, can draw together all of the professionals involved in the occupational health team. In many instances the nurse will be the only member of the team who is permanently employed by the enterprise or present on a particular site. Therefore they have a unique position and have access to valuable information that can be used to help shape and direct the occupational health program. In this role the nurse would exercise skills in communication, planning, involvement, management and in organizing the professional team.

Worker education and training

The occupational health nurse has a role in worker education. This may be within existing training programmes or those programmes that are developed specifically by occupational health nurses to, for example, inform, educate and train workers in how to protect themselves from occupational hazards, non-occupational but workplace preventable diseases or to raise awareness of the importance of good environmental health management practices.

Environmental health management

The occupational health nurse, particularly in those organizations, such as SME's, who may not have a designated environmental health manager, can advise the enterprise on simple measures to reduce the use of natural resources, minimise the production of waste, promote re-cycling and ensure that environmental health management is placed on every organizations agenda. The occupational health nurse can also identify appropriate specialists in their locations to advise or deal with environmental health management. The occupational health nurse may contribute by taking these issues forward in the absence of other specialists.

7.4. Adviser

To management and staff on issues related to workplace health management

Occupational health nurses involved in workplace health management can sometimes be asked to act as advisers to management and staff on the development of workplace health policies and practices, and can fulfil an advisory role by participating in, for example, health and safety committee meetings, health promotion meetings, and may be called upon to provide independent advice to managers or workers who have specific concerns over health related risks.

As a conduit to other external health or social agencies

Occupational health nurses act in an advisory role when seeing individuals who may have problems that, whilst not directly related to work may affect future work attendance or performance. The nurse may be involved in advising individuals to seek advice from their own family doctor or general practitioner, or other external agency that may be better placed to assist the individual.

7.5. Health educator

Workplace Health promotion

Health education as one of the key prerequisites of workplace health promotion is integral aspect of the occupational health nurses' role. In some countries the nurse is required to support activities aimed at adoption of the of healthy lifestyles within on-going health promotion process, as well as participate in health and safety activities. Occupational health nurses can carry out a needs assessment for health promotion within the enterprise, prioritise activities in consultation with management and workers, develop and plan appropriate interventions, deliver or co-ordinate the delivery of health promotion strategies and

can play a valuable role in evaluating the delivery and achievements of the health promotion strategy.

7.6. Counsellor

In the small or medium sized enterprise the occupational health nurse may be the only health care professional present most of the time and they can assist people working there in dealing with mental health and work-related stress. For many people the occupational health nurse, working at the enterprise level, may be the first point of contact with health care providers and these nurses can do much to ensure that individuals are referred to the appropriate agency.

Counselling and reflective listening skills

Where the nurse has been trained in using counselling or reflective listening skills they may utilise these skills in delivering care to individuals or groups. As part of this approach there should be opportunities for the nurse to receive ongoing supervision and support and to have access to additional professional services to which particularly difficult cases can be referred or where additional expertise is needed in order to help the individual or group.

Problem solving skills

Due to the close working relationship which occupational health nurses have with the working population, and because of the nurses' position of trust, occupational health nurses are often approached for advice on personal problems. The nurse can use listening techniques and problem solving skills developed through nurse education and training to meet this need. The nurse can act as a useful resource for the organization and where necessary refer individuals on to the appropriate, skilled agencies to help them with their personal problems. This may be a clinical specialist such as physicians or psychologists, or to counsellors, employee assistance programmes etc.

7.7. Researcher

Health needs assessment

A specialist occupational health nurse will need to be well skilled in undertaking a nurse-based health needs assessment at both the individual and the organizational level. This type of assessment can be used as the basis for individual case management or occupational health program planning.

Occupational health nurses may use research based skills in carrying out the assessment, in handling the data generated in the assessment and in interpreting the results and advising management acting as a member of the multidisciplinary team.

Research skills

Nurses are becoming increasingly familiar with both quantitative and qualitative research methodologies, and can apply these in occupational health nursing practice. In the main, occupational health nurses working at the enterprise level, are more likely to use simple survey techniques, or semi-structured interviews, and to use descriptive statistical techniques in their presentation of the data.

Evidence based practice

Increasingly all health care providers are using an evidence-based approach to practice that requires the professional to seek the best available information on which to base their practice. Occupational health nurses are skilled in searching the literature, reviewing the evidence available, which may be in the form of practice guidelines or protocols, and applying these guidance documents in a practical situation. Occupational health nurses should be well skilled in presenting the evidence, identifying gaps in current knowledge, and allowing others to review critically the implementation of care plans based on their assessment of the evidence.

Epidemiology

The most widely used and accepted form of investigation into occupational related ill health and disease is based on large-scale epidemiological studies. Occupational health nurses are advised to become familiar with the principles and basic methods used in epidemiology.

Concluding remarks

As was indicated at the beginning of this chapter, the complex, highly dynamic processes used by occupational health nurses to deliver health care interventions to working populations in diverse organizations can not be described simply in a list of core competencies, but those described here represent some of the core competencies and areas of knowledge that occupational health nurses already use in some countries. An individual nurse, or group of nurses, may not be skilled in all of these areas of practice equally, but will develop and mould their practice to meet the needs of the populations they serve. In different countries different health care systems are in operation and occupational health nurses practicing in those settings will tailor their efforts to compliment the existing health care systems.

8. Guidance on determining the function of an occupational health nurse

Those responsible for the management of health, environment and safety matters at the enterprise level should consider the following guidance when determining what function the occupational health nurse specialist will fulfil within the enterprise. There may well be variation in the function of an occupational health nurse between different organizations depending on the needs and priorities of the working population and the health care system in which they are operating.

Some useful questions to consider are:

- Has a comprehensive health needs assessment been performed recently to identify the needs of the organization and to help with setting priorities for action?
- Has the workplace health management policy been reviewed and agreed in light of the needs assessment, taking into account both legislative demands and voluntary agreements?
- Have the goals of the occupational health service been defined clearly and communicated throughout the organization?
- Does the occupational health service have adequate resources to achieve these goals, including staff, expertise, facilities and management support?
- Is it clear how the performance of the occupational health service, or of individual professionals within that service, is to be evaluated and are there clear, objective criteria agreed.

The answers to each of these questions will help to shape the discussion about the role and function of the occupational health nursing specialist within a specific organization.

Workplace health management is most effective when there is:

- commitment from senior management
- active participation of employees and trade unions
- integration of company policies and clear targets for HES (health, environment and safety management)
- effective management processes and procedures
- adequate resourcing
- a high level of management competence, and

- rigorous monitoring of company performance using the principles of continuous quality improvement

Policy making should be based on legislation and on a voluntary agreements between social partners at work , covering the total concept of health, safety and wellbeing at work.

9. Evaluation of Performance

Evaluation can take place on three levels:

- a) company performance in the area of workplace health management
- b) contribution of the occupational health and safety service
- c) contribution of the individual occupational health nurse

All review procedures should be based on the principles of continuous quality improvement (43, 44, 45). The criteria and indicators against which performance is to be measured should be defined clearly as a part of the initial planning and contracting process so that everyone is clear about what performance indicators are being used.

Some caution is required if health measures are to be used as performance indicators for the occupational health service as much of the work of an occupational health service is orientated primarily towards the prevention of disease or injury or the reduction of risk. The success or failure of preventative strategies can be difficult to measure using health data on its own as it is sometimes uncertain to what extent a single intervention or programme of interventions can claim responsibility for preventing the effect. Furthermore, many health effects only become apparent a long time after initial exposure and sometimes only become apparent in particularly vulnerable individuals. Where prevention is dependent upon the

employee, the line manager or the organization following the advice of the occupational health professional, where this is not followed the adverse event may not necessarily indicate a failure on the part of the occupational health service, but rather a failure of the individual, manager or organization to respond appropriately to the advice they were given.

Evaluation can be based on the structure, input, process, output and outcome indicators, and both direct and indirect effects, positive or negative, can be taken into account when judging the relative success or failure of the service.

It is often useful to consider two inter-related aspects of occupational health practice in the evaluation process, the professional standards that underpin professional practice and the delivery of services within the organization.

Professional practice can be evaluated by, for example, evidence of participating in continuing professional development and adapting practices to take account of new knowledge, self-assessment of compliance with current best practice guidelines, regular internal and external peer review, or systematic audit of compliance with standards. The criteria used to evaluate professional practice should also take account of ethical standards, codes of practice and guidance from the professional bodies.

Evaluating service delivery can be done by, for example, comparing the delivery of services against pre determined service level agreements or contracts, including meeting agreed quality standards for services, through customer or client satisfaction surveys, or by assessing the adequacy of access to and level of uptake of services.

10. Education and training of occupational health nurse

As has been indicated the General Nurse education varies between different countries in Europe. In some the educational programmes are taught in schools of nursing which are based in polytechnic colleges or other training institutes, and the qualification awarded is sometimes at Diploma level. In other countries the General Nurse education is undertaken at undergraduate level within University departments leading to the award of a University Degree, with opportunities to study for higher degrees as a part of continuing professional development (36).

Variation in the entrance requirements for General Nurse educational programmes, differences in the length of the programmes and the depth of knowledge required to qualify as a Registered Nurse in different countries has led to Registered nurses being prepared and qualified at different levels within Europe. Steps are now being taken to harmonise the level of education and qualifications for nurses within the European Union.

Specialist Occupational Health Nurses

As has been discussed the specialist Occupational Health Nurse is a fully trained Registered Nurse who, in addition to their General nursing education and training, will have undertaken an additional period of formal study in occupational health, leading to a recognized specialist qualification in occupational health nursing, most often at University degree level (36).

There is some variation in the course content and standards that apply in the specialist occupational health nurse programs in different countries within Europe. However, the Federation of Occupational Health Nurses within the European Union (FOHNEU) (37) has prepared a core curriculum that reflects a

minimum standard for these courses (see Appendix 2). This core curriculum is currently being review by the FOHNEU members.

Annex 1

Professional associations active in occupational health nursing

World Health Organization Nursing Forum

International Committee on Occupational Health (ICOH) Scientific Committee on Occupational Health Nursing (SCOHN)

Federation of Occupational Health Nurses within the European Union (FOHNEU)

French Nurses Association, France

Association pour la Promotion de la Formation en Santé au travail (APRO FOST), France

Royal College of Nursing Society of Occupational Health Nursing (RCN SOHN), UK

Royal College of Nursing Occupational Health Nurse Managers Forum, UK

Dutch Nurses Association, Netherlands

The Association of Occupational Health Nurses, Sweden

The Association of Occupational Health Nurses, Finland

The Association of Occupational Health Nurses, Denmark

The Association of Occupational Health Nurses, Norway

Annex 2

Federation of Occupational Health Nurses within the European Union (FOHNEU) – Core curriculum.

Occupational health nursing as a profession

Occupational health nursing can be defined as follows:
it is a goal - oriented activity based on the client's needs which focuses on work and the working environment. The aim is to change the working environment in collaboration with the worker in order to maintain or improve health and safety for all individuals.

The occupational health nurse

- has her / his own professional responsibility
- is included in the OHS team as an independent professional
- is concerned with and has the responsibility to evaluate and
- develop her / his own work and methods used
- can have administrative management responsibility of her / his own work
- is an expert in health promotion in the work environment

The education of an occupational health nurse in general

Occupational health nursing aims to ensure the health, safety, optimum working capacity and the well-being of the working population. Occupational health nursing considers not only the individual but also the individual in his / her working environment. Continuous change in the working environment means changes in the

speciality of occupational health nursing and, in consequence, of the education of occupational health nurses.

Occupational health nursing education is a post graduate activity based on a life - long - learning principle.

Each nurse undertaking a course on this core curriculum should already have achieved the first level qualification of a nurse as established in the EU directives preferably with experience in public health care. The WHO recommendations regarding the education of a qualified nurse state that the education is health related instead of illness related and also includes knowledge in occupational health nursing. Ideally the student occupational health nurse would be a nurse qualified or graduated in public health nursing, but it is recognized that there may be many nurses in the EU working in industry, commerce or hospital services who do not meet this criteria. In consequence while this core curriculum is capable of being taught at a sophisticated level it can also be used as a syllabus for very basic occupational health learning.

Modules in occupational health nursing education

Education of occupational health nurses should be based on the nursing sciences. The scientific approach should be considered both in the education as well as in the methods used. The substance should be based on documented knowledge, evaluated and / or scientifically proved as well as empirical knowledge.

The settings in which training is given may vary in accordance with the health and educational structures of the country or region in which the education and training takes place. Part - time, modular or distance learning should not be excluded from planning programmes based on this curriculum.

To ensure that the professional occupational health nurse has the multiple skills and knowledge required we suggest the following modular training programme.

Occupational health nursing consists primarily of:

- interaction and collaborating skills and group interaction skills
- educational informative counselling and training skills
- dynamics of communication
- administration of occupational health services
- develop nursing science and research

The education programme is focused on the occupational nursing process. The contents in the modules develop and support the occupational health nurse's working process.

1. Module - health promotion in oh nursing

- Activities supporting and promoting working capacity and the methods used
- Working environment hazards and their effects on health
- Environmental surveys and follow - up
- Labour protection / Legislation
- Ecological health care

2. Module - the work of an occupational health nurse and interaction

- Fundamentals of nursing in OHS
- Development of the work of an OHN
- Marketing and communication methods

3. Planning an occupational health service

- Current questions concerning health policy
- OHS as a part of the health care system

- Working life and legislation on work
 - Health economics
 - International aspects of OHS
4. Module - administration and organizations
- Service and expert organizations
 - Organizational systems
 - Management and strategies
 - OHS as a part of corporate strategy
 - OHS as a part of entrepreneurship
5. Module - evaluation and development of occupational health services
- Epidemiology
 - Work and research on work
 - Research methods
 - Efficiency and quality assurance

Annex 3

List of occupational health nursing associations affiliated to the Federation of Occupational Health Nurses in the European Union.

Belgium

Vlaamse Vereniging van Verpleegkundigen in de
Bedrijfsgezondheidsorg

c/o

Dirk Vermeulen

Medimar V.Z.W

Brouwersvliet 33

2000 Antwerpen

Phone: + 32 03 221 9803

Fax: + 32 03 231 8846

www.vvvb.org

Association Francophone des Infirmiers de sante au travail en
Belgique

C/o

Josette Moresi

Afisteb Cockerill-Sambre

Usine de Chertal

B - 4683 Vivegnis

Phone: +32 (0) 4/2368530

Fax: +32 (0) 4/236 8455

Email: josette.moresi@cockerill-sambre.com

Denmark

Occupational Health Nurse Association

C/o Julie Staun

Forvalterbolig

Orebjerg Gods

Orebjerg Allé 5 B

3630 Jægerspris, Denmrk

Phone/fax: +45 47521402

Email : juliestaun@mail.tele.dk and jus@topsoe.dk

Finland

The Finnish Association of Occupational Health Nurses
Maistraatinportti 4 A 6 krs
00240 Helsinki
Phone : + 358 (0)9 417 89 810
Fax : + 358 (0)9 417 89 850
www.stthl.net

France

Groupement des Infirmier(e)s du Travail GIT, B.A.MAP
4 rue Jean- Jaques Rousseau
75001 Paris
Fax: + 33 1 42 60 49 48

Germany

VAF e. V
Eller Kamp 14
40627 Düsseldorf
Phone: + 49 211 2700 833
Fax: + 49 211 2700 834
E-mail: VAF-SC@T-Online.de

Ireland

Occupational Health Nurse Section
Irish Nurses Organisation
Professional Development Centre
11 Fitzwilliam Place
Dublin 2
Phone: + 353 1 676 0137
www.ino.ie

Portugal

Portuguese Occupational Health Nurses Association
Rua São Caetano, 13 A
PT – 1200 – 828 Lisboa
Phone: + 351 21 397 1717
Fax: + 351 21 396 65 81

Spain

Asociacion Española de Enfermería del Trabajo y Salud Laboral
Pl. de Mariano de Cavia, 4
28007 Madrid
Phone: + 34 600 333 768
www.timet.org/aet

Sweden

Riksföreningen för företagssköterskor
C/o Gun Falk
V.Strandgatan 5
44230 Kungälv
Phone: + 46 317 656 099
E-mail: gun.falk@telia.com

Netherlands

Beroepsvereniging Arbo Verpleegkunde (BAV)
Postbus 1429
9701 BK Groningen
Phone: + 31 50 313 9634
Fax: + 31 50 314 2841
www.kvv.nl/bavl

United Kingdom

Royal College of Nursing
20 Cavendish Square
London W1M 0AB

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