

## Workplace Health Promotion in Thai Occupational Health Nursing

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### ABSTRACT

The increase of health care expenditure for Thai worker calls for the need of workplace health promotion. The purpose of this article is to describe the status of workplace health promotion in Thailand, emphasizing the roles of occupational health nurse. Secondary data analysis and extensive literature reviews were conducted. Results showed that Thailand is committed with implementing health promotion concepts in various settings including workplace. Several public organizations have developed national workplace health projects with different strategies and approaches. Role of occupational health nurses in workplace health promotion has gradually expanded. The new law specifying the functions of occupational health nurse in providing comprehensive health services is in the process. Occupational health nursing standard as related to workplace health promotion has been developed. A research based case study

on workplace health promotion program is also presented to elaborate the proactive roles of occupational health nurse. Findings of this study suggest the transitional roles of Thai occupational health nurses in which training and technical supports from related organizations are in need.

### BACKGROUND

Thailand is an agricultural country in South East Asia that is moving toward industrialization. Of 62.5 million populations, around 34.5 millions are in the workforce (55.2%). Of the total workforce, 42.54% were agricultural workers, and 15.24% were in manufacturing (National Statistical Office, 2004). National development with emphasis on the industrial and service sectors has contributed to the migration of the rural population to work in the urban area. As a result of rapid industrialization, Thai working populations increasingly face with various

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health problems. Major occupational diseases and injuries claimed from the workmen's compensation funds in 2002 were work related injuries, musculoskeletal disorders, occupational contact dermatitis, and chemical poisoning (Social Security Office, 2003). In addition, a comparison of 1998 prevalence of non work related illnesses among workers and that of 2002 revealed a two fold increase (Social Security Office, 2003). This has resulted in dramatic increase of the medical expense during the past five years. The health plan therefore need to be reconsidered and reoriented to emphasize on the health promotion and preventive measures as means to save the overall health expenditure. Health promotion is subsequently introduced as an effective strategic process to enable and increase people ability in illness prevention and promotion of healthy behaviors in various settings including workplace. The purpose of this article is to describe the status of workplace health promotion in Thailand, emphasizing the roles of occupational health nurse.

## METHODS

Secondary data analysis was conducted. The data obtained were statistics of the Ministry of Health and Ministry of Labor. Other data sources used were research papers from the Thai Index Medicus and Thai Health Research System Institute published since 1995.

## RESULTS

### 1. Health Promotion Policy in Thailand

Due to the increasing trend in non communicable diseases among Thai people,

health promotion has played a critical role in disease prevention. Thailand has committed to health promotion applying Ottawa Charter on Health Promotion, a result of the First International Conference on Health Promotion. Health promotion is defined as "the process of enabling people to increase control over, and to improve, their health" (WHO, 1998). This commitment calls for comprehensive strategies that involve all sectors of society in health improvement leading to the establishment of the Health Promotion Foundation in 1999.

Thai Health Promotion Foundation (known as 'ThaiHealth') was established based on the model of Australian health promotion foundation by allocating 2% of the tobacco and alcohol tax from the government. ThaiHealth's mission is to empower the various civic movements that lead to an improvement in the well being of Thai citizens. Operating dimensions emphasize healthy public policies, issued based programs, and holistic 'setting' approaches. ThaiHealth provides catalytic funding for projects that change public values, people's lifestyles, and social environments. Health promotion strategies include building health public policy, creating supportive environment, developing personal skills, strengthening community actions, and reorienting health services (WHO, 1998). These can be achieved through various setting approaches which represent the organization base infrastructure required for health promotion including schools, hospitals, cities, and workplace.

### 2. Workplace: A Setting Approach of Health Promotion

Workplace offers special opportunities for health promotion interventions, which have a high probability of success as a result of

certain characteristics intrinsic to the organizational environment. Some of the reasons are vast majority of the active adult population spends the greater part of their time at work and workers may expose to specific work environment and hazardous at work that require disease/injury prevention as well as health promotion. In addition, many jobs have a stable population, therefore, actions which promote health can become more effective over time.

Worksite health promotion refers to the systematic approach endorsed by an organization designed to enhance the health of the company and its employees. In order to reach the greatest health improvement and cost containment potential, programs require initiatives based in the worksite that should include various forms of awareness education, behavior and lifestyle change, as well as the creation of supportive environments.

Several studies have been carried out showing workplace health promotion is a worthwhile investment for companies (Palletier, 1996). Workplace health promotion could result in a reduction in illness related absenteeism, fewer working days lost and therefore in a long term decline in the sickness rate. It can increase motivation among the staff and improve the working atmosphere in the company leading to more flexibility, better communication and a readiness to cooperate. Health promotion in workplace may result in a measurable increase in the quality of products and services, more innovation and creativity and a rise in productivity in the company and is also a prestige factor which helps to improve the public image of a company and to make it more attractive as an employer.

In Thailand, workplace health promotion is under extensive development by various

organizations (Table 1). "Healthy workplace" project was developed by Department of Health, Ministry of Public Health in 1999. The certificate is given by the Ministry to the organization that has facilities and services according to the healthy workplace indicators.

Thai Health Promotion Foundation has also developed the following strategies for workplace health promotion in Thailand.

1. Support the Federation of Thai Industries to develop standards for quality of life in the workplace and expand implementation.
2. Develop benchmarks for health promotion and disease prevention within the government sector in piloted departments.
3. Organize learning networks regarding the development and implementation of health related activities in the workplace, educational institutions, and government offices as well as run a campaign creating perceptions and attitudes.
4. Select model workplaces, educational institutions, and government agencies so as to further outcomes and implementation.
5. Accumulate bodies of knowledge and analyze them to produce policy recommendations which support health promotion within the workplace such as life insurance, health and safety standards for the workplace, and objective identification for government agencies.

Funds are also available for companies that would like to initiate their health promotion activities.

According to the Social Security Act and the Workmen Compensation Act of 1990, providing protection and security for employees who are injured, sick, or disabled from work related illness and non work related illness has been the responsibility of the Social Security Office, Ministry of Labor. Because of the rapid increase of health service utilization and

health expenditure. "Workplace Health Promotion Initiatives" has developed by Social Security Office since 1999. The main components of the projects is reorienting health services by training health personnel from the main contract hospitals primarily responsible for providing the health services to employees to be able to work as workplace health promotion facilitators. Through series of lecture, group discussion, and site visit, 67 WHP facilitators were embedded with the WHO health promotion strategies, which included all measures taken by the employer, the employees, health personnel, and cooperative organizations. "Selling" workplace health promotion to management, planning, implementing, and evaluating the workplace health promotion projects were also emphasized. Project evaluation suggested that the training project has provided the facilitators with a useful basis for building up their own expert activities and had satisfactory impacts at workplace level especially in the area that has active workplace health promotion network (Lagampan, Nontasorn, Kaewboonchoo, 2002).

### 3. Overview of Occupational Health Nursing in Thailand health setting

The roles of nurses in industrial settings mostly conformed to the roles identified by corporate management officers in which have focused on treatment rather disease prevention and health promotion (Limprasute, 1993).

In the governmental sector, Bureau of Occupational and Environmental Disease, Ministry of Public Health has the main policy to enhance access to occupational health services. The Ministry has integrated occupational health programs into the ordinary health service system at provincial level. Occupational health services to cover the industrial, agricultural, and service sectors are provided by regional and general hospitals as the local level implementation. Occupational health nurses working for governmental sectors play a major role in occupational health surveillance and providing group occupational health services according to the needs in the area.

### 4. Role of Thai Occupational Health Nurses in Workplace Health Promotion

<Table 1> National workplace health promotion projects

Responsible Organization	Project	Program strategies
Ministry of Public Health	Healthy Workplace	<ol style="list-style-type: none"> <li>1. Develop the criteria for healthy workplace</li> <li>2. Present the award for participating worksites who demonstrate efforts met with the healthy workplace criteria</li> </ol>
Social Security Office, Ministry of Labor	Workplace Health Promotion Initiatives	<ol style="list-style-type: none"> <li>1. Train workplace health promotion facilitators</li> <li>2. Develop health promotion education materials for worksite</li> <li>3. Support health promotion network at the local level</li> <li>4. Organize the national meeting in workplace health promotion annually</li> </ol>
Thai Health Promotion Foundation	Workplace Health Promotion	<ol style="list-style-type: none"> <li>1. Provide funds for organization to initiate workplace health promotion activities</li> <li>2. Develop standards for quality of life in the workplace</li> <li>3. Organize learning networks in workplace health promotion</li> <li>4. Knowledge management for policy recommendation</li> </ol>

The changing demographic, morbidity, and mortality profile of workers, changes in technology, types of work, and health needs present challenges to Thai occupational health nurse to provide a comprehensive program for promotion of worker health and safety. Currently, the Ministry of Labor is in the process of passing a law specifying the qualifications and functions of nurses who will be working in occupational health settings (Kalampakorn, 2003). This upcoming legislation will guarantee every nurse entering occupational health services has received at least 60 hours of basic knowledge and skills necessary for providing occupational health services.

The function of occupational health nurse required by the upcoming laws is shown in (Table 2). Health promotion will be a major component of the comprehensive occupational health nursing service required by the upcoming laws. The Bureau of Occupational and Environmental Health, Ministry of Public Health also conducted a research study and appointed a group of expert to develop Thai occupational health nursing standard. The

standard as related to health promotion is explained in (Table 2).

However, a basic survey on occupational safety and health management in Thailand revealed that Thai occupational health nurses play limited roles in health promotion (NICE, 2000). The health information was mainly disseminated by using bulletin board and pamphlet. Occupational disease prevention, AIDS, and drug abuse are widely concerned issues. Results of the survey also indicated that activities of the health personnel were varied by size of the establishment. Other factors related to different role and function among Thai occupational health nurses are employment status of nurse (i.e. full time or part time), type of industry, and the commitment of the company's management to health and safety. Since workplace health promotion in Thailand is relatively new (Jantawimon, 1999), it is difficult to "sell" concept of health promotion as the lifestyle approach to the company management. Wellness program, although it can increase productivity, it is not concerned by most companies. Employers mostly focus on

(Table 2) Occupational health nurse's roles in health promotion

Organization	Roles
Ministry of Labor	Functions of the Thai OHNs required by Law (Draft) <ol style="list-style-type: none"> <li>1. Define the objective, structure, operational and budget plan of the health unit</li> <li>2. Participate in OHS committee meeting</li> <li>3. Arrange for equipment necessary for health unit</li> <li>4. Provide comprehensive OH nursing service including disease prevention, health promotion, treatment, and rehabilitation for employees</li> <li>5. Keep record of necessary health data for treatment and health surveillance</li> <li>6. Provide counseling service, health education, and training</li> <li>7. Collaborate with physicians in providing health services</li> </ol>
Ministry of Public Health	Occupational health nursing standards for health promotion <ol style="list-style-type: none"> <li>1. Assess the health problems and health needs of employees for health promotion</li> <li>2. Develop operational plan for health promotion</li> <li>3. Implement health promotion projects/activities according to the health needs with participation of employees and support from the employer</li> <li>4. Collaborate and create partnership with related organization</li> <li>5. Evaluate health promotion projects/activities</li> </ol>

prevention work related diseases and injuries rather than promoting optimal health. As a result, most of the health promotion projects are initiated with changing health behaviors that related to work related illnesses. Successful programs can later be expanded to other positive health approach projects.

#### 5. Training Programs Related to Workplace Health Promotion for Thai OHN

Although currently there is no legal requirement in terms of education and training for Thai OHNs, requests for continuing education and training have increased among full time and part time nurses working in industrial settings. As a result, several educational institutions have offered the 60 hours short course training in which a part of theoretical contents is related to workplace health promotion.

Continuing education related to workplace health promotion are provided by various professional organizations in forms of workshop, conference, seminar, and national meeting. For example, the workplace health promotion was the theme of the most recent meeting for Thai Occupational Health Nursing Society. In 2004, the topic of the national safety meeting organized by the safety and Health at Work Promotion Association will be "Partnership for Health Promotion and Safety at Work". However, the formal training program in workplace health promotion has not been regularly offered by any institutes.

#### 6. Case Study of Workplace Health Promotion Program Case : Musculoskeletal disorders prevention program managed by occupational health nurse in a footwear factory

There are 1,500 employees working 2 shifts in a sport shoes factory. One OHN provides occupational health services. Employees are mostly female (85%) and 70% aged 26-35 years. The type of work that most of employees do is sewing cloths to make sport shoes. In terms of health, it was found that the major health problem among female workers in production department was muscle pain, especially back pain and pain at lower limbs, representing by 25% of total workers receiving medical services from the nursing unit in the factory. Moreover, report of muscle pain among the workers still increases every month. Interview of workers in production department revealed that all workers (100%) experienced muscle pain at least once in the past 6 months, most workers (80.6%) believed that their muscle pain is caused by the work they do. The OHN, therefore, had developed a musculoskeletal disorders (MSD) prevention program with the intention of reducing and eliminating musculoskeletal disorders (Table 3). The plan was established in recognition that within the company, policy, work environment, worker behaviors and participation was essential components to ensure the program success.

### Tasks

The OHN in charge of providing occupational health services approached the management at occupational health and safety committee with data on health services utilization and medical expenses due to the muscle pain. Common to many manufacturing industries in Thailand, the company focused on accident prevention and was not aware of the potential for lower limb and musculoskeletal disorders to develop. However, they agreed to conduct job analysis and risk assessment for musculoskeletal

disorders.

At sewing workstations, employees encounter several risk factors, such as awkward arm, neck, trunk, and leg postures. These postures are influenced by the size of the worker and the design of the workstation. Concerning working behaviors, they sit at the sewing machines for eight hours starting from 7 am. 4 pm., with only 1 hour lunch break. During operation hours, the workers cannot take a short break. The chair used for work is an unadjustable stool without back support. After job analysis was performed, occupational health and safety were particularly concerned to conduct a program to prevent musculoskeletal disorders.

Various methods to address the muscle pain for industrial sewing machine operators were used such as improving workstation by providing foot rest and using adjustable chair when necessary. Policy in company could also be changed to reduce the muscle pain such as allowing the worker to take a short break during work. Program to change workers

behaviors related to working posture, stretching exercise, and improved their workspace was conducted by the OHN. Group health education was provided to all sewing machine operators including new employees in order to equip them with knowledge to identify and address hazards with the potential to lead to musculoskeletal disorders. The training was aimed to raise awareness of the health risks and how to manage their working posture and rearranging their own workspace to prevent the problem. Photographs and video footage of various processes was taken to facilitate skills practice in real life circumstances. Stretching exercise was also trained by OHN. By having each worker takes turn to be the exercise leader, stretching exercise was performed regularly before work and during the break after the training. In addition, "booster" health information related to musculoskeletal disorders was provided through various communication channels such as health education board, company broadcasting system, and the internal newsletter. Individual

<Table 3> Example of musculoskeletal disorders prevention program

Process of Health Promotion Program	Activities	Responsible persons
Assessment	- Health examination	- OHN
	- Review health services utilization and medical expenditure as related to musculoskeletal disorders	- OHN
	- Workplace survey	- OHS committee and OHN
	- Conduct job analysis and risk assessment	- Safety officers
Planning	- Building healthy policy	- Management
	- Improving workplace environment	- Management & safety officer
	- Developing worker skills in MSD prevention	- OHN
Intervention	- Changing breaking time policy	- Management
	- Providing adjustable chairs and foot rest	- Management & safety officer
	- Group health education for MSD prevention & health information to increase worker awareness	- OHN
	- Stretching exercise	- Workers
Evaluation	- Health problems and service utilization	- OHN
	- Workplace environment	- Safety officer
	- Worker knowledge, awareness, and interest in health promotion activities	- OHS committee and OHN

counseling to reduce muscle pain was also given to workers who come to receive the health services with muscle pain problem.

## Results

The program led to :

- identifying that workstation needed to be modified to provide better work postures
- developing corporate policy to promote safety and health of its employees
- increasing worker knowledge and awareness of musculoskeletal disorders prevention
- prevalence of muscle pain perceived by workers was 50% reduced
- other health promotion activities such as aerobic dance and yoga were also provided by management after working hours with small financial support from employees.

## CONCLUSION

The national policy on health promotion and upcoming legislation on the functions of OHN provide opportunities for conducting workplace health promotion program. To have more proactive roles, training in workplace health promotion are needed for occupational health personnel. Continuing education channels need to be developed for Thai OHN such as OHN journal, OHN newsletter, web based information, etc. More evidence based practices are also needed in terms of the key successive components of the program that can have positive effects on worker health behaviors and health status. Greater attention should also be placed on the evaluation of the workplace health promotion projects especially in terms of cost effective analysis. In addition, business case for lifestyle intervention should be developed and information should be disseminated by related organizations.

Development of workplace health promotion model for to various types of employees i.e. those who work for small and medium enterprise, agricultural workers, home based worker are also needed to enlighten appropriate approach for OHN working for settings with different circumstances.

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