

Development of Multi-Dimensional Action Checklist for Promoting New Approaches in Participatory Occupational Safety and Health in Small and Medium-Sized Enterprises

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Received August 31, 2005 and accepted November 25, 2005

Abstract: To meet diversified health needs in workplaces, especially in developed countries, occupational safety and health (OSH) activities should be extended. The objective of this study is to develop a new multi-dimensional action checklist that can support employers and workers in understanding a wide range of OSH activities and to promote participation in OSH in small and medium-sized enterprises (SMEs). The general structure of and specific items in the new action checklist were discussed in a focus group meeting with OSH specialists based upon the results of a literature review and our previous interviews with company employers and workers. To assure practicality and validity, several sessions were held to elicit the opinions of company members and, as a result, modifications were made. The new multi-dimensional action checklist was finally formulated consisting of 6 core areas, 9 technical areas, and 61 essential items. Each item was linked to a suitable section in the information guidebook that we developed concomitantly with the action checklist. Combined usage of the action checklist with the information guidebook would provide easily comprehended information and practical support. Intervention studies using this newly developed action checklist will clarify the effectiveness of the new approach to OSH in SMEs.

Key words: Action checklist, Small and medium-sized enterprises, Workplace health promotion, Participatory occupational safety and health

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Introduction

The lack of occupational safety and health (OSH) activities in small and medium-sized enterprises (SMEs) has been pointed out and countermeasures have been discussed worldwide in the last decade^{1–11}. In Japan, occupational safety has been stressed mainly to prevent work-related accidents especially in manufacturing companies rather than from an occupational health perspective^{1, 9, 12}.

The Japanese government has taken several measures to promote OSH in SMEs. Regional occupational health centers were established as public health facilities in 347 districts from 1993 to 1997 in order to support small companies with less than 50 employees^{9, 13}. Several subsidies for promoting OSH activities in SMEs have been provided by the government. However, these measures have not been well utilized^{9, 12, 14} and new approaches to promoting OSH activities have been sought.

Our research team previously listed resources available for promoting OSH in SMEs in Japan¹². We noticed that although not sufficient or abundant, available health care services, facilities, and subsidies were considerable. But the problem is the apparent difficulty in disseminating information about these entities and services because they are delivered by various organizations and sources, which do not usually collaborate with each other.

To assess the reasons for inactive OSH activities in SMEs and the real need to support their OSH activities, we had conducted semi-structured interviews with employers and OSH personnel in SMEs¹⁵. The results indicated that they had insufficient knowledge on implementing OSH activities, especially from the health perspective. They did not know what to do for workplace health promotion except to conduct health examinations. Employers did not fully utilize the results of the health examinations for workplace health promotion by identifying common health problems in the workplace nor did they provide the opportunity for employees to utilize such results to improve their own health, i.e., they provided much less opportunity for health education, health counseling, etc. They lacked information on accessible health care resources outside the workplace. Also, they had no knowledge of whom to ask for advice. Such a lack of knowledge and information resulted in a lack of motivation. Tools for empowering employers and workers in SMEs to promote voluntary initiatives in OSH activities are needed.

Action checklists have been developed aiming at active participation of both workers and employers^{16, 17} and in many countries have proved to be effective in facilitating concrete actions for improvement, especially in SMEs in Asia^{18–23}. The Work Improvement in Small Enterprises (WISE) project in the Philippines from 1994–1996 was reported to have implemented over 2000 low-cost improvements with the technical assistance of the International Labour Organization

(ILO) and the financial assistance of the United Nations' Development Program²¹. A participatory training program to improve OSH under the trade union initiative with the acronym of POSITIVE (Participation-Oriented Safety Improvements by Trade Union Initiative) was first created in Pakistan in 1994 and has gradually expanded to many countries in Asia with the financial support of the Japan International Labour Foundation and with the technical assistance of the Institute for Science of Labour, Japan²³. Action tools for these participatory approaches include action checklists, group work dynamics and photo sheets showing good examples of local undertakings^{18–23}. In Japan, several projects have been implemented with the support of the Institute for Science of Labour, Japan^{24–26} but dissemination of the movement has not been achieved.

Most previous action checklists have focused on improving ergonomic work conditions or the workplace environment^{17, 24–26}, for example, materials handling, workstations, machine safety, physiochemical environment or facilities helpful to the health and refreshment of the employee.

Recently diversification of working conditions also has resulted in various health needs, including mental health care, and has presented new risks in the workplace, especially in modernized societies²⁷. To manage this situation, new action checklists that cover a wide-range of OSH activities will be useful to meet various types of health needs and address risks in SMEs especially in developed countries.

Previous successful experiences have suggested that in order for an action checklist to be effective it must be easy to understand, concrete, and feasible (such as low-cost). Trained facilitators are the key to actual implementation of the action checklist in the workplace^{24, 28}. In Japan, occupational health nurses (OHNs) in various health care facilities including publicly funded or government health insurance associations provide health care services for workers in SMEs²⁹. In this study, we assumed such OHNs would be the facilitators for disseminating the action checklist.

The objective of this study is to develop new multi-dimensional action checklists that can support employers and workers in understanding the value of a wide range of OSH activities and in promoting participatory OSH in SMEs.

Methods

Literature review

Previous action checklists were reviewed and the items were extracted and categorized.

Extraction of essential information for promoting OSH activities in SMEs from the interview

Information that tended to be lacking but essential to meet multi-dimensional OSH needs in SMEs and to promote OSH

activities has been drawn from the results of our interviews of responsible persons for OSH or employers of SMEs.

Focus group meeting on the general structure of the new approach

The whole structure of our new approach was discussed in several rounds of focus group meetings with OSH researchers and practitioners including OHNs, occupational health physicians, occupational health hygienists, and mental health specialists.

Formulating the new multi-dimensional action checklist

Essential technical areas were extracted during several rounds of the focus group meetings mentioned above. Consequently, we prepared an item pool for each technical area incorporating terms used by our interviewees and from the previous action checklist. Then essential items were selected for each technical area.

Validity and practicality

To assure the practicality and validity of the new multi-dimensional action checklist, several sessions were held to discuss the content and descriptions of technical areas and items within each area with employers, workers, OSH researchers and service providers including OHNs. After several rounds of discussions to obtain various opinions, an acceptable version of the action checklist was completed.

Results

General structure

As to the general structure, combined use of the action checklist with the information guidebook was planned for effective introduction of essential information on multi-dimensional OSH activities into SMEs. The new multi-dimensional action checklist itself was intended to be simple and easily understood. An effective linkage of each action in the checklist with suitable sections in the new information guidebook was devised to solve the dilemma as to whether to retain the presentation of the material in a concise and easily comprehended format or to provide an increased amount of information due to the expansion of the action areas. The information guidebook was also planned to include basic knowledge and concrete ideas for promoting OSH activities in SMEs and the available resources outside the company for supporting OSH in SMEs, which are quite diversified and complicated in Japan.

New multi-dimensional action checklist

The new multi-dimensional action checklist was formulated to consist of 6 core areas, 9 technical areas, and 61 essential items (Table 1). In addition to the technical areas previously covered, several new areas have been

suggested for OSH activities in SMEs.

Linkage with the information guidebook

Each action item was linked to the suitable page of the information guidebook, which was originally developed and edited so that each chapter of it was correspondent to the core area of the action checklist (Table 1). The details of the newly developed information guidebook will be reported in the future.

A flow chart describes how to use the action checklist (Fig. 1) and the manifesto of selected actions was prepared to stimulate the motivation of company members (Fig. 2).

Discussion

With increasing attention being paid to occupational safety and health management systems, participatory approaches to OSH have become essential in recent years^{30,31}. An action checklist, which has been proven to be the most efficient tool for promoting participative workplace improvement, is expected to bring a company's voluntary initiative into all areas of workplace health promotion. On the other hand, previous action checklists have been restricted mainly to ergonomic working conditions or the workplace environment, although rapid diversification of working life in industrialized countries has caused various health needs and risks in the workplace, such as mental health issues²⁷. It is noticed that quite recently a new action checklist which is focused on mental health has been developed³².

The present study tried to extend the areas of actions to cover the whole range of OSH activities in SMEs. This newly developed action checklist will meet the present and future multi-dimensional health needs of many types of SMEs, i.e., not only manufacturing but also service, sales, information technology, etc. Our previous interviews with employers and workers in SMEs indicated that they had much less knowledge of health perspectives than safety perspectives. This new action checklist will support the first phase of participatory occupational health activities that will lead to the appropriate use of health care resources or specialists.

With the expansion of covered action areas, the new multi-dimensional action checklist should provide wider information than previous ones. Especially with regard to health perspectives, it is important that workers and employers can easily consult OSH specialists or health care specialists outside the company when needed. Available resources are not sufficient but in Japan those that are available are also so diversified and complicated that guidance toward the appropriate resources for each specific purpose is necessary. On the other hand, an action checklist should be concrete and simple enough to easily read and comprehend. As a measure to solve this dilemma, we planned the combined use of the action checklist and information

Table 1. The contents of the new multi-dimensional action checklist

Core areas	Technical areas	Number of essential items	Examples of the items
I Health examination	A Ensuring implementation of health examination	5	<Ensuring that employees take health examination> Be sure that all employees take appropriate health examinations.
	B Fully utilizing results of health examination	3	<Arranging health counseling> Arrange for health counseling so that employees can get advice by health care specialists, in order to correctly understand the meaning of the results of health examinations and compare those results with previous ones, and cope appropriately with any health problem revealed.
II Health counseling	C Having an opportunity to consult and learn about health	6	<Lecture on health> Give employees the opportunity to attend lectures by health care specialists on general or work-related health topics (For example, hypertension, obesity, lumbago, organic solvent intoxication, hypoxia, pneumoconiosis, etc.).
	D Establishing a mental health care system	8	<Establishing good climate for consultation> Establish a good workplace climate for employees to easily consult with somebody in a company when they have a problem.
III Mental health promotion	E Improvement of work procedures	10	<Exercise at workplace> Exercise in the workplace for refreshment and prevention of injury, before starting work or at an interval during working hours.
IV Improvement of work procedures and workplace environment	F Improvement of workplace environment	9	<Prohibition of passive smoking> Discuss health problems and stress responses caused by passive smoking in the workplace and consider how to cope with passive smoking.
	G Coordinating system and climate of workplace for health promotion	12	<Assignment of OSH personnel> Promote health and safety activities by appointing someone as OSH personnel to be the person who contacts and brings news from available service organizations.
V Healthy workplace climate	H Planning and practicing workplace health promotion at the organizational level	6	<Sharing health problems> Provide the opportunity for employees to share their health issues in the workplace.
	I Utilizing local services and information	2	<Gathering information on health promotion> Find useful information about health promotion activities in the workplace from books, pamphlets, homepage, etc., and make them known to employees.
VI Service and information			
Sum	9	61	

guidebook.

Trained facilitators will increase the effectiveness of this action checklist. In our studies, OHNs in health insurance associations were assigned as the facilitators because they sometimes visit SMEs to provide health consultations after health examinations²⁹. We intended to utilize the site-visit opportunity fully not only for individual support but also for organizational support. Furthermore, OHNs are suitable

for facilitating activities related to such a company initiative because of their specialty of empowerment abilities^{33, 34}.

Intervention studies will be needed to evaluate the practicality and effectiveness of this support model and tools³⁵. We have started the intervention study, using this action checklist and the informational guidebook, and with trained OHNs as facilitators. Several days of training were held for OHNs to provide skills for facilitating workplace

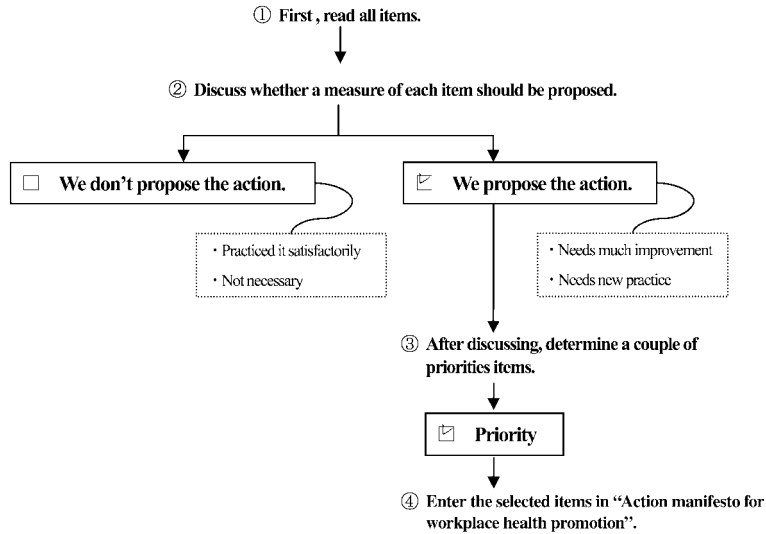


Fig. 1. How to use the action checklist.

Action manifesto for health promotion at our workplace

We will work on the followings actions.

No. () _____
Concrete plan

No. () _____
Concrete plan

No. () _____
Concrete plan

<Example> No. (16) Disseminate information on mental health to employees through lectures or distribution of pamphlets.

We will discuss and evaluate our progress in health promotion activities _____ months later.

Group members (signature) :

Declaration date : ____ / ____ / ____

Fig. 2. Action manifesto for workplace health promotion.

health promotion at an organizational level with this tool. Now we are collecting process records, not only in cases of success but also in cases of failure because process evaluation is important as well as outcome evaluation. We will improve the intervention model and tools through information about such experiences.

Acknowledgment

This research is funded by the Ministry of Health, Labour and Welfare, Japan.

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