FINANCIAL ASSISTANCE IN PROMOTING OCCUPATIONAL HEALTH SERVICES FOR SMALL-SCALE ENTERPRISES IN JAPAN

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Abstract. In spite of the diversified views on the governmental financial assistance in promoting occupational health services (OHS) for small-scale enterprises (SSE), the issue has not been much studied. Considering the large differences between countries in the degree of governmental financial assistance, the international comparative research will provide insight into its advantages and disadvantages. In order to conduct such comparative research, the status of each country must first be clarified. This informative piece of study aims at stimulating researchers in other countries to share their experiences and facilitate future comparative studies. This study was conducted to clarify the financial assistance of the Japanese government for SSE. Published reports on financial assistance for SSE were collected and used for the study. The Ministry of Labor initiated the policy of subsidizing OHS for SSE in the early 1960s. Activities to be subsidized through four routes included primary and secondary prevention of occupational injuries and diseases. The amount of subsidy was limited from one-third to two-thirds of costs. There was a fourteen-fold increase in the amount of subsidies for SSE from US$ 7 million in 1986 to US$ 98 million in 1998. The long history of financial assistance for SSE and the increasing amount of subsidies suggest that the Ministry of Labor recognizes the importance of financial assistance in promoting OHS in small scale enterprises.

Key words: Occupational health services, Small-scale enterprises, Financial assistance, Japan

INTRODUCTION

Small-scale enterprises (SSE) having less than 50 employees comprise the vast majority of business and industrial undertakings in most countries, and they employ 40–90% of the total workforce [1]. In Japan, 97% of all enterprises are SSE, which employ 60% of the working population [2]. They are noted for poorer workers’ health status and higher incidence of occupational injuries and illnesses [1,3–6]. Although multiple channels for occupational health services (OHS) are shown to exist to improve workers’ health, not all SSE [7], have been effectively covered by these services [7–10]. The need to develop OHS for SSE has also been widely recognized by international
organizations, governments, and professional bodies [1,11]. Therefore, the provision of OHS for SSE, has been considered the major target of occupational health, not only in Japan, but also throughout the world [1,12–21]. Cost is a very important factor for enterprises to consider investing in OHS [22,23], and the issue of financing is the key to the promotion of OHS for SSE [24,25].

Regarding the role of the government in promoting OHS, the International Labour Organization (ILO) adds financial assistance to legislation, education, training and research [26]. According to ILO, funding of OHS for SSE is generally ensured by the state, the social security institutions, the employer, and sometimes by private agencies. Because economic constraints preventing organization of OHS for SSE are substantial, the governmental financial assistance is considered crucial [1]. The significance of the system of subsidy is demonstrated by the experience of Finland, where the high level of subsidies expanded the OHS coverage from 50–60% to 80–90% of all workers during the 1980s [27–29]. Most of that expansion took place in the small enterprise sector. The comparison of occupational health service systems in six European countries has shown that governmental financial assistance is associated with the OHS coverage [30]. There is an argument, however, that governmental intervention may lead to an unwarranted distribution of costs: high risk production methods may bear too low costs, whereas low risk production methods will bear high costs and become relatively too expensive [31]. The relevance of government intervention has been questioned from the viewpoint of cost-internalization [32].

In spite of the diversified views on the government financial assistance in promoting OHS for SSE, the issue has not been much studied. Some studies have dealt with financial assistance for SSE [1,25,26,30–35], but in only a limited aspect. Considering the large differences between countries in the degree of governmental financial assistance, the international comparative research will provide insight into its advantages and disadvantages [30]. In order to conduct such comparative research, the status of each country must first be clarified. This informative piece of study aims at stimulating researchers in other countries to share their experiences and facilitate future comparative studies. This study was conducted to clarify the financial assistance of the Japanese government for SSE, with special reference to subsidy programs.

**METHODS**

We conducted a form of evaluation research in health services aimed at analyzing the functions and objectives of health services, including the political, social, and economic forces shaping and conditioning the funding, organization, management, priorities, efficiency, and effectiveness of services [36]. In this analysis, we used publications dealing with financial assistance provided by the Ministry of Labor (MOL) for the promotion of OHS for SSE in Japan. Small-scale enterprises were defined in this study as undertakings with less than 50 employees, since this number of workers has been most widely accepted as a maximum limit [1]. Papers dealing with financial assistance for SSE provided by MOL or by other ministries or organizations, affiliated rather with the government than with MOL, for purposes other than the OHS promotion [37–39] were not included in this study. Papers were collected through the computer literature search using the Japan Centra Revuo Medicina database and MEDLINE database from 1990 to 2000, and manual search of recent journals and books. For computer search we used the following key words: occupational health services, occupational safety and health, financial assistance, subsidy, small-scale enterprises, small- and medium-scale enterprises. The references in relevant articles were also examined by manual search. Twelve papers [35,40–50] were identified, and used in the analysis. The information on the amount of subsidy was also obtained through a direct inquiry of the relevant organizations.

The analysis employed descriptive study design without control group [51]. First, a brief history of financial assistance in promoting OHS for SSE in Japan was given. Second, the nature of financial assistance was clarified through organizations providing subsidy programs, with special reference to the kinds of activities to be subsidized, qualification for subsidies, proportion of the subsidy...
upper limit to total cost, and subsidy terms. Third, the performance of financial assistance was described in terms of the number of SSE receiving financial assistance, and the amount of the subsidy. An attempt was made to ensure that description was as quantitative as possible by employing concrete numbers and figures.

RESULTS

Historically speaking, MOL began subsidizing OHS for SSE in 1961 to assist the provision of special health check-ups for workers engaged in hazardous work. In 1972, MOL expanded its financial assistance to loan programs for SSE to improve the work environment. In 1988, the Health Promotion Center was established in the Japan Industrial Safety and Health Association to support the Total Health Promotion Plan [40]. The association was a non-profit legal entity, and its membership consisted of associations of employers [41]. In 1993, MOL began to establish regional occupational health centers and prefectoral occupational health promotion centers in order to support weak economy and few resources for OHS [42,43]. In 1995, the Center of Safety and Health for Small and Medium-Sized Enterprises was established in the Japan Industrial Safety and Health Association to provide SSE with various services including financial assistance [41,44].

To sum up in terms of the routes of the MOL financial assistance for SSE, there were four of them [35,41,45,46,47]: 1) the Center of Safety and Health for Small and Medium-Sized Enterprises; 2) the Health Promotion Center; 3) occupational health promotion centers; and 4) regional occupational health centers. Table 1 compares the specific features of financial assistance of the four organizations. In order to get subsidies, the following criteria had to be fulfilled by enterprises: (a) the number of employees less than 300 or 50; (b) the activities to be subsidized approved; and (c) the terms to get subsidies satisfied. The number of employees, activities to be subsidized and terms to get subsidies differed among the four organizations. The activities of the Center of Safety and Health for Small and Medium-Sized Enterprises were most comprehensive, followed by those of the Health Promotion Center, which covered health promotion-related activities [40,41]. Occupational health promotion centers provided subsidy funds for a group that was organized by several SSE to jointly employ an occupational physician [46]. Regional occupational health centers provided

<table>
<thead>
<tr>
<th>Target enterprises (No. of employees)</th>
<th>Center of Safety and Health for Small and Medium-Sized Enterprises</th>
<th>Health Promotion Center</th>
<th>Occupational Health Promotion Centers</th>
<th>Regional Occupational Health Center</th>
</tr>
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<tbody>
<tr>
<td>&lt;300</td>
<td>&lt;300</td>
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<tr>
<td>Activities to be subsidized</td>
<td>Establishment of joint SH system</td>
<td>Health assessment</td>
<td>Fee for an occupational physicians</td>
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<td></td>
<td>Activities to prevent occupational accidents</td>
<td>Health guidance</td>
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<td>Health protection activities</td>
<td>Provision of machines and equipment</td>
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<td>Comfortable work environments</td>
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<td>Qualification to get subsidies</td>
<td>SSE organized by a region or industry Steering committee established</td>
<td>Activities should be provided by specialists</td>
<td>A group of organized enterprises established</td>
<td></td>
</tr>
<tr>
<td>Limit of subsidies</td>
<td>% of costs</td>
<td>2/3 of costs</td>
<td>Max. US$ 700/year/group</td>
<td></td>
</tr>
<tr>
<td>Years of assistance</td>
<td>3 years</td>
<td>3 years</td>
<td>3 years</td>
<td></td>
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<td></td>
<td></td>
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<td>No limitation (continuous)</td>
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**Table 1.** Financial assistance to small-scale enterprises provided through the four routes of the Ministry of Labor (as of 1999)

SSE – Small-scale enterprises.
occupational health services for SSE free of charge [48]. Subsidy terms became stricter in the order of the comprehensiveness of the activities to be subsidized. Regarding the Center of Safety and Health for Small and Medium-Sized Enterprises and the Health Promotion Center, the amount of subsidy was limited to one-third or two-thirds of costs, respectively. With regard to occupational health promotion centers, the maximum amount of subsidies for one group of SSE was approximately US$ 700 per year. In the case of regional occupational health centers, approximately US$ 50,000 was allocated to one center, and the center was able to spend the subsidies for various occupational health services. Except for financial assistance by regional occupational health centers, the period of assistance was limited to three years. Regional occupational health centers provided occupational health services continuously, i.e. no limitation as to the duration of assistance. Subsidized enterprises had to submit a report on their occupational health activities and a statement of accounts.

Table 2 shows the provision of subsidies for SSE by MOL. The number of enterprises receiving funds through the Center of Safety and Health for Small and Medium-Sized Enterprises increased, from 24,516 in 1986 to 34,378 in 1998 (1.4%), and the amount of subsidy funds increased from US$ 7 to 29 million (4.1%) during the same period. The number of enterprises provided with funds through the Health Promotion Center increased from 246 in 1989 to 4249 in 1998, and an increase of 1.9% in the amount of subsidy funds was noted at that time [49]. Approximately 90% of enterprises receiving funds were small and medium-sized having less than 300 employees. The number of enterprises receiving funds through occupational health promotion centers was 1344 in 1998, and the amount of subsidy funds increased by 2.8 times during a six-year period. The amount of funds for regional occupational health centers increased by 8.5 times during six years. The total amount of subsidies provided by MOL increased by 14 times, from US$ 7 million in 1986 to US$ 98 million in 1998. The proportion of the budget for OHS to the total MOL budget increased by 16 times from 0.01% in 1987 to 0.16% in 1998 [50].

**DISCUSSION**

It has been shown that Japan has a long history of financial assistance in providing OHS for SSE. Van Waarden presents characteristic features of occupational health
and safety regulations in various countries, their implementation and enforcement, and public versus private involvement [52]. According to his analysis, Japan relies more on administrative guidance than on punitive enforcement and adversarialism. Financial assistance to SSE is based on the MOL administrative policy, and this is in agreement with the van Waarden study.

It has been revealed that the activities to be subsidized included almost all responsibilities of OHS: the establishment of the system for providing services, and concrete activities in primary, secondary, and tertiary prevention of occupational diseases and injuries. Among other things, primary and secondary prevention is emphasized. However, curative services, are not much emphasized in Japan, and this policy differs from that of Finland, where the comprehensive OHS also includes curative care [28,53].

Regarding the amount of funds given to individual enterprises, they were limited for all forms of financial assistance, varying from one-third to two-thirds of costs. This policy is almost the same as that of Finland, where all employers are reimbursed in 50% of OHS costs provided that the kind of the services meets the legal criteria. Also, in Canada, approximately 50% of the agencies involved in providing health care for SSE are funded by federal, provincial, or municipal governments [54]. The nationwide action program which began in Finland in 1995 to provide SSE with comprehensive OHS is free of charge [28].

Occupational health services provided by the Japanese regional occupational health centers are also free of charge for employers, but the budgetary restrictions have been pointed out as a major problem, considering the large number of SSE and their employees allocated to each regional occupational health center [43].

Most subsidy programs have been provided with funds for the first three years of operation. This shows that the fundamental policy behind the financial assistance constitutes something like pump priming. The intention of MOL is to use subsidies as a means of motivating SSE to ensure OHS. It has been shown, however, that approximately 60% of subsidized companies were not willing to continue the Total Health Promotion Plan after the first three years of subsidization [55]. The major reasons for discontinuing the implementation of the Plan were the economic burden for companies, uncertain effectiveness, and no time for employees to participate in the Plan. In order to encourage companies to continue occupational health and safety program, certain measures may be needed.

Financial assistance for SSE was provided by four organizations, all of which were closely affiliated with MOL. Each organization has its own history of establishment, with different structures and functions. It is of interest that the Japan Medical Association and its regional branches were deeply involved in the management of occupational health promotion centers and regional occupational health centers [20]. The Japan Medical Association began a new occupational health training and certification program in 1990. Physicians who take about 50 hours of training including practical training are certified by the Association as occupational physicians, and a total of 42,433 physicians had been certified under this program by the end of December, 1999. This large number of certified occupational physicians will become a strong power in promoting OHS for SSE.

The number of subsidized enterprises and the amount of subsidies for SSE increased during the past 13 years. This suggests that MOL considers seriously the issue of promoting OHS for SSE. In order to continue the provision of subsidies MOL may find it necessary for those who implement the programs to prove their effectiveness. It has been shown that the incidence of occupational injuries and diseases in the Japanese workforce has been decreasing [6].

Many factors have contributed to this decrease, and subsidy programs are considered to be one of them [56]. It is also indicated that the effectiveness of MOL-financed workplace health promotion programs is related with the lifestyle indicators such as proportion of employees engaged in physical exercise or taking appropriate diet to prevent obesity [57]. The design of these studies is not a randomized controlled trial, and the validity of the results is not high. The effectiveness of subsidy programs should be shown by using a randomized design in the future.

The status of financial support for safety and health of workers employed in SSE in terms of the structure and functions of organizations involved has been clarified by
this study. However, this study did not deal with factors and processes regarding the decision-making on subsidy policies in Japan, and the relevance of subsidy programs has not been clarified more thoroughly. The question on whether the government should intervene and if so, how this should be done, has not been answered. This question, however, seems relevant now as the government is reconsidering its role in many aspects of its policy, and it should be the subject of the future study.

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REFERENCES


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