Session III: Needs for research, education, information and narrowing the science-policy gap

Future Directions in Job Stress Control: Evidence-Based Approach, Cultural Perspective and Integrated National Strategy

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ABSTRACT

This paper reviews three topics relevant to a future direction of job stress control. The author first described the importance of evidence-based approach to rationalize job stress control as a good investment for promoting worker health and welfare. Second, It is also empathized that culture perspectives are increasingly important in job stress research and practice, since job stress is now becoming a global issue. Third, beyond research issue, job stress researchers are expected to play multiple roles to bridge gaps between research/researchers and other key areas/groups relevant to job stress control. This is an essential step toward an integrated national strategy to implement research evidence into policy and practice in the real world. More theoretical development, empirical research and integrating reviews are needed on these three topics..

Introduction

There is a common concern on job stress and its adverse effects, shared among post-industrialized countries including the U.S., Europe and Japan[1]. Job stress control which includes the prevention and reduction of job stress has been increasingly important to protect and promote worker health and well-being in the contemporary workplace. Previous research has accumulated evidence on effects of job stress on physical and mental health[2]~[5]. However, there is still a gap between research evidence and its implementation for policy development and practice. Closely related to this issue, this paper reviews selected topics and discuss the future directions of job stress control. The topics include the following: a need for evidence-based approaches in job stress control, a cultural perspective on research and practice for job stress control, and an integrated national strategy for achieving job stress control.

Evidence-based approach in job stress control

Why an evidence-based approach is important for job stress control, as well as in other fields of medical and health sciences? One reason is that we have only limited resources for health care and there are competitive priorities among health care services. For a better investment of manpower and financial resources, a decision on the priority should be made based on evidence for the efficacy of a certain measure of job stress control. In a

current social trend, the accountability is increasingly important: policy makers and health care providers show consumers and the public why they choose one measure from several candidates. The accountability is also required in case of job stress control. An evidence-based approach is also essential to increase a sense of profession among practitioners in the field of job stress control.

Here are some examples from our recent work, illustrating the importance of the evidence-based approach. A controlled study was conducted to assess the effects of a supervisor-participated worksite stress reduction program on worker mental health[6]. In this study, corporate medical staffs including psychologists worked together with supervisors from two worksites (the intervention group), discussing specific sources of stress in their worksites and planning a possible improvement for each stressor. Finally, supervisors conducted these improvement plans for the succeeding year. Average depression scores decreased one year after the beginning of the improvement activity in the intervention worksites, while the scores for the control worksites remained stable. At the end of a two-year follow-up, an intervention effect was even observed in a decrease in sick leave days. Although the intervention and control worksites were not randomly allocated and there may be factors other than the intervention affecting the findings, it is suggested that an improvement in a stressful work environment is a useful approach for worksite stress reduction.

A healthy lifestyle, such as eating breakfast regularly, sleep hours, exercising and not smoking was associated with lower psychological distress among working men and women. However, an experimental study[7] revealed that sending a mailed advice for workers to indicate their stress levels and recommend these daily habits showed little effects on the improvement of their daily habits or reduction of their psychological distress, suggesting a need for an effective education program to utilize daily habits as a stress reduction measure. This is a good example showing why we need evidence on the efficacy of job stress control, even when we already have many indirect evidence for it.

Research on evaluation of job stress control programs is still limited. More well-designed controlled studies should be conducted in future. A well-described case study or a uncontrolled trial may also provide evidence of high quality. Steps toward the evidence-based approach includes: to review evidence for each job stress control program critically, rank them based on the reliability and validity, add new evidence if necessary, and construct a database. Education and training of key experts for job control in the evidence-based approach and dissemination of the information to them are also inevitable steps.

Cultural perspectives

Job stress is an issue not only for post-industrialized countries but also for so called developing countries. In such a circumstance, culture in each country should be considered in research and practice in job stress control. Japan is know as having a distinctive culture from Western countries although there are cultural difference observed among Western countries. Markus and Kitayama[8] defined the Japanese culture as having an "interdependent self" construal under which self is variable depending on specific situations and roles in Japan, while self is considered independent regardless of situations or roles in Western culture. This theory implies that the most important tasks of Japanese for keeping their self-esteem are to fit in a given situation and occupy one's proper place, read others' mind and try to achieve what others need. As a consequence of these, Japanese pay more attentions to their negative aspects to continuously correct their behaviors to fit in a situation; they also have more concerns on others' need rather than their own need.

Japanese workers reported greater psychological distress and lower job satisfaction than U.S. workers[9] This has been considered evidence that Japanese workers are more stressed. However, a series of studies by Iwata and his colleagues[10] addressed this issue and have indicated that the higher reported psychological distress among Japanese workers is attributable to a response bias, i.e., the suppression of expression of positive emotions by the Japanese. When comparing responses between Japan and the U.S. on each item of the CES-D, a self-reported depression scale, they found that the difference was only observed for positively-worded items (e.g.,
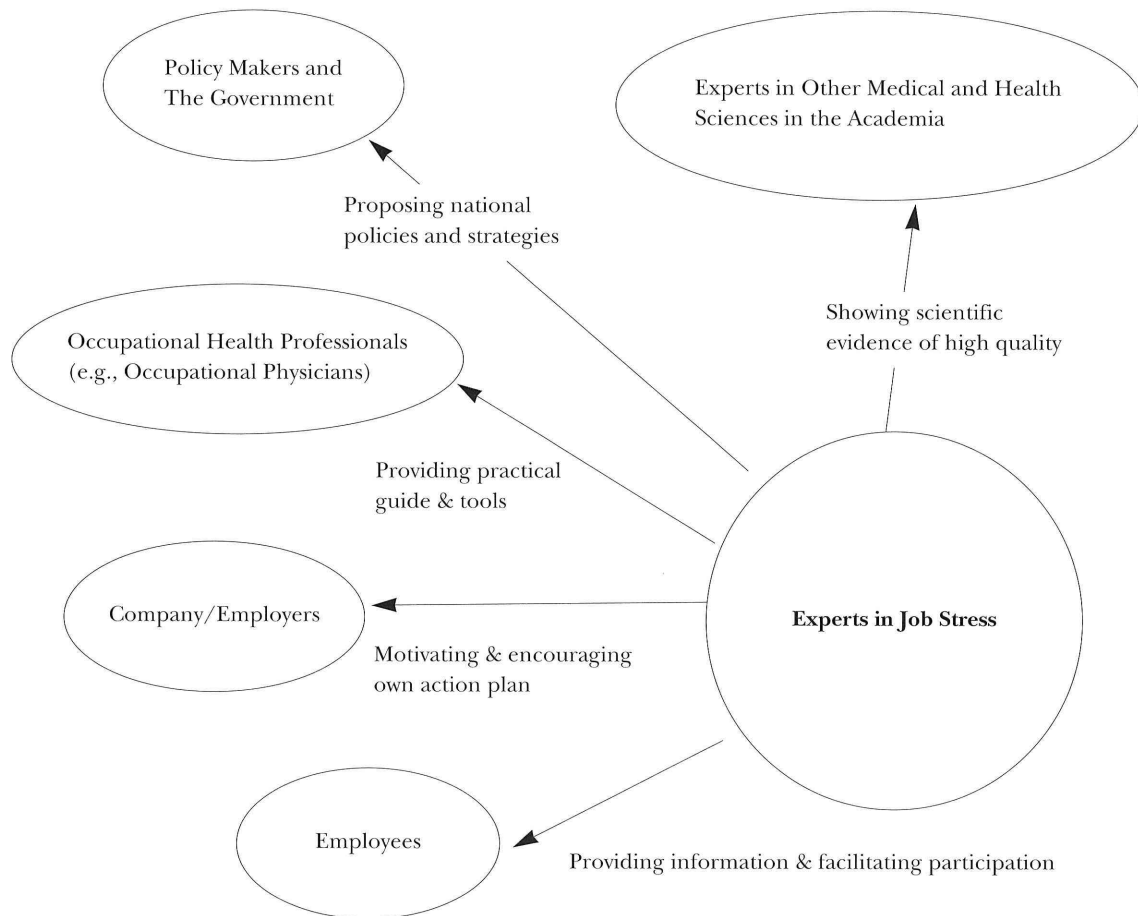
Policy Makers and
The Government

Experts in Other Medical and Health
Sciences in the Academia

Proposing national
policies and strategies

Showing scientific
evidence of high quality

Occupational Health Professionals
(e.g., Occupational Physicians)

Providing practical
guide & tools

Company/Employers

Experts in Job Stress

Motivating & encouraging
own action plan

Employees

Providing information & facilitating participation

Figure   Toward An Integrated National Strategy: Multiple Roles of Experts in Job Stress to Interact with Other Key Groups Relevant to Job Stress Control

happy, satisfied) but not for negatively-worded items (e.g., depressed, irritated). This is consistent with a tendency of Japanese paying a more attention to own negative aspects[8]. The same tendency may also affect perception or expression of job stressors.

There is also evidence for a different role of supervisors between Japan and the U.S.[9], [11]. In a study by Lincoln and Kalleberg[9], frequency of supervisor contact was greater in Japanese employees than in the U.S. employees, as expected. Then, they fund supervisor contact was negatively associated with job satisfaction and autonomy for the U.S. employees. On the other hand, it was positively associated with job satisfaction and even slightly and positively associated with autonomy for Japanese employees. This suggests that supervisor contact is perceived as problem finding on worker behaviors and a source of distress in the U.S.; supervision seems perceived by Japanese employees as a function to collect information from workers

and maintain harmony and welfare of a whole group, as expected from the theory[8], [11].

These preliminary evidence leads to a hypothesis that a culture may affect perception of job stressor, job stressor-strain relationship and expression of psychological distress. Such a possible cultural difference may affect job stress prevention practice. It is speculated that a continuous improvement ("kaizen"), a characteristic of Japanese style production management, can be a source of stress[12]. According to the theory of Japanese culture[8], this seems a source of self-esteem for Japanese, but it may not be so for the U.S. workers. Job stress research and job stress prevention considering a culture will be essential and very promising in future. The concept of culture may be expanded to collective behavior characteristics and their effects on job stress by gender, age groups and companies/worksites.

Toward an integrated national strategy for job stress control

One of final goals of research in job stress is to implement accumulated evidence in practice for job stress control. It is very obvious that job stress control in a whole country cannot be completed by experts in job stress alone. This could be achieved in a cooperation with several other key groups relevant to job stress control[3]. Taking the Japanese case as an example, there are five key groups: policy makers and the government, occupational health professionals, companies or employers, employees, and other researchers in the academia, (figure).

Policy makers and the government focus more on opinions from the pubic (i.e., their consumers) rather than scientific evidence. What they expect is generally a consensus proposal which can be immediately implemented, e.g., a new health care system, legislation, support programs, etc. On the other hand, researchers are more oriented to find out new scientific evidence. To fill in the gap between policy makers and researchers, experts in job stress are required to have enough knowledge on current policies resources, integrate them with scientific evidence and develop a specific proposal which is enough detail to convince policy makers.

More than 70% of companies in Japan are interested in job stress reduction activities[13]; they recognize that job stress control is effective for increased productivity and worker health. On the other hand, only 20% of them are doing any activities for job stress control. A large gap in the figures indicates that companies are not enough motivated to pay efforts. Any activity costs some including employee's time and an extra payment for lectures and improvements of machines and work environment. Evidence for cost-effectiveness is essential to motivate companies. However, it should be noted that sometimes just a single successful case story in another company is very useful to motivate a company. Furthermore, each company has its own values and goals like that "employees are a basis for our company" and "our company has the priority on people's harmony and well-being". Once goals and strategies of job stress control are fit in the company values, they are willing to pay for job stress control. Another force to motivate

companies to do job stress prevention is also a legislation by the government.

Each company which has 50 or more full-time employees is required by law to hire an occupational physician in Japan. An occupational physician is a key professional for job stress control, as well as for other domains of occupational health, in Japan. In general, they are highly motivated for job stress control. However, they are usually a non-expert in psychiatry or psychology. To promote their activities in companies, education/training for occupational physicians in psychosocial factors at work is essential. It would be also useful to provide easy and effective tools for job stress control which is used by occupational physicians without a guidance by experts.

Employees are less informed about job stress, thus passive and less motivated about job stress reduction. This is even reported by company personnel as a barrier against job stress reduction activities. It is important to empathize sense of employees' own responsibility and motivate them to prevent and cope with job strain for their health. It is important to give them an opportunity to participate in a job stress reduction. It should be aware that they are an important basis of changing norms and developing a new value for preventing job stress.

While interacting with experts in other occupational health fields or other medical sciences and clinicians, one might find that research in psychosocial factors at work is often looked as a "soft" science, having a much weaker scientific basis than biomedical research. Such a negative attitude of the academia may greatly discourage a company and an occupational health specialist to be involved in job stress control activities. Job stress researchers are required to conduct and publish good research, convincing other experts that research and practice in job stress are an established field of high scientific quality.

It should be empathizing that interactions with each of these key groups are essential to achieve the prevention and reduction of job stress and its adverse effects on worker health and welfare at a national level. However, it will be not easy for one single expert to play such multiple interdisciplinary roles. Researchers on job stress should collaborate to take a

group responsibility in such multiple roles, i.e., developing national policies and strategies, motivating companies, providing education/ training and tools for practitioners and employees, and seeking scientific evidence.

Conclusions

This paper briefly described the importance of evidence-based approach to rationalize job stress control (prevention and reduction) as a good investment for promoting worker health and welfare. It also should be empathized that culture perspectives are increasingly important in job stress research and practice, when considering a circumstance that job stress is now becoming a global issue. More empirical research, theoretical development and integrating reviews are needed in these topics. Beyond research, job stress researchers are expected to play multiple roles to bridge gaps between research/researchers and other key areas/groups relevant to job stress control. This is an essential step toward an integrated national strategy to implement research evidence into policy and practice in the real world.

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