

CURRENT ISSUES ON JOB STRESS IN JAPAN AND WORKSITE MENTAL HEALTH APPLICATION AMONG JAPANESE COMPANY **A Case Study Analysis**

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Background: Issues about job stress is more popular in the world currently. Not just for Japan, Korea and Taiwan, but also an important issue in EU countries, especially the UK and Finland Increase of awareness about job stress effects on work performance, productivity and mental health is as one reason of the phenomenon. **Objective:** The present study aimed to explore the issue of job stress in Japan for the reference of good practices to Indonesia. **Methods:** This study, based on observational studies in the period of September-December in year 2010 in Tokyo, Kawasaki and Kitakyushu Japan. Observations on Japanese Company and discussions with experts, such as: occupational physician of Riken Company, experts from: Tokyo University and Tokyo University's occupational physician, Department of ergonomics, the Institute of Industrial Ecological Sciences UOEH (University of Occupational and Environmental Health), Institute for Science of Labor, and researcher of Japan NIOSH. Two stress management training and occupational mental health' application program were observed in the period of October-December. **Result:** The trend of current occupational mental health research in Japan has being moved from job stress to more advanced issues of work engagement and work-life balance. There are three approaches to prevention of job stress. Considering the three approach could improve of worker productivity and well-being. The training for Tokyo University's staffs was as one session of individual-oriented stress prevention approach. It was conducted in very interactive class lecture. During 2 hours session, the participants learned some knowledge about job stress and its risk factors, exercised to construct better cognitive for stress prevention and productivity, practiced of progressive muscle relaxation technique, group work, did some home works and filled an evaluation sheet after the session was finish. We also observed the occupational mental health program at Riken Company that was covered of primary, secondary and tertiary prevention of occupational mental health program of workers mostly on job stress issue. **Conclusion:** It was concluded that although many efforts has made to anticipate the problem of job stress in Japan, it is still need further studies to find the most appropriate instruments for the indicator of job stress and methods of intervention which are most effective for employees and company, as well as general improvement for well-being of workers and their family as they are a part of community.

Key words: job, stress, issue, management.

INTRODUCTION

Concern about occupational mental health problems, especially job stress seems to have become an international issue recently. It is not just in Japan, Korea and Taiwan, but also as an important issue in EU countries, especially the UK and Finland.¹ The issues concerning job stress in Indonesia is also an issue to be concerned in the

field of occupational practice and sciences, although lack of publications as well as specific policy are related. It could be predicted that the increase of complexity and competition of working condition. Unhealthy corporate culture, economics condition resulted in downsizing and restructuring the organization, local culture and individual belief system are an example of stressor among workers in Indonesia, besides various other factors related to working conditions. Although the problem of job stress will be a serious problem in the future, the intervention studies are rare, especially of international publication. Compare to Indonesia, it

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has been surprised with current conditions in Japan. Stress at work remains at high levels (65%) in Japan in period of year 2002 to 2007. Fifty-eight percent of employees in Japan reported strong worry, anxiety, or stress at work or in their working life in 2007. The number of suicide is increased among employees from about 6,000 per year in 1997 to about 9,000 a year in 1998 and remained stable in 2007. Currently, in Japan, 2-5% of workers have mental health problems in many companies. While an accurate data on the amount of job stress problems in Indonesia and the strategy for anticipated has not been found. Progress in research and build some strategy in anticipation of occupational mental health problems in Japan could be a reference for the implementation of research and improvement program in Indonesia.

This study aims to find the current issue of job stress in Japan and application of stress management intervention in Japanese companies.

METHOD

This study based on observational studies in the period of September-December 2010 in Tokyo, Kawasaki and Kitakyushu Japan. Observation on Japanese companies and discussions with occupational physician of Riken Company, experts from Tokyo University (include Tokyo University's occupational physician), Department of ergonomics, the Institute of Industrial Ecological Sciences UOEH (University of Occupational and Environmental Health), Institute for Science of Labor (The President of the International Commission on Occupational Health) and researcher of Japan NIOSH were conducted. Two stress management training at Tokyo University and an occupational mental health' application program at Riken Company were observed in the period of October-December. Discussion with Expert Occupational of Mental Health from the Department of Mental Health of Tokyo University, Department of ergonomics, the Institute of Industrial Ecological Sciences of UOEH (University of Occupational and Environmental Health), company visit and discussions with key person at company (occupational physician, fulltime nurse and clinical psychologist), discussion with the President of the International Commission on Occupational Health at the Institute for Science of Labor, Kawasaki, and discussion with researcher of Japan NIOSH. This study was equipped with ethical clearance obtained from the local authority board.

RESULTS

Current Issue of Job Stress in Japan

Currently, Japan is not only intense in research on aspects of job stress in accordance of the

working conditions at workplace, but more advance; they have already conducted research about the positive aspect of psychological conditions of worker which is popular on term of work engagement, and study on work-life balance issue.

Historically, according to Kawakami's explanation (Norito Kawakami is a professor on mental health at Graduated School of Medicine of Tokyo University), Japanese company's concern on mental health increased significantly since 2000, started and was improve since 1980's. Concern began to grow was start from the emergence of pressure from the shoot claim of compensation against the cases "Karo-jisatsu" (suicide due to overwork) is a term commonly also called as "karoshi" (death due to overwork, the caused by cardio vascular disease). The company is feared by the will of the demands of large compensation claims costs by cases of mental illness. In addition, the incident of suicide among workers also increased in Japan. Economics crisis in Japan resulted in organizational restructuring, downsizing and outsourcing such as is a new source of job stress in Japan. Worker in Japan are exposed to a rapidly changing work environment, such as newly developed of technology or organizational changes. According to Kumashiro, quantitative work load is a very important factor proved to be a stressor of job stress among workers in Japan. It has been proved through many research (one of his research is a longitudinal study over 10 years-in year 2000-2010 (at big air condition company in Japan) related to job stress in relation to the WAI (work ability index). He explained that need an integrated assessment of evidence objectively of cycle time of work (work pace) and the subjective feeling of quantitative workload among workers if we want to assess and do intervention against these stressors. Improvement in nature to increase the motivation of workers will be very beneficial as a strategy in the stress management program when the real quantitative workload cannot be avoided, especially on "busy season".² The result of discussions with experts from the Institute of Science for Labor, DR. Kazutaka Kogi had another opinion related with intervention of job stress at workplace. According to Kogi, the strategy in anticipation of job stress in the workplace should keep its volunteers and use of participatory approach. Because there is always any good local practice has been done by workers on their problems. The improvement of working condition must be made in both aspects on psychosocial overall scale and physical or ergonomics aspects. Because of job stress can appear by various stressors. Strategies have been practiced and effective in the form of workshops to facilitate the workers find their own strategies in

dealing with job stress they face. There is no one fixed instrument for assessing successful of the program and could be used and suitable for all company.³ It is recommended to make adjustments of instruments so that the gain and could applicable to measure the effect of improvement has been done in a rational way.

In research area, year 1990's in Japan was the growing era of job stress research. Japan launched big-government's research grants for anticipating problems of job stress. Many international publications which can be viewed in free access through internet facility (Pub Med). Based on Kawakami's explanation, the Japan Ministry of Health, Labor, and Welfare conducted a representative survey of companies and employees in Japan every five years (The National Surveys of Health Status of Workers, 1982, 1987, 2002, and 2007). In fact, in 2007, a total of 952 and 164 claims were submitted requesting worker compensation for mental disorders and suicide respectively possibly related to work; 28% and 50% of these claims were approved for the compensation in 2007. The number of these claims was doubled for mental disorders and 1.3 times for suicide greater during the last five years. The workers compensation and the suitcase due to work-related mental disorders and suicide have motivated employers to take actions for mental health at workplace during the past 10 years.

Several researches have been done in Japan. Those appear that many measuring instruments have been developed and tested its validity to supporting the evidences in a more scientific about job stress, outcomes and types of interventions. They're doing test-retest of the instrument and make improvements so that research results more robust, valid and meaningful. Tokyo University in Japan is seemly as a leader on research about occupational mental health in the world. Their researches are growing up as same speed of the UK and Europe country. In 2006 in Japan, amendments of the Industrial Health and Safety Law introduced a new activity for prevention of job stress-related diseases, particularly cardiovascular diseases and depressive disorders, namely the Doctor's Interview of Workers with Long Work-hours. It is mandatory every employer that provides a chance to have an interview and health checkup by a physician to employees who work 100 hours overtime or longer, have fatigue, and wish to see a physician.

In year 2009, the Japan Ministry of Health, Labor and Welfare developed the guideline about occupational injuries was updated and added the term "Plus he / she had experienced awful bullying, verbal abuse, or violence".⁴

Observation of Job Stress Management Training in Japanese Company

According to Norito, there are three primary approach to prevention of job stress, such as: 1) Improvement of psychosocial work environment (or organizational approach), 2) Education/ training of managers and supervisors; 3) Individual-oriented stress management. Observation result of following two cases as seen below were with different approaches on stress prevention. Description of both cases could be seen below.

Case 1 and 2 Stress management training for Tokyo University staff lecturers

Four trainees groups held in different day from November to December 2010. First training conducted on November 5th 2010. Fifteen participants from 10 departments, a range of age 30-55 years attended. At least was needed of five months preparation. Small groups of meetings conducted to be well preparation. The initiative was come from the university's occupational physician. This training was one training session. It was 2 hours training session, trained by clinical psychologist expert of Tokyo University.



Picture 1
The training of Tokyo University staff on November 5th and 24th, 2010.

After finish the training, the participants looked more enthusiasm to improve their knowledge and behavior to anticipating stress. Participants reported that the training was very useful for them and for their profession. They told will recommend their friends to joint the stress management training if any possibility for them. Effectiveness of training measured by evaluation form and submitted to occupational physician.

The second training was more perfect than the first training. Training contents were more interactive. Some obstacles could prone the training un-maximal on their effectiveness were: 1) Strategy to enhance participant motivation to aware that stress prevention program is their need, make it sure to participants understand well that is not trainers or occupational physician need, 2) Trainer skills and experiences; 3) Training content and training's time arrangement.

Case 3 Stress Management Program at Riken Company

Riken Company is located at Koyadai, Tsukuba-shi, Ibaraki, Japan. The centre of the company is the Riken BioResource Centre (BRC). The BRC is a core repository of biological experimental materials, often referred to as biological resources, or bioresources. Around 300 employees are belonging in this company which is mostly researcher and laboratory analyst.

In Riken, health department is separated with safety section. They have one fulltime nurse staff who standby at company's clinic to assist all health problems of employees during day time. Concern of job stress issue at Riken Company was started in year 2007. Many case of long sick leave caused by mental health problem, harassments at workplace and worker exit from company were found during the period of year. Those conditions invited Human Resources Department manager initiated to arrange a strategy to anticipate the long term effect of the problem. Mental Health Promotion Plan and activities related were decided to do in well organizer. The long-term goal of Mental Health Promotion Plan at Riken Company is to promote workplaces with active atmosphere through better communication, and prevent work-related mental health problems. The company prepares stress management training based on individual-oriented and training for supervisor. Their current activities on occupational mental health are: usual occupational health service, specific occupational mental service based on primary, secondary and tertiary prevention of mental health, such as: awareness program, finding new cases, consultation, management, return to work evaluation and interview of long working hours worker as mandatory by law. Occupational health

including mental health activities conducted at Riken as shown in the following pictures.



Picture 2
Occupational Physician interviewed and measured physical condition of worker with long working hours.



Picture 3
Occupational Physician, Nurse, Safety Department Staff, HRD staff, inspected workplace

Service of occupational mental health consultation among occupational physician and employees with mental health problem is conducted on monthly. Mostly case of mental health problem among workers in Riken was adjustment disorder and atypical depressive disorder. To manage worker's health problem the health department has networking with mental health clinic which is located around Tsukuba area and hospital at Tokyo. Some plan of occupational health activities including occupational mental health activities discussed on monthly meeting at company conducted in November 18th 2010.

DISCUSSIONS

This is the study to obtain the current condition of job stress issue in Japan. The country has been very advance on job stress awareness and

research on aim to improve worker well-being especially on mental health. They are no longer only deepen the research on aspects of job stress in accordance of the working conditions at workplace, but more advanced, they have already conducted research about the positive aspect of psychological conditions of worker the which is popular on term work engagement, and other research was work-life balance study.

Based on discussions with experts and lectures attended, in Japan, employee mental health care has now become a major occupational health issue. The number of suicides in Japan exceeded 30 000 in each of the last 3 years, presumably due to the prolonged economic recession and corporate restructuring. The number of workers recognized by the Ministry of Health, Labor and Welfare as suffering from work-related mental disorders, a category including suicides, increased dramatically from less than four before 1998 to 36 in 2000. This is reasonable, because many publications illustrating that the worker in Japan is working with long working time (more than 40 hours per week), although this time his time has begun to shorten. The length of working time has become one of the triggers of job stress in Japan which is related to a high incidence of suicide risk. So invite the concern of Japan on Job stress issue.

Many cross-sectional studies have revealed a positive association between adverse job characteristics and poor mental health, including major depressive episodes, depressive symptoms, and psychiatric morbidity according to Tsutsumi, adverse psychosocial job characteristics can potentially lead to suicide via depression or psychiatric disorders.⁵

As described above, that other more specific reasons why the concern about job stress is increasing in Japan is increasing the number of compensation claims due to disruption of suicides and other mental conditions to the company, in addition to other losses due to lost workdays, decrease in work productivity and employee benefits.¹ Exposure to the above is also in accordance with what has been described by Haratani that social concern about "karoshi" (death from overwork) in Japan has been there since the 1980's (Haratani, encyclopedia of acc health, ILO, 1998). According to Haratani, karoshi was initially a legal issue nowhere families of victims claimed workers compensation for death possibly related to overwork. Kasahara (1987) also revealed that, 'tashin funin' (long distance marriage), 'madogiwa' (demotion to a lower position without any Important duty), and 'shukko' (transfer to a subsidiary company) as characteristics in Japanese working life relevant to mental health workers.

In Japan, the proportion of companies which implemented mental health care activities at workplaces dramatically increased from 2002 to 2006 (Inoue et al., 2008). Early identification of workers with mental health problems was established in 69% of companies participating in the surveys in 2006, compared to 18% in 2002. Education/training of managers and supervisors, individual-oriented stress management, and improvement of psychosocial work environment were conducted in 41, 29, 17%, respectively, of the companies in 2006, compared to 8, 10, and 10%, respectively, in 2002.

Many strategies have been done by the Japan Ministry of Health, Labor and Welfare since 1999 supported by Japan experts as well as initiative of companies. One example is The Tokyo Declaration, it was given the available evidence of the endemic nature of occupational stressor exposures and the high incidence and serious consequences of the resulting work-related stress and ill health, 28 countries leading occupational, behavioral, and environmental health scientists from Europe, Japan, and North America to a "triangular" conference held at and sponsored by the Tokyo Medical University and cosponsored by the European Commission, the World Health Organization (WHO), the International Labour Office, the National Institute of Occupational Safety and Health, the Japanese Ministries of Labour and Health and Welfare, and others.

Other strategies have developed to anticipate the problem of job stress through stress management intervention is examined through various studies to find the best method for employees and company.⁹⁻¹⁶ Studies that are bio-molecular and applied sciences began to be in the range of 1997 by Kawakami which is then followed by several studies which was aimed as a prevention (from primary prevention to tertiary prevention) of job stress. Cross-cultural considerations will also be a concern in designing intervention strategies for job stress.¹⁷

Of the three approaches to job stress prevention in accordance with Kawakami described above, the approach to the organization that represents the first approach, aiming to reduce the stressors of the workplace. Tsutsumi et al (2009) in his studies applying interventions in the form of organization and the participation approach among blue collar workers in medium-sized company producing electrical devices in Japan. The strategy as mention were the team-based, problem-solving based on active employee involvement, share work-related goals, and action planning to improve the work environment (job redesign) for stress reduction. Improvements implemented during intervention period based on participatory approach

were: 1) 4S, as a standardized clean-up activity (sorting, straightening, sweeping, standardizing); 2) Clear labeling of parts; 3) Work station redesign (layout of work areas); 4) Material storage and handling (including inventory control); 5) Dust cleanup; 6) Noise reduction; 7) Appropriate revision of manuals for working processes; 8) Set up of cleaning time by all the team members; 9) Time-saving by introducing stamps (instead of hand-writing); 10) Using appropriate devices/tools and jigs; 11) Regular machine maintenance. In addition of good practice based on Tsutsuya's study, there are some strategies according to organizational approach for job stress management are as followed: 1) Change in supervisors' knowledge and attitude (understanding how to listen to subordinates, positive attitude toward listening to subordinates, understanding how to support workers who are returning to work after experiencing mental health problems, understanding how to work with occupational health professionals, understanding the psychosocial work environment, positive attitudes toward improving the work environment, understanding how to deal with stress, being aware of and coping well with stress; 2) Changes in worker perception of worksite support; 3) Changes in other job stressors: quantitative and qualitative workload.⁶ Based on Van der Klink et al. (2001), many organization-focused programs aim at enhancing job control. However, individual perception and coping skills are necessary if one is to use this extra control and make it profitable.⁷

The second approach, namely managers/supervisors training, has been proven through several empirical studies by Kawakami and the results are significantly decreased of psychological distress among workers. According to Kawakami (2005), supervisors are a source of emotional, informational, and instrumental social support as well as being key individuals in preventing job stressors in the work environment.⁷ The supervisor support has been associated with a wide range of better health outcomes among workers (less depression, less fatigue, greater job satisfaction, lower blood pressure, fewer musculoskeletal problem, successful return to work, and greater productivity. He conducted the study as a web-based supervisor training on supervisor to dealing with the extent to which a supervisor listens to personal problems of subordinate workers. The web-based training method of supervisor training (as well as individual-oriented stress management training) use of internet technology and provided from internet server PC at office or at home. All participants accessed the training program which is called "E-learning Worksite Mental Health for Supervisors" (Fujitsu Infosoft Technology Co. Ltd.,

Japan, 2002). The contents of the web-based training included a variety of topics that supervisors were required to know based on "Guidelines for Promoting Mental Health Care in Enterprises" by the Japanese Ministry of Health, Labor and Welfare. The average time to complete the entire training was 3 to 5 h. The participant spend 2 to 4 weeks in completing the entire programs.⁷ The third approach that is individual-oriented stress management carried out by face to face training in the classroom as well as those currently gaining popularity in Japan and is also in web-based training. Shimazu have already done many study in this approach.^{9,10}

In individual oriented, stress management intervention is defined as techniques and programs that are designed to help employees modify their appraisal of stressful situations or to deal more effectively with the symptoms of stress, or both.¹² According to Murphy, there are various kinds of intervention techniques of individual-focused training and programs such as, cognitive-behavioral training, personalized feedback based on systematic assessment, meditation, relaxation training, and physical fitness training. Accumulated Murphy's experience from individual-focused interventions shows that cognitive-behavioral training is more effective than other techniques in enhancing psychological resources and responses, and reducing complaints.¹² Individual approaches have also been tested using web-based training methods. Several studies that apply the training in the form of web-based individual²⁶⁻²⁸ have proved that this method is effective in decrease of mental health risk and work performance problems among workers.

As Japan has more advances on anticipate of job stress issue, currently issue on "work engagement" would be more popular in this decade. This issue started the research era as conducted through development of the Japanese version of the Utrecht Work Engagement Scale (UWES) and published in 2005. Work engagement concept raised in term of increased attention is paid to what has been coined "positive psychology": the scientific study of human strengths and optimal functioning.^{9,10} Work engagement is a defined as a positive, fulfilling, work-related state of mind that is characterized by vigor (is characterized by high levels of energy and mental resilience while working), dedication (is refers to being strongly involved in one's work and experiencing a sense of significance and pride, and absorption (is characterized by being fully concentrated and happily engrossed in one's work).^{9,10} In addition, in this year Shimazu developed research on work-life balance. The latest issue will be as a chance in

future research at aim of worker and family well-being that could be reached together.¹⁰

The most difficult part of stress prevention is an organizational (environmental) approach. It is not easy to find the type of improvement which is applicable to the conditions and needs of employees and company. The study results also not enough to guide the plan it will be directly applicable in the real workplace. Some consideration in holistically is needed to find out one fit program suitable for type of workplace and variety of task on job stress management program for worker and company.

CONCLUSION

The application of job stress prevention program has already been running well in Japanese company. This country has been very advance on job stress awareness and research on aim to improve worker well-being especially on mental health. They don't just doing research on job stress aspect in accordance of working condition at workplace, but more advance, they have already conducted research about positive aspect of psychological condition of worker which is popular on term work engagement, and other research was work-life balance study. Further studies on intervention methods and ways of assessing effectiveness of the program would still be challenges ahead, particularly in supervisory and organizational stress prevention approach.

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