Participated in two global publications in 2022/2023

- World Health Organization (WHO). Guidelines on mental health at work, 2022
  https://www.who.int/publications/i/item/9789240053052

Topics Today

• Improving mental health in the workplace in Japan

1. History
2. Current programs and practices
3. Research
4. Conclusion
Japanese occupational health system

Strength
• A thorough legal framework, broad-based administrative arrangements, detailed data collection
• A large complement of trained professionals.

Challenges
• Aging work force and shift in industrial structure
• Most unions remain limited in power and many workers are non-unionized and without influence.
• Marginal workers may suffer problems.
• Women employees continue to confront discrimination.
• Emerging issues of stress and mental health.
• Tensions between productivity and worker welfare persist.

A history of improving mental health in the workplace in Japan

The 1st boom (1950's) & slump (1960-70's)

The 2nd boom & the Karoshi problem (1980')

Company legal duty for worker safety (2000-)

Productivity concerns (2010-)

The human capital business perspective (2020-)

The 1st worker compensation for a depression case (1984)


A surge of mental health problems of workers (2005)

The COVID-19 pandemic (2020-)

Return to work

Early identification

Education/training

Work environment improvement

Positive mental health

The Stress Check Program (2015-)
“Karoshi” (death due to overwork)  
“Karo-jisatsu” (suicide due to overwork)

Karoshi (mostly cardiovascular death from overwork): the ILO case study

• Mr A worked at a major snack food processing company for as long as 110 hours a week (not a month) and died from heart attack at the age of 34. His death was approved as work-related by the Labour Standards Office.

• Mr B, a bus driver, whose death was also approved as work-related, worked more than 3,000 hours a year. He did not have a day off in the 15 days before he had stroke at the age of 37.

• Mr C worked in a large printing company in Tokyo for 4,320 hours a year including night work and died from stroke at the age of 58. His widow received a workers’ compensation 14 years after her husband’s death.

• Ms D, a 22 year-old nurse, died from a heart attack after 34 hours’ continuous duty five times a month.

The first civil lawsuit case of Karo-jisatsu (suicide due to overwork) in Japan

• A 24-year-old male employee of an advertising company committed suicide in 1991 after he became depressed due to overwork.

• The family sued the company that the company neglected the responsibility to stop his overwork and to properly respond to his mental health condition. The trials went through the District Court and the Tokyo High Court.

• In 2000, the Supreme Court confirmed the obligation of a company (and a manager) to care for health of those in their charge and ordered the Tokyo High Court a retrial.

• The settlement proposed by the Tokyo High Court was agreed: the company accepted its failure for the suicide of the caused by overwork and paid the family about 168 million yen in compensation to settle the case.

• After agreeing to the compromise, the company regretted the suicide of this employee and promised to take measures to prevent similar deaths by thoroughly monitoring employees’ working and health conditions.
Causes of Karojisatsu (work-related suicide)

- Amagasa et al. (2005)
  - 22 cases - both applications for worker's compensation insurance and civil suits
  - Experienced personnel changes, such as a promotion or transfer (77%). Low social support (82%), high psychological demand (82%), and low decision latitude (77%).
  - Long working hours (86%) (more than 11 hours per day for 3 months or more, and without a day off for 9 cases).

- Nishimura et al. (2022)
  - 167 cases of mental disorders resulting in suicide that were compensated in 2015-2016.
  - Chronic long working hours (19%), gradual increase (27%), or rapid increase (25%) in working hours before the onset of a mental disorder.


“Karoshi” and “Karo-jisatsu” are legal terms facilitating the compensation to the victim’s family.

### Classification by cause

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>過労死 “Karoshi”</td>
<td>Cardiovascular death due to overwork</td>
</tr>
<tr>
<td>過労自殺 “Karo-jisatsu”</td>
<td>Suicide due to overwork</td>
</tr>
</tbody>
</table>

### Related social system

<table>
<thead>
<tr>
<th>Legal base</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial Accident Compensation Insurance</td>
<td>Compensation provided for under the Industrial Accidents and Diseases Branch of the Social Security</td>
</tr>
<tr>
<td>Articles 415 and 709 of the Civil Code</td>
<td>The employer’s civil liability for committing a fault or negligence of taking care of health of workers</td>
</tr>
</tbody>
</table>
Japan is no more the No. 1 country.

https://data.oecd.org/emp/hours-worked.htm
Worker compensation due to cardiovascular disease (CVD) and death in Japan: A secular trend

https://www.mhlw.go.jp/stf/newpage_33879.html
Worker compensation due to mental disorders (MD) and suicide (S) in Japan: A secular trend

The Workplace Mental Health Guideline


- A “mental health promotion plan” is recommended to establish through a discussion at the Health Committee to promote mental health measures continuously and in a planned manner with a mid- and long-term perspective.

- “Self-care” by workers; “Line-care” by supervisors; “Care by occupational health staffs”; and “Care by outside resources” (such as supporting centers) are to be implemented according to the capacity of the workplace.

- Recommended four specific measures:

  (1) Education/training and information dissemination
  (2) Assessment and improvement of work environment
  (3) Awareness of and consultation for a workers with mental health condition
  (4) Support for return-to-work
The national system and programs for occupational mental health activities in Japan

- The Industrial Safety and Health Law (1972)
- The Guideline for Maintenance and Promotion of Mental health of Workers (2000)

Organization for safety and health management in the workplace

- General safety and health supervisor
- Safety supervisor
- Health supervisor
- Industrial physician
- Workers

Measures for worker mental health

- The Worker Mental Health Guideline
- The Stress Check Program
- Measures for prevention of health problems due to overwork

Related measures

- Supporting the treatment and work integration in the workplace
- Employment of persons with disabilities
- Harassment measures

Programs and systems to support activities in the workplace and workers

- Occupational Health Support Centers
- Regional Occupational Health Centers
- Subsidy for mental health activities in the workplace
- A portal website for promoting worker mental health “Kokoro no mimi”

Employer

Health committee

Labour standards inspectors

Other health workforce (hygienist; public health nurse; psychologist)
Evidence-based measures included in the Worker Mental Health Guideline by the Japan Ministry of Health, Labour, & Welfare

<table>
<thead>
<tr>
<th>Specific measures</th>
<th>Scientific evidence for effectiveness*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary</strong></td>
<td></td>
</tr>
<tr>
<td>Education/training and information dissemination for workers</td>
<td>Improved stress, positive mental health, work effectiveness of workers, as well as knowledge of mental health</td>
</tr>
<tr>
<td>Education/training and information dissemination for supervisors and managers</td>
<td>Improved knowledge, attitude, behaviors related to mental health of supervisors and managers</td>
</tr>
<tr>
<td>Assessment and improvement of work environment</td>
<td>Improved stress and work-related outcomes (job satisfaction, work performance) of workers</td>
</tr>
<tr>
<td><strong>Secondary</strong></td>
<td></td>
</tr>
<tr>
<td>Awareness of and consultation for a workers with mental health condition</td>
<td>Supervisor education/training improved help-seeking behaviors of subordinates; unclear effect of screening of mental disorders</td>
</tr>
<tr>
<td><strong>Tertiary</strong></td>
<td></td>
</tr>
<tr>
<td>Support for return-to-work of workers with mental health condition</td>
<td>Program provided by occupational health professionals improved total sick leave days and symptoms of workers back to work</td>
</tr>
</tbody>
</table>

* Summary evidence based on systematic reviews of randomized controlled trials.
Shifting the target: Increased prevalence of mental health problems in early 2000’s in Japan

Reported trend of prevalence of mental health problems among employees

- 2002: Increased
- 2004: Stayed flat
- 2006: Increased
- 2008: Increased
- 2010: Increased
- 2012: Increased
- 2014: Increased

Shifting the target from the risk management for “Karoshi” and “Karojisatsu” to the primary prevention of mental health problems

Source: The Japan Productivity Center: Surveys of listed companies on employee mental health.
The Stress Check Program (2014)

The Industrial Safety and Health Act was amended

- To mandate workplaces with 50 or more employees to conduct the Examination for Assessing the Degree of Psychological Burden (so called “the Stress Check Program”) since December 2015 (recommended for smaller workplaces)

The aim

- Primary prevention of mental health conditions of workers

Components of the program

- Conduct periodic questionnaire surveys of stress of workers
- Inform workers individual results of the survey to increase their awareness of own situation of stress
- Analyze the survey data on a group-basis, and utilize the results to improve (psychosocial) work environment
- If a workers with high stress requests, the employer must have the worker to receive a face-to-face guidance by a physician

Implementation (as of 2020)

- Implemented by 84.9% of workplaces with 50 or more employees
- Two third of these workplaces utilized the data for improving work environment.
- Different language versions of the questionnaire are available for foreign workers

Two approaches in the Stress Check Program: screening and improvement of workplace environment

A Stress Check

Employer provides a Stress Check once a year (apart from annual health checkup)

The Brief Job Stress Questionnaire

Worker request seeing a physician

Inform the respondent’s result

An employer

Improvement of working conditions

Physician’s opinion

An employer

A designated physician

For improvement of (psychosocial) workplace environment

The Job Stress Assessment Diagram

Group-based analysis of the data
### Evaluation of the Effect of the Stress Check Program

<table>
<thead>
<tr>
<th>Approach</th>
<th>Component</th>
<th>Study design</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual oriented</td>
<td>Inform workers individual results of the survey and advice to cope with stress</td>
<td>Pre-post comparison (Ito et al, 2016)</td>
<td>Improved awareness of stress and motivation to cope better with it among workers</td>
</tr>
<tr>
<td>Individual oriented</td>
<td>Face-to-face guidance by a physician</td>
<td>Cross-sectional survey (Asai et al, 2018)</td>
<td>Six of ten workers reported the physician guidance as useful.</td>
</tr>
<tr>
<td>Combined</td>
<td>Interviews of all employees; education/training of workers and supervisors</td>
<td>Pre-post comparison (Shintani et al, 2018)</td>
<td>Improved somatic complaints of workers</td>
</tr>
<tr>
<td>Work environment oriented</td>
<td>Improvement of work environment after the Stress Check</td>
<td>Retrospective cohort (Imamura et al, 2018)</td>
<td>Improved psychological distress and work performance of workers</td>
</tr>
</tbody>
</table>

Other measures related to mental health of workers

**Supporting treatment and work integration in the workplace (The “Work Style Reform”)**
- Provide the assistance for a company to promote support for the medical treatment-work balance of workers with health conditions to continue their employment, when they wish to receive.

**Employment of persons with disabilities (Act to Facilitate the Employment of Persons with Disabilities)**
- Requires companies to hire a certain number of people with disabilities at least to meet a designated proportion of the whole employees (2.3% in 2021).
- Vocational rehabilitations, job placement, adaptive training are provided to people with disabilities according to disability characteristics.

**Harassment measures**
- Workplace sexual harassment (Equal Employment Opportunity Act)
- Harassment associated with pregnancy and childbirth, maternity, childcare leave, caregiver leave (Act on Childcare Leave, Caregiver Leave, and Other Measures for the Welfare of Workers Caring for Children or Other Family Members)
- Power harassment (humiliating language and behavior based on power relationships in the workplace) (Act on Comprehensive Promotion of Labor Policies)
Progress of measures for improving mental health in the workplace: proportions of workplaces which took measures by year

### Lancet Work and mental health paper (2023) recommendations and Japan’s case

<table>
<thead>
<tr>
<th></th>
<th>Recommendation</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>regulate and control working conditions, for which scientific evidence suggests an increased risk of mental health problems and mental disorders</td>
<td>partially</td>
</tr>
<tr>
<td>2</td>
<td>develop and improve policy on mentally healthy work, with a particular focus on work environments of unskilled and low-wage workers</td>
<td>partially</td>
</tr>
<tr>
<td>3</td>
<td>develop guidance on how to create and maintain mentally healthy work at all levels of an organisation and promote systematic professional capacity building and training programmes for supervisors and occupational health and safety professionals</td>
<td>partially</td>
</tr>
<tr>
<td>4</td>
<td>improve governmental support and workplace conditions to enable individuals with mental health problems and disorders to be part of the workforce</td>
<td>partially</td>
</tr>
<tr>
<td>5</td>
<td>routinely enquire about work and working conditions in the clinical assessment, diagnosis, and management of mental health problems and mental disorders</td>
<td>Poor</td>
</tr>
<tr>
<td>6</td>
<td>ensure that the workplace is included into governmental mental health strategies, and build societal awareness about the importance of mental health in the workplace</td>
<td>Fairly</td>
</tr>
</tbody>
</table>
Mental health programs and services in the workplace before and in the COVID-19 pandemic: A demonstration video
The second shift of the target

From the prevention of mental health problems

To making the "Iki-iki" (active and lively) workplace
Shrinking labor workforce in Japan

- Companies motivated to maintain the productivity by improving worker health in the workplace
- The national strategy set by the President Abe to promote worker health to maintain the healthy workforce (2013)


Toward positive mental health at work

• Work engagement – “a positive, affective-motivational state of fulfillment that is characterized by vigor, dedication, and absorption.” (Schaufeli et al., 2001)

• “Mental wellbeing is a dynamic state in which the individual is able to develop their potential, work productively and creatively, build strong and positive relationships with others and contribute to their community”. (UK National Institute for Health and Clinical Excellence, 2009)


• “Enhancing work engagement and promoting decent work” (G7 Labor and Employment Ministers' Meeting, Okayama, Japan, 2023)
Promoting positive mental health in the business strategy

POLICY & PLANS

- Human Capital Management
- Employee engagement
- Health/Well-being and Productivity Management

In-house OH divisions/outside service provider (e.g., EAP)

DISCLOSURE

- Disclosure of key indicators
- Disclosure of actions and outcomes

PDCA CYCLE

- Analysis
- Plan
- Do
- Assess
- Improve

ACTIONS
The “Kenko-iki-iki” (healthy and active) workplace model

Psychosocial work environment

Job demands
- Quantitative
- Qualitative
- Physical
- Emotional
- Interpersonal
- Role conflict
- Work-life balance (negative)

Resources at work

Task level
- Job control
- Meaning of work
- Role clarity
- Chance for development

Group level
- Supervisor support
- Coworker support
- Rewards
- Leadership
- Interational justice
- Positive feedback
- Approval of mistake

Company/organization
- Trust to employer
- Preparedness for change
- Respect for individuals
- Fair evaluation
- Career development
- Work-life balance (positive)

Health & organizational outcomes

Health

Ill-health process

Buffering

Activation process

Work engagement

Social capital at work

Contribution to
- Improved productivity
- Worker wellbeing

Prevention of bullying
No bullying

Kawakami et al., 2012
Emerging concerns in the COVID-19 pandemic: Changing communication in the workplace may affect mental health of workers

- Decreased communication at work
  - Loneliness in the workplace
  - Poor mental health of workers

- Employees got less able to talk to supervisors and colleagues in COVID-19

- Sick leave more than 1 month due to mental health problems increased from 0.4% in the pre-pandemic (2018) to 0.6% during the pandemic (2022).

Data: Japan Ministry of Health, Labour, and Welfare
Challenges in mental health in the workplace in Japan

- Population decline
- Digital transformation and AI
- Still traditional work culture, long working hours, and Karoshi
- Inadequate work-life balance
- Harassment and bullying
- Gender inequality
- Social inequity
- Foreign immigrants
- Working populations not covered by the legislation (e.g., self-employed)
- Worker and user involvement in occupational health and safety
- Limited accessibility to mental health care and psychological services
- Natural disasters
Research on mental health in the workplace in Japan

Number of publications in PubMed

- Preliminary studies
- Cross-sectional studies
- Longitudinal studies
- Intervention studies
- Systematic reviews

Japanese version of JCQ (1996)
Brief Job Stress Q (2000)
Work engagement Scale (2008)

Iwata. AJPH (1998)

Searched on Pubmed with keywords (job stress OR mental health) AND (workplace* OR worker* OR occupational health) AND Japan, as of Jan 13, 2024.
Organizational interventions

- A supervisor-led program of improving psychosocial work environment reduced depression and sick leave days in a controlled trial (Kawakami et al., 1997).
- A worker participatory program improved psychosocial work environments and mental health among white-collar workers in a controlled trial (Kobayashi et al., 2008).
- A worker-participatory workshop intervention improved psychological distress and work performance in a cluster randomized controlled trial (Tsutsumi et al. 2009).
- No significant effect of a participatory intervention to improve psychosocial work environment was observed on mental health was observed among nurses in a cluster randomized controlled trial (Uchiyama et al. 2013).

The Mental Health Action Checklist (MHACL)

<table>
<thead>
<tr>
<th>Action areas</th>
<th>No. of items</th>
<th>Example of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Sharing work planning</td>
<td>(5)</td>
<td>Group planning, limited workload, sharing information</td>
</tr>
<tr>
<td>B Work time + organization</td>
<td>(5)</td>
<td>Non-overtime day, shift schedule, flexible hours</td>
</tr>
<tr>
<td>C Ergonomic work methods</td>
<td>(5)</td>
<td>Materials handling, labels avoiding mistakes</td>
</tr>
<tr>
<td>D Workplace environment</td>
<td>(5)</td>
<td>Heat, noise, smoking resting, facilities</td>
</tr>
<tr>
<td>E Mutual support at work</td>
<td>(5)</td>
<td>Supportive climate, newsletter, e-mail’s</td>
</tr>
<tr>
<td>F Preparedness and care</td>
<td>(5)</td>
<td>Counseling, self-care, primary care</td>
</tr>
<tr>
<td>Number of total items</td>
<td>(30)</td>
<td></td>
</tr>
</tbody>
</table>
Organizational interventions are recommended and prioritized

- WHO Guidelines recommend organizational interventions

### Recommendations for organizational interventions

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Universal organizational interventions</td>
</tr>
<tr>
<td>2</td>
<td>Organizational interventions for health, humanitarian and emergency workers</td>
</tr>
<tr>
<td>3</td>
<td>Organizational interventions for workers with mental health conditions</td>
</tr>
</tbody>
</table>

- The WHO/ILO Policy Brief prioritized organizational interventions to prevent harm.

![Strategies to address mental health at work](image)
Manager training

- A review identified seven intervention studies of the effect of supervisor/manager training on mental health of subordinate workers (Tsutsumi, 2011).
  - Improved psychological distress (including depression and insomnia) (Greenberg, 2006; Kawashima et al, 1997*; Tsustumi et al, 2005*)
  - Maintained supervisor support (Kawakami et al, 2005*)
  - Improved job control and workplace atmosphere (Kawakami et al, 2006*).
  - Decreased urine cortisol (Theorell et al, 2001)
  - No significant improvement observed (Takao et al, 2006*)

* Red collars indicates studies from Japan

Worker-oriented digital mental health interventions

• An Internet cognitive behavioral therapy (iCBT) program reduced the risk of major depressive disorder (hazard ratio, 0.22) in a randomized controlled trial (Imamura et al., 2015).

• A web-based stress and depression literacy intervention improved depression and work engagement among workers in a randomized controlled trial (Imamura et al., 2016).

• A computer-based stress management training improved psychological well-being and work performance in Japanese employees in a cluster randomized controlled trial (Umanodan et al. 2020).

• A psychoeducation website named “Imacoco-care” improved psychological distress among workers under COVID-19 pandemic in a randomized controlled trial (Imamura et al., 2021)

https://imacococare.net/en/
Worker-oriented digital mental health interventions for LMICs: a case of hospital nurses in Vietnam

- Intervention
  - Six-week six-module self-guided program
  - Accessible from smartphones (android and i-phone) and an Internet browser
  - Adapted to the target population (nurses in Vietnam)
- Findings of the RCT
  - Depression improved at 3 month follow up significantly for the programs B compared to the control (p=0.048 with a repeated mixed model analysis; Cohen’s d=0.18).

Digital Mental Health (DMH)*: Opportunities and challenges

Opportunities (WHO Guidelines on Mental Health at Work, 2022):
- “Individual level interventions (psychosocial and physical activity) can be feasibly delivered face to face, or electronically, guided or unguided, group or individually accessed.”
- “Digital interventions may offer feasible access for shift workers, self-employed or ‘off-site’ workers.”

Challenges
- “Many digital applications are available for mental health self-help and only a few have been well tested and evaluated” (WHO/ILO Policy Brief, 2022)
- “However, they should only be delivered as part of a broader programme of activities that also includes other interventions” (WHO/ILO Policy Brief, 2022)

* Digital mental health is proposed as a boarder term that encapsulates eMental health while including other technologies that help improve consumers’ mental health and overall wellness (World Economic Forum, 2021).
Conclusion

• The current systems and programs in Japan for mental health in the workplace were developed, first triggered by “Karoshi” and “Karojitsatsu”, and then by concerns on productivity loss due to mental health problems in the shrinking labor force.

• Research on mental health in the workplace in Japan was advanced initially with cross-sectional studies using validated instruments of job stressors, and later with longitudinal studies, intervention studies, and systematic reviews, contributing to globally accumulated knowledge.

• Future challenges exist both in the research and practice in the changing world of work and with innovative technologies.