

9 過重労働による健康障害に関する労働衛生法令の国際比較

International Comparison of Occupational Health Legislations with Regard to Overwork Related Diseases

藤井 健蔵、佐々木直子、筒井隆夫、堀江正知
産業医科大学産業生態科学研究所

Fujii RK, Sasaki N, Tsutsui T, Horie S

Department of Health Policy and Management, Institute of Industrial
Ecological Sciences, UOEH, Japan

ABSTRACT

Increasing literature on overwork and overwork impact on safety and health indicates the necessity to define and build strategies to prevent the wide range consequences of overwork. Policy and legislation development followed by the proper enforcement are important steps to promote changes in culture and behavior. In attempt to improve the health and safety legislation with regard to overwork in Japan, we designed a qualitative research based on literature, World Wide Web review and direct interviews with experts in the area. We were able to collect information and legal documents from 30 different countries. The language barrier was the most important limitation observed in our study. Concerns were raised upon time reductions in work hours such the restricted number of professionals, time constrains inherent to the job and the fear of an unsustainable economy at an increasingly competitive society. Key factors to policy development were found to be union's strength and participation in the legislative process, work schedule best practices implementation prior to the reduction of working hours, the full support of all stakeholders and the presence of actors within all levels, responsible for the implementation, dissemination and monitoring of workers at risk.

1. INTRODUCTION

According to the available literature, the complexity of the health effects of long working hours depends on several factors such as personal characteristics, type of job, pay, work scheduling, level of control over the tasks and non-work duties^{1, 2)}. These various factors would lead to several unhealthy behaviors such as lack of exercise, lack of sleep and the decrease in the consumption of nutritious meals, as well as other stress-related negative attitudes such as smoking and alcohol consumption³⁾. All these factors would lead to an increase in the risk factors for outcomes such as myocardial infarction^{4, 5)}, musculoskeletal disorders⁶⁾ and injuries^{7, 8)}, among many others. The numerous overwork effects on health still need considerable research, while the known impacts on health and safety, families, employers and the community⁹⁾ need assessment through policies and strategies. The relationship between overwork and heart disease

was found to be researched since 1930¹⁰), while overwork was considered a direct cause of diseases by law in 1947¹¹). The first criteria with regard to overwork related compensable diseases were defined in 1961 and were modified in 1987, 1995, 1996 and lately 2001. Policies with regard to overwork prevention started to be implemented in Japan in 2002¹²). Further policies with regard to overwork and overwork related diseases should be formulated and/or improved, aimed at prevention efficacy through an efficient and effective enforcement.

2. METHOD

In order to identify legal documents relevant to the health and safety legislation with regard to overwork and overwork related diseases in Japan, we designed a qualitative research based on literature review, search at the World Wide Web (WWW) and direct interviews through a questionnaire form.

The literature review and the search at the WWW were performed through the Entrez Pubmed database and the search engine Google™ using the combination of one or more of the following words: overwork, work, safety, legislation, law, long working hours, long hours and labor, as well as the name of a determined country.

Our sample interviewees consisted of occupational health professionals and several occupational health institutions' representatives, which were selected through referrals and direct inquiring at the 17th International Conference of Occupational and Environmental Health in Milan, Italy, June 2006. The interviewees also provided further referrals and addresses at the WWW, which were added to the electronic search.

Our questionnaire was developed in Microsoft Excel and used in electronic format at the interview, through a personal computer. The interviewer would approach subjects at the conference, inquire their country and their familiarity with health and safety legislation (question 1). If the answer was negative, we inquired question 8.

Question 2 was inquired as: What is the definition of long working hours for your country? When inquired about question 2, the following example was provided: In Japan, 40h/week of regular labor + 45h/month of extra work are the limit for overwork standards defined by the Japanese Labor Standards Legislation. The answer was typed as dictated.

Question 3 was inquired as: With regard to health impairment due to overwork prevention: Are any of the following instruments available in your country? Answer categories were: "1-Laws", "2-guidelines", "3-others" and "4-none". When inquiring about laws, the following example was provided: "Article 36 of the Labor Standards Law of Japan - 1998: permission of overtime work exceeding standards in special occasions and demands the Labor Standards Inspection Office to assist the case". When inquiring about Guidelines, the following example was provided: Guidelines for Industrial Safety and Health in Japan, Japan Industrial Safety and Health Association (International Labor Office - CIS Center in Japan) 2003. Answers were marked and typed as dictated. If "none" was chosen, the questionnaire continued at question 5.

Question 4 was inquired as: "What is the legal responsibility of the employer, and/or assigned occupational physician and/or occupational nurses in the prevention of

health impairments due to Overwork?" When inquiring about question 4, the following example was provided: "In Japan, the employer has the responsibility on providing annual examinations and reduce overtime by promoting the utilization of annual paid holidays and fully implement measures relating to worker health management if the worker is known to overcome the standards of overwork as mentioned in question 2". The answer was typed as dictated.

Question 5 was inquired as: "With regard to death from overwork compensation: Are any of the following instruments available in your country?" Answer categories were: "1-Laws", "2-guidelines", "3-others" and "4-none". When inquiring about Laws, question number 6 items were used as examples. If "none", the questionnaire continued at question 7. Answers were marked and typed as dictated.

Question 6 was inquired as: "Among the criteria below to consider death from overwork eligible for compensation, do you find any correspondence to the marked instruments in the previous question?" Answer categories were: "1-Engaged extra ordinal work* almost continuously for 24hours just before death"; "2-Worked long hours or extra ordinal work for seven consecutive days before death"; "3-Worked more than about 100 hours overwork in the month before death"; "4-Worked more than about 80 hours overwork 2 to 6 months before death"; "5-Diferent criteria. The definition of extra ordinal work was provided as: "Extra ordinal work is defined in Japan as: Work under inappropriate physical conditions such as noise, temperature, ergonomics; Irregular job scheduling; On-call work; Business trip; Time lag; Shiftwork; Night work; Mental strain." If a different criterion was mentioned, the answer was typed as dictated.

Question 7 was inquired as: "What are the overwork related diseases in your country?" Answer categories were: "1-Asthma"; "2-Cardiovascular disease"; "3-Cerebrovascular disease"; "4-Depression"; "5-Psychosomatic disorders"; "6-Suicide attempt"; "7- Duodenum/gastric Ulcers or Gastritis"; "8-None" and "9-Others". If other diseases were mentioned, the answer was typed as dictated.

Question 8 was inquired as: 8- Please, indicate any references, such as web pages, contact persons or offices, which could provide further information about subjects related to death from overwork in your country.

The questionnaire was also sent by e-mail to referred individuals and authorities. All examples were provided as mentioned before and an extra cover letter was added including our research objectives.

3. RESULTS

30 different countries were accessed in our research. Basic elements of the working hours' regulations such as normal hours of work, beyond which overtime premium become payable; maximum permitted overtime hours; maximum total hours and the overtime premium to be paid varied widely between countries as observed in Table 1. The information was obtained part from the Organization for Economic Country Development (OECD) database¹³⁾ and updated trough our interviews, including countries not associated to the OECD. Questionnaire data was filled by 21 subjects from 15 different countries: Australia, Brazil, Canada, Finland, France,

Germany, Italy, Norway, Poland, South Korea, Switzerland, Taiwan, Thailand, the United Kingdom and the United States of America.

France was found to have the shortest working week due to job sharing initiatives to reduce unemployment¹⁴⁾. This initiative provided more flexibility to shifts at large industry settings, although a considerable economy decrement was observed. The public sector and the healthcare sector were the most affected areas, suffering from staff shortages.

The longest working weeks were found at Hong Kong, Thailand and Switzerland. A recent survey indicated Switzerland may also have the highest levels of stress in Europe (33%)¹⁵⁾. Hong Kong presented the longest regular work week among the accessed countries at 65h, with no regulations with regard to maximum number of hours. Thailand presented the longest maximum week hours at 75h, and its regular work week at 48h.

Evidence to support the innumerable consequences of long working hours were found in healthcare workers across many countries¹⁶⁻¹⁹⁾. Further policies to decrease these healthcare workers' workload generated different outcomes, either causing minor changes, including more time spent with the patients²⁰⁾ or raising concerns about a possibly significant and dangerous decrease in training, leading to errors and the increase in mortality rates²²⁾.

Other professions facing health problems due to overwork such as flight attendants²²⁾ and drivers^{23, 24)} have conditions and duties inherent to their job that might serve as barriers to further policy implementations with regard to the maximum number of hours.

3.1. WWW Search addresses

Table 2 contains all relevant addresses used to complete and update the source table from OECD countries.

3.2. Questionnaire answers:

3.2.1. Australia

1- Are you Familiar with the occupational health and safety legislation in your country?

Yes

2- What is the definition of long working hours for your country?
40h per week.

3- With regard to Health impairment due to Overwork PREVENTION:

Others: Unions do sometimes provide some help, usually not on an individual worker basis, but rather on an industry or large employer basis.

4-What is the legal responsibility of the employer, and/or assigned occupational physician and/or occupational nurses in the prevention of health impairments due to Overwork?

None that I know of. I think overwork is never recognized.
5- With regard to death from Overwork COMPENSATION: Are any of the following instruments available in your country?

Others: It depends on the case (Judged by court). There are provisions for compensation of relatives of people who die at work. These have to go through the courts and many factors may be considered.

6- Among the criteria below to consider DEATH FROM OVERWORK compensable, do you find any correspondence to the marked instruments in the previous question?

None

8- Please, indicate any references, such as web pages, contact persons or offices, which could provide further information about subjects related to death from overwork in your country.

Around April May 2006, there were seven work related deaths reported in the press in Australia. There was no report about the contribution (or non contribution) of overwork to these deaths.

3.2.2. Brazil

3.2.2.1 Brazil A

1- Are you Familiar with the occupational health and safety legislation in your country?

Yes

2- What is the definition of long working hours for your country?

More than 44h per week

More than 36 for nurses

3- With regard to Health impairment due to Overwork PREVENTION:

Laws: Labor laws consolidation (Consolidação das leis do trabalho)

Guidelines: regulation norms (Norma regulamentadora NR17, NR32)

4- What is the legal responsibility of the employer, and/or assigned occupational physician and/or occupational nurses in the prevention of health impairments due to Overwork?

The employer is responsible for the health of workers. Engineers, occupational physicians and occupational nurses constitute an internal commission in every industry.

5- With regard to death from Overwork COMPENSATION: Are any of the following instruments available in your country?

None (go to question 7)

7- What are the OVERWORK RELATED DISEASES in your country?

Others: Repetitive movement distress (LER): Muscular disease related to overwork, but not necessarily expressed in the law.

8- Please, indicate any references, such as web pages, contact persons or offices, which could provide further information about subjects related to death from overwork in your country.

www.ee.usp.br/biblioteca/saudetrabalhador
www.eerp.usp.br/repap

3.2.2.2 *Brazil B*

1- Are you Familiar with the occupational health and safety legislation in your country?

Yes

2- What is the definition of long working hours for your country?

40-44h

3- With regard to Health impairment due to Overwork PREVENTION:

Laws: Legislation related to workplace assessment - Delegation of work

4-What is the legal responsibility of the employer, and/or assigned occupational physician and/or occupational nurses in the prevention of health impairments due to Overwork?

Employer takes the responsibility and it is penalized when the event happens

5-With regard to death from Overwork COMPENSATION: Are any of the following instruments available in your country?

1-Laws: It is difficult to prove, although if the case of death is work-related, the employer is punished by civil and criminal laws.

6- Among the criteria below to consider DEATH FROM OVERWORK compensable, do you find any correspondence to the marked instruments in the previous question?

Different criteria: depends on the case (court cases)

7- What are the OVERWORK RELATED DISEASES in your country?

Others: There is no direct association. There is an association in agriculture between pesticides in the tobacco industry and suicide. It depends on the job.

8- Please, indicate any references, such as web pages, contact persons or offices, which could provide further information about subjects related to death from overwork in your country.

www.fudacentro.com.br

3.2.2.3 *Brazil C*

1- Are you Familiar with the occupational health and safety legislation in your country?

Yes

2- What is the definition of long working hours for your country?

44h per week diurnal max. 8h up to plus 4h per day We consider long working hours over 9 hours per day.

3- With regard to Health impairment due to Overwork PREVENTION:

Laws: max number of hours + additional pay from 20 to 100% and even 200% depending on the type of work

Guidelines: National Worker's Health Network (Rede Nacional de Saude do Trabalhador - RENAST) – Defines the structure of the work hours, established

by the ministry of work (www.mte.gov.br) (eg. call operator's specific guidelines included).

4-What is the legal responsibility of the employer, and/or assigned occupational physician and/or occupational nurses in the prevention of health impairments due to Overwork?

The responsibility goes to the employer and the occupational health professionals in place.

5-With regard to death from Overwork COMPENSATION: Are any of the following instruments available in your country?

None (go to question 7)

7- What are the OVERWORK RELATED DISEASES in your country?

None

8- Please, indicate any references, such as web pages, contact persons or offices, which could provide further information about subjects related to death from overwork in your country.

All websites in portuguese (www.ms.com.br www.saude.gov.br) Search for texts about the 3rd National Conference on Worker's Health 2005 (www.mte.gov.br). Recent directives about work conditions. Check Brazilian 1988 constitution art. 7 ciso 14

3.2.3 Canada

1- Are you Familiar with the occupational health and safety legislation in your country?

Yes

2- What is the definition of long working hours for your country?

40hours a week as a normal work week

3- With regard to Health impairment due to Overwork PREVENTION:

None (go to question 5)

5-With regard to death from Overwork COMPENSATION: Are any of the following instruments available in your country?

None (go to question 7)

7- What are the OVERWORK RELATED DISEASES in your country?

Cardiovascular disease, Depression, Psychosomatic disorders, Duodenum/gastric ulcers or gastritis

OBSERVATION: The indicated diseases are assumed as overwork related

8- Please, indicate any references, such as web pages, contact persons or offices, which could provide further information about subjects related to death from overwork in your country.

Do a search in every province since different laws are applicable

3.2.4 Denmark

1- Are you Familiar with the occupational health and safety legislation in your country?

Yes

2- What is the definition of long working hours for your country?

More than 37 hours

3- With regard to Health impairment due to Overwork PREVENTION:

None (go to question 5)

5-With regard to death from Overwork COMPENSATION: Are any of the following instruments available in your country?"

None (go to question 7)

7- What are the OVERWORK RELATED DISEASES in your country?

None

3.2.5 Finland

1- Are you Familiar with the occupational health and safety legislation in your country?

Yes

2- What is the definition of long working hours for your country?

It depends on the contract. 37.15 to 40

3- With regard to Health impairment due to Overwork PREVENTION:

Laws: legislation about overwork in common, quite strict laws about overwork and what kind of work is regarded to overwork. Extra payment for overworking hours. (eg. after 8pm 100% addition). It is very expensive to employers to maintain overworkers.

4-What is the legal responsibility of the employer, and/or assigned occupational physician and/or occupational nurses in the prevention of health impairments due to Overwork?

According to the law it has health examinations for certain types of work. And special hazards such as Noise. The final responsibility lies in the employers.

5-With regard to death from Overwork COMPENSATION: Are any of the following instruments available in your country?

None (go to question 7)

7- What are the OVERWORK RELATED DISEASES in your country?

None: The concept of overwork is very different between Finland and Japan.

3.2.6 France

3.2.6.1 France A

1- Are you Familiar with the occupational health and safety legislation in your country?

Yes

2- What is the definition of long working hours for your country?

More than 35 per week aimed at the increase in the number of jobs. Nowadays the working code is being argued. We face a reduction in the compensations and increase in job intensity. Among the most intense workers we find a high number of part-time female workers usually on Shiftwork with long commuting

time.

3- With regard to Health impairment due to Overwork PREVENTION:

Laws: physicians must not work more than 50h per week and need a safety rest.

When they work at night they must not work the morning after.

4-What is the legal responsibility of the employer, and/or assigned occupational physician and/or occupational nurses in the prevention of health impairments due to Overwork?

The responsibility is personal.

5-With regard to death from Overwork COMPENSATION: Are any of the following instruments available in your country?

None (go to question 7)

7- What are the OVERWORK RELATED DISEASES in your country?

None

OBSERVATION: Overwork is listed as a type of psychological harassment

8- Please, indicate any references, such as web pages, contact persons or offices, which could provide further information about subjects related to death from overwork in your country.

Further personal contacts were provided

3.2.6.2 France B

1- Are you Familiar with the occupational health and safety legislation in your country?

Yes

2- What is the definition of long working hours for your country?

35h per week, max 40h and could be moved during the year

3- With regard to Health impairment due to Overwork PREVENTION:

Guidelines: regards the maximum number of hours - about 48, but there is no control - no enforcement of the regulation

4-What is the legal responsibility of the employer, and/or assigned occupational physician and/or occupational nurses in the prevention of health impairments due to Overwork?

The responsibility lies on the employer. The employer is committed to have an occupational physician and the physician should advise the employer in the different aspects of work of the employee.

5-With regard to death from Overwork COMPENSATION: Are any of the following instruments available in your country?

None (go to question 7)

7- What are the OVERWORK RELATED DISEASES in your country?

Asthma

OBSERVATION: The indicated disease is assumed as overwork related

8- Please, indicate any references, such as web pages, contact persons or offices, which could provide further information about subjects related to death from overwork in your country.

3.2.7 Germany

3.2.7.1 Germany A

1- Are you Familiar with the occupational health and safety legislation in your country?

Yes

2- What is the definition of long working hours for your country?

35-42

3- With regard to Health impairment due to Overwork PREVENTION:

Laws: national work and safety law based on the European Union (EU) directive: work has to be designed in a way not to harm the worker.

4-What is the legal responsibility of the employer, and/or assigned occupational physician and/or occupational nurses in the prevention of health impairments due to Overwork?

Don't know

5-With regard to death from Overwork COMPENSATION: Are any of the following instruments available in your country?

None (go to question 7)

7- What are the OVERWORK RELATED DISEASES in your country?

Depression, Psychosomatic disorders

OBSERVATION: The indicated diseases are assumed as overwork related

3.2.7.2 Germany B

1- Are you Familiar with the occupational health and safety legislation in your country?

Yes

2- What is the definition of long working hours for your country?

35-42

3- With regard to Health impairment due to Overwork PREVENTION:

None (go to question 5)

5-With regard to death from Overwork COMPENSATION: Are any of the following instruments available in your country?

None (go to question 7)

7- What are the OVERWORK RELATED DISEASES in your country?

Cardiovascular disease; Depression; Suicide attempt; Duodenum/gastric Ulcers or Gastritis

OBSERVATION: The indicated diseases are assumed as overwork related

8- Please, indicate any references, such as web pages, contact persons or offices, which could provide further information about subjects related to death from overwork in your country.

www.hvbg.de

3.2.8 Italy

1- Are you Familiar with the occupational health and safety legislation in your country?

Yes

2- What is the definition of long working hours for your country?

8h per day or 6h per day for metal industry workers, depending on the type of work (Monday to Friday)

3- With regard to Health impairment due to Overwork PREVENTION:

Laws: night shift, no more than 85 nights per year or 83 depending on the profession

Guidelines: for occupational physicians - Italian occupational physician and industrial hygienist society (SMLII)

4-What is the legal responsibility of the employer, and/or assigned occupational physician and/or occupational nurses in the prevention of health impairments due to Overwork?

The same in Italy and European Union.

5-With regard to death from Overwork COMPENSATION: Are any of the following instruments available in your country?

None (go to question 7)

7- What are the OVERWORK RELATED DISEASES in your country?

Others: basically related to other risk factors

8- Please, indicate any references, such as web pages, contact persons or offices, which could provide further information about subjects related to death from overwork in your country.

Institute of occupational medicine of Brescia Universita di Brescia (www.unibs.it)

3.2.9 Norway

1- Are you Familiar with the occupational health and safety legislation in your country?

Yes: Interviewee asked to continue the questionnaire by e-mail, although no further answers were given after contacting the provided addresses.

3.2.10 Poland

1- Are you Familiar with the occupational health and safety legislation in your country?

Yes

2- What is the definition of long working hours for your country?

42h per week

3- With regard to Health impairment due to Overwork PREVENTION:

Guidelines: The interviewee asked to terminate the questionnaire and referred to its personal e-mail address to finish the questionnaire. The e-mail was contacted although no further response was obtained

3.2.11 South Korea

1- Are you Familiar with the occupational health and safety legislation in your country?

Yes

2- What is the definition of long working hours for your country?

40h per week.

3- With regard to Health impairment due to Overwork PREVENTION:

Laws: very similar to Japan industrial safety law

4-What is the legal responsibility of the employer, and/or assigned occupational physician and/or occupational nurses in the prevention of health impairments due to Overwork?

Employer is also responsible for the payment and refunding of the disease. Also have insurance system.

5-With regard to death from Overwork COMPENSATION: Are any of the following instruments available in your country?

Laws: have laws and insurance for death from overwork

6- Among the criteria below to consider DEATH FROM OVERWORK compensable, do you find any correspondence to the marked instruments in the previous question?

Worked more than about 100 hours overwork in the month before death

7- What are the OVERWORK RELATED DISEASES in your country?

Cardiovascular disease

Others: Musculoskeletal disease is the first in prevalence

8- Please, indicate any references, such as web pages, contact persons or offices, which could provide further information about subjects related to death from overwork in your country.

Korea occupational and safety health agency.

3.2.12 Switzerland

1- Are you Familiar with the occupational health and safety legislation in your country?

Yes

2- What is the definition of long working hours for your country?

More than 50h per week

3- With regard to Health impairment due to Overwork PREVENTION:

Laws: Arbeitsgesetz (www.admin.ch)

Guidelines: Shift working recommendations (www.seco.admin.ch)

4-What is the legal responsibility of the employer, and/or assigned occupational physician and/or occupational nurses in the prevention of health impairments due to Overwork?

Employer

5-With regard to death from Overwork COMPENSATION: Are any of the following

instruments available in your country?

Others: If you are suspecting of having a work-related occupational disease, you claim compensation through the employer's compensation system and if this is recognized as an occupational disease by the court. The court will compensate the case if the event has 75% of chance of being work-related.

6- Among the criteria below to consider DEATH FROM OVERWORK compensable, do you find any correspondence to the marked instruments in the previous question?

None

7- What are the OVERWORK RELATED DISEASES in your country?

Cardiovascular disease; Depression; Psychosomatic disorders

OBSERVATION: The indicated diseases are assumed as overwork related

8- Please, indicate any references, such as web pages, contact persons or offices, which could provide further information about subjects related to death from overwork in your country.

Browse (stress no stress.ch)

3.2.13 Taiwan

1- Are you Familiar with the occupational health and safety legislation in your country?

Yes

2- What is the definition of long working hours for your country?

They use the same standards as Japan. The regulations 84h per two weeks or 44h per week

3- With regard to Health impairment due to Overwork PREVENTION:

Guidelines: occupational disease diagnostic standards, occupational circulatory disease related to stress, and the major stress factor is overwork, and most of the criteria is related to the Japanese criteria.

4-What is the legal responsibility of the employer, and/or assigned occupational physician and/or occupational nurses in the prevention of health impairments due to Overwork?

Labor health insurance system paid by all workers. The insurance pays full coverage for work related issues. Non work-related illnesses are paid by the common health insurance system and it is not fully covered.

The responsibility also lies on the employer

5-With regard to death from Overwork COMPENSATION: Are any of the following instruments available in your country?

Laws: few cases but it exists

6- Among the criteria below to consider DEATH FROM OVERWORK compensable, do you find any correspondence to the marked instruments in the previous question?

Engaged extra ordinal work* almost continuously for 24hours just before death; Worked long hours or extra ordinal work for seven consecutive days

before death; Worked more than about 100 hours overwork in the month before death; Worked more than about 80 hours overwork 2 to 6 months before death
7- What are the OVERWORK RELATED DISEASES in your country?

Cardiovascular disease; Cerebrovascular disease

8- Please, indicate any references, such as web pages, contact persons or offices, which could provide further information about subjects related to death from overwork in your country.

過勞死 (circulatory disease)

3.2.14 Thailand

1- Are you Familiar with the occupational health and safety legislation in your country?

Yes

2- What is the definition of long working hours for your country?

48h per week (usually 6days per week). 40h per week for government workers only

3- With regard to Health impairment due to Overwork PREVENTION:

Laws: limit for men and women lifting, laws for exposure limits on noise levels, chemical levels, electricity levels (OSS laws) Labor acts 17-18 occupational categories

4-What is the legal responsibility of the employer, and/or assigned occupational physician and/or occupational nurses in the prevention of health impairments due to Overwork?

Social Security fund available and funded by the employer, employee and government. Compensation Fund available and funded by the employer and government.

5-With regard to death from Overwork COMPENSATION: Are any of the following instruments available in your country?

None (go to question 7)

7- What are the OVERWORK RELATED DISEASES in your country?

Cardiovascular disease; Depression; Duodenum/gastric ulcers or gastritis
OBSERVATION: The indicated diseases are assumed as overwork related

3.2.15 The United Kingdom

1- Are you Familiar with the occupational health and safety legislation in your country?

Yes

2- What is the definition of long working hours for your country?

40h a week, more than 48 average over 17weeks

3- With regard to Health impairment due to Overwork PREVENTION:

Laws: directive from EU and national health and safety legislation.

Guidelines: from the health and safety legislative as well

4-What is the legal responsibility of the employer, and/or assigned occupational

physician and/or occupational nurses in the prevention of health impairments due to Overwork?

Legal requirement for employers to health check night workers

5- With regard to death from Overwork COMPENSATION: Are any of the following instruments available in your country?

None (go to question 7)

7- What are the OVERWORK RELATED DISEASES in your country?

Cardiovascular disease; Depression; Psychosomatic disorders

OBSERVATION: The indicated diseases are assumed as overwork related

8- Please, indicate any references, such as web pages, contact persons or offices, which could provide further information about subjects related to death from overwork in your country.

Health and safety executive UK

3.2.16 The United States of America

3.2.16.1 The United States of America A

1- Are you Familiar with the occupational health and safety legislation in your country?

Yes

2- What is the definition of long working hours for your country?

Army would be duty 24h a day.

3- With regard to Health impairment due to Overwork PREVENTION:

Guidelines: Regulations around overwork (cannot specify)

5- With regard to death from Overwork COMPENSATION: Are any of the following instruments available in your country?

Guidelines: Defense occupational health program (DOHP) determines

Also possible to find guidelines at the Army Center for Health Promotion & Preventive Medicine (CHPPM)

7- What are the OVERWORK RELATED DISEASES in your country?

None

3.2.16.2 The United States of America B

1- Are you Familiar with the occupational health and safety legislation in your country?

Yes

2- What is the definition of long working hours for your country?

There is no control at the professional level. There is a limit by the union levels or industry. There are regulations for youth and people under 18.

Occupational Health and Safety Agency (OHSA at www.ohsa.gov)

3- With regard to Health impairment due to Overwork PREVENTION:

Others: certain industries such as mining (Mining and safety legislation)

4- What is the legal responsibility of the employer, and/or assigned occupational physician and/or occupational nurses in the prevention of health impairments due

to Overwork?

Lies on the employer under guidelines

5- With regard to death from Overwork COMPENSATION: Are any of the following instruments available in your country?

Others: OSHA and will vary on state regulations

You go through the normal procedure first under the guidelines of unions and later you can appeal to the court

6- Among the criteria below to consider DEATH FROM OVERWORK compensable, do you find any correspondence to the marked instruments in the previous question?

None

7- What are the OVERWORK RELATED DISEASES in your country?

Others: relates to stress at work and it is not defined

8- Please, indicate any references, such as web pages, contact persons or offices, which could provide further information about subjects related to death from overwork in your country.

National Institute of Occupational Health and Safety (NIOSH) and stress at work

3.3. Questionnaire conclusions

3.3.1. Legislation familiarity

One out of 22 was not familiar with their country legislation about health and safety, although all other listed countries had at least 1 knowledgeable representative.

3.3.2. Overwork definition

Data included in Table 1

3.3.3. Prevention instruments

Most countries referred to the limitation of working hours and the premium payment system laws as preventive measures. South Korea and Taiwan were the only countries that referred similar laws to Japan. Guidelines to specific professional categories were found in Italy (physicians and steel workers), France (physicians) and Brazil (steel workers and nurses).

3.3.4. Legal responsibility for claims

Most countries' representatives referred legal responsibilities for claims with regard to overwork to the Employer: Brazil, Switzerland, USA, France, UK, Thailand. Some countries' representatives listed shared governmental responsibilities through insurance systems: Taiwan, Thailand and South Korea. According to our survey, in Brazil, the responsibilities may lay also in the team responsible for the health examination and safety such as the occupational physician and safety engineer.

3.3.5. Overwork death compensation

South Korea and Taiwan representatives referred to have laws and pointed references. According to our survey, Australia, Brazil, Switzerland and USA follow court cases.

3.3.6. Overwork death compensation criteria

Taiwan was found to be adopting the same criteria as Japan does. In South Korea, the criterion used was defined as: Worked more than about 100 hours overwork in the month before death (item 3).

3.3.7. Overwork Related Diseases This question was widely miss-interpreted, and the often interpreted meaning retrieved from this question was actually the personal assumption of the following diseases as associated to overwork, and not legally identified as overwork-related diseases as in Japan. To indicate this difference, we signed with a “*” the countries which were referring each category as overwork-related diseases.

- Asthma: France*
- Cardiovascular Disease: Taiwan; South Korea; Thailand*; UK*; Canada*; Switzerland*
- Cerebrovascular Disease: Taiwan
- Depression: Switzerland; Germany*; Thailand*; UK*; Canada*
- Duodenogastric diseases: Thailand*; Germany*; UK*; Canada*
- Musculoskeletal Diseases: South Korea
- Psychosomatic Disorders: Switzerland; Germany*; UK*; Canada*
- Suicide: UK*

Brazilian representatives indicated that several differences among each professional category could be found, since Brazilian unions were active and influent in the legislative process. According to another interview, in Switzerland, there is no established standard, although all illnesses can be related to work if submitted to a court appraisal.

4. DISCUSSION

The most challenging aspect of this research was the language barrier, since many instruments were published in each country’s respective official language, making most official documents impossible to track and/or read. Very few documents examined, when compared to the Japanese legislation, presented equal or lower levels of detail with regard to occupational diseases related to overwork and death or suicide from overwork, which were Taiwan and South Korea.

The development of legal documents to prevent overwork face several difficulties, such as the inertia caused by long working schedules leading to a restricted number of professionals well represented by healthcare workers, time constrains such as in the transport and delivery industry, and the fear of a unsustainable economy at an increasingly competitive society.

Some aspects were identified as key items to policy development with regard to long working hours: Worker’s unions’ strength with active participation at the legislative process with regard to health and safety as well as the levels of overtime premium as referred in our interviews; Work scheduling best practices, managing resting time, leisure and work demands wisely and efficiently prior to policy enforcement to avoid risky work intensification leading to further health problems¹⁴; Validation trough a cooperative effort from all labor and authority levels at work, in

liaison with governmental, non-governmental and research entities; The presence of key actors responsible for the implementation, dissemination and constant monitoring of workers aware of legislation standards and health problems with regard to overwork and long working hours such as committees of occupational health and safety composed by all hierarchic levels.

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Table 1

Country	Regular Working Hours	Legal Maximum Working Hours per week	Normal weekly hrs set by Collective Agreements	Premium for overtime hours
Australia	38-40	None	35-40	50%
Austria	40	50	36-40	50% first 4 and 100% after
Brazil	44	60	36	50-200%
Canada	40-48	..	35-40	Usually 50%
Czech Republic	40	51	30-38.75	25%
Denmark	37	48	37	50% for 1 hour and 100% after
Finland	37.5	45	37.5-40	50% for 2h, 100% after 8pm
France	35	40 (48?)	(39?)	25% for first 8h, then 50%
Germany	42 (48?)	60	35-39	25%
Greece	40	48	40	25% for the first 60 h/ y then 50%
Hong Kong	55	none
Hungary	40	52	40	50%
Ireland	48	60	38-40	25%
Italy	40	60	30-40	after 48h, 10% plus 15% for unemployment fund
Luxemburg	40	48	40	25% blue-collar, 50% white collar
Mexico	48	57	..	100%
Netherlands	45	60 (max average over 13 w is 48)	36-40	no legislation
New Zealand	40	none	40	no legislation (50% by consensus)
Norway	40	50	37.5	40%
Poland	42	..	40	..
Portugal	40	60	35-44	50% for first hour, then 75
South Korea	34-44	56	..	50%
Spain	40	47	38-40	..
Sweden	40	48-52	40	no legislation
Switzerland	45-50	61-66	40-42	25%
Taiwan	40	55 M/ 50 F (Max36-24h/m)	..	33% for the first 2h and then 66%
Thailand	48	76	40	50% - 300%
Turkey	45	60 (max 270 h/y of overtime)	..	50%
United Kingdom	40	48	34-40	Bargained
United States	40	none	35-40	50%

Where .. = data not available. Partial data retrieved from the OECD database¹⁴.