



Original Article

Labor law violations in Japanese public hospitals from March 2002 to March 2011

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Abstract **Background:** According to the Japan Pediatric Society, the mean extra work hours of hospital pediatricians in 2010 was approximately 80 h per month, which is the certification criterion for *Karoshi* (death from overwork), but there is no precise picture of personnel management at hospitals because the labor authorities do not disclose detailed statistics concerning labor law violations to the public.

Methods: Most local governments have a disclosure system, and the local governments that operate public hospitals were requested to disclose warning documents issued by the labor authorities from March 2002 to March 2011.

Results: A total of 208/369 public hospitals (56.4%) with ≥ 200 beds in Japan were warned of labor law violations. Offenses included exceeding the limit of working hours (177 hospitals) and non-payment of increased wages for night and holiday work (98 hospitals).

Conclusions: Many public hospitals in Japan did not always pay workers including physicians for increased workload because they do not regard night and holiday duties as work hours.

Key words burnout, law, labor standards, overwork, working hours.

According to the Japan Pediatric Society, the mean extra work hours of hospital pediatricians in 2010 was approximately 80 h per month, which is the certification criterion for *Karoshi* (death from overwork).¹ There were a number of reports on personnel management at workplaces. In 2009, the labor authorities inspected 146 860 workplaces including hospitals, and found that 20.4% violated Article 32 of the Labor Standards Act involving the maximum number of working hours, and that 15.6% violated Article 37 dealing with increased wages for overtime work, work on days off, and night work.² A report on 596 hospitals inspected by the authorities in 2004 showed that only 2.8% violated Article 32 and 16.9% violated Article 37.³

It is not known exactly whether or not hospitals in Japan have appropriate personnel management because the labor authorities do not disclose detailed statistics to the public, while most Japanese local governments have a disclosure system and information regarding hospitals run by these governments is available on request. Most public hospitals with ≥ 200 beds in Japan are regional medical centers and provide emergency medical services,⁴ and many physicians including pediatricians are required to work >30 consecutive hours when assigned night duty in emergency services.⁵ In order to obtain a clearer picture of personnel management problems in the Japanese hospitals for acute care,

public hospitals with ≥ 200 beds run by local government were studied.

Methods

Hospitals with ≥ 200 beds funded by local government are identified in the Annual Report of Local Public Enterprise, 2008.⁴ The presence or absence of teaching programs for medical graduates was confirmed in a report by the Japan Residency Matching Program.⁶ The population of the city or town in which the public hospital was located was cited from the Population Census of Japan, 2010.⁷

A total of 936⁴ of 8784⁸ Japanese hospitals were funded by local government in 2008, and 400 of the public hospitals had ≥ 200 beds (Fig. 1).⁴ There were 144 hospitals run by prefectures and major cities, and 256 by other cities and towns in Japan (Table 1). Of the 400 hospitals, 299 (74.5%) had training programs for medical graduates and 370 (92.5%) provided emergency medical services.

In March 2002, the Ministry of Health, Labour and Welfare issued a notice concerning night duty and days off at hospitals,⁹ and confirmed that medical workers must be paid increased hourly wages when they provide medical services at night and on holidays. Previously, many physicians worked at night and on holidays without pay, compliant with the Labor Standard Act in Japan. In order to verify whether these increased wages were paid, documents detailing labor law violations during the period from March 2002 to March 2011 were requested from 314 local governments (47 prefectures, 19 major cities, and 248 other cities and towns), which operate hospitals with ≥ 200 beds.

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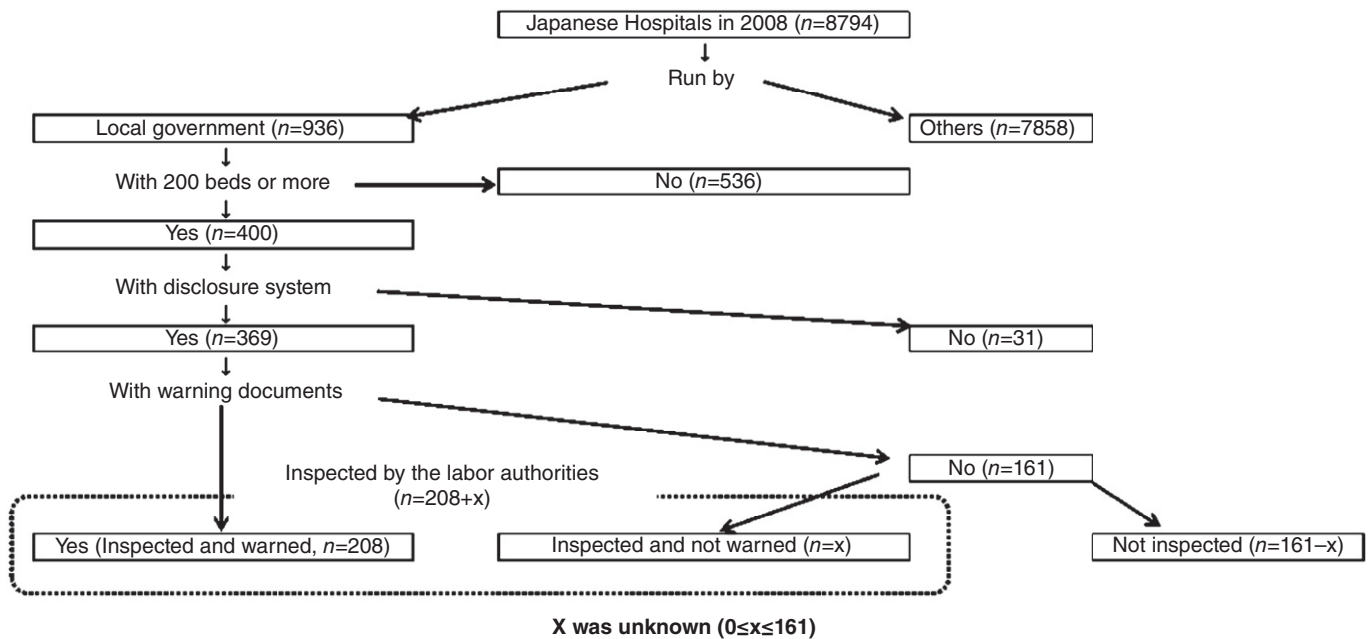


Fig. 1 No. public hospitals with and without warning documents issued by the labor authorities. Among 161 hospitals that had no warning documents, it was unknown how many were inspected by the labor authorities.

In the previous reports, the rate of workplace violation of labor laws was defined as violating workplaces divided by inspected ones.^{2,3} In this study, however, the same definition could not be used because it was unknown how many hospitals were inspected by the labor authorities. It was obvious that all of

the hospitals with warning documents were inspected by the labor authorities. Among the hospitals without warning documents, however, it was not known how many hospitals were inspected, because inspected hospitals with no violations as well as hospitals not inspected by the labor authorities reported the

Table 1 Japanese public hospitals with ≥200 beds run by local government in 2008

	Run by	
	Prefectures and major cities	Other cities and towns
Hospitals with ≥200 beds	144	256
With medical training programs	102 (70.8%)	197 (77.0%)
Providing emergency services	119 (82.6%)	251 (98.0%)
Beds		
10 percentile	228	229
Median	387	354
90 percentile	690	570
Inpatients		
10 percentile	155	142
Median	288	254
90 percentile	591	468
Outpatients/day		
10 percentile	283	346
Median	632	675
90 percentile	1 230	1 192
Workers [†] /100 beds		
10 percentile	83.4	76.0
Median	111.0	108.0
90 percentile	146.2	134.1
Inhabitants [‡]		
10 percentile	37 465	31 750
Median	273 677	89 285
90 percentile	2 158 789	351 447

[†]Including physicians and nurses. [‡]Population of the city or town in which the public hospital was located.

Table 2 Public hospitals with ≥ 200 beds warned of labor law violations (March 2002–March 2011)

	Run by	
	Prefectures and major cities (<i>n</i> = 144) <i>n</i> (%)	Other cities and towns (<i>n</i> = 256) <i>n</i> (%)
Public hospitals with disclosure system	144	225
Labor law violations (violation rate [†])	80 (55.6)	128 (56.9)
Violation of the Labor Standards Act	75 (52.1)	123 (54.7)
Articles found in violation of the Labor Standards Act		
Article 15 Clear indication of working conditions	14 (9.7)	21 (9.3)
20 Advance notice of dismissal	1 (0.7)	0 (0.0)
24 Payment of wages	7 (4.9)	4 (1.8)
32 No. working hours	67 (46.5)	110 (48.9)
34 Rest periods	6 (4.2)	10 (4.4)
35 Days off	16 (11.1)	13 (5.8)
36 Overtime work and work on days off	2 (1.4)	1 (0.4)
37 Increased wages for overtime work, work on days off, and night work	38 (26.4)	60 (26.7)
39 Annual paid leave	2 (1.4)	6 (2.7)
89 Responsibility for drawing up and submitting rules of employment	19 (13.2)	35 (15.6)
106 Dissemination of laws and regulations, etc.	4 (2.8)	9 (4.0)
107 Roster of workers	2 (1.4)	1 (0.4)
108 Wage ledger	15 (10.4)	21 (9.3)
109 Preservation of records	1 (0.7)	0 (0.0)

[†]Violation rate, hospitals with labor law violations/hospitals with a disclosure system.

absence of such documents (Fig. 1). In the previous reports, it was not reported what percentage of public hospitals were inspected,^{2,3} although in 1 year the labor authorities inspected 2.3% (146 860 /6 356 236¹⁰) of workplaces in Japan. Consequently, the rate of labor law violations was defined as hospitals issued with warning documents during the 9 years from March 2002 to March 2011 divided by hospitals with a disclosure system.

Information on violations of the Labor Standards Act was obtained from the released documents. There are two limitations in this study. One is that warning documents were not limited to illegal management of physicians. The other is that some of the documents issued from 2002 to 2008 might have been discarded, because hospitals are required by the labor authorities to save these documents for only 3 years.

This study used publicly available data and was exempt from review by the Ethics Board of Hiroshima International University.

Results

As shown in Figure 1 and Table 2, the presence or absence of documents warning of labor law violations were confirmed in 369 (funded by prefectures and major cities, *n* = 144; by other cities and towns, *n* = 225) of 400 public hospitals with ≥ 200 beds. The remaining 31 hospitals had no disclosure system. It was disclosed that 208 (funded by prefectures and major cities, *n* = 80; by other cities and towns, *n* = 128; 56.4%) of these 369 hospitals received a total of 307 warning documents of labor law violations during the period from March 2002 to March 2011 (Table 2).

Of the 144 hospitals run by prefectures and major cities, 80 (55.6%) were warned of labor law violations, and 75 (52.1%)

were warned of violations of the Labor Standards Act. Of the 225 hospitals operated by other cities and towns, 128 (56.9%) were warned of labor law violations, and 123 (54.7%) were warned of violations of the Labor Standards Act.

Most of the violations involved having employees work more than the maximum number of hours allowed, and failure to pay employees for overtime work. Of the 144 hospitals operated by prefectures and major cities, 67 (46.5%) were warned of violating Article 32 of the Labor Standards Act, involving the maximum number of working hours, and 38 (26.4%) for violating Article 37, dealing with increased wages for overtime work, work on days off, and night work.

Similarly, of the 225 hospitals operated by other cities and towns, 110 (48.9%) were warned of violating Article 32 of the Labor Standards Act, and 60 (26.7%) for violating Article 37.

Characteristics of public hospitals with and without warning documents are listed in Table 3. Warned hospitals had more beds, more inpatients, more outpatients, and more workers/100 beds compared with hospitals without such documents. Hospitals that provided medical training programs and/or emergency services had a higher violation rate.

Discussion

In the previous reports, of the 146 860 workplaces including hospitals, 20.4% violated Article 32 of the Labor Standards Act involving the maximum number of working hours, and 15.6% violated Article 37 dealing with increased wages for overtime work, work on days off, and night work in 2009.² In contrast, of the 596 hospitals inspected by the authorities, only 2.8% offended against Article 32 and 16.9% violated Article 37 in 2004.³ From these reports, it is likely that hospitals are more compliant with labor laws compared with other workplaces

Table 3 Characteristics of public hospitals vs presence of warning documents

	Warning documents		P
	Present (n = 208)	Absent (n = 161)	
No. hospitals that provided			
Medical training programs	171 82.2%	102 63.4%	0.000 [†]
Emergency services	198 95.2%	141 87.6%	0.013 [†]
Beds			
10 percentile	253	215	
Median	414	321	0.000 [‡]
90 percentile	660	508	
Inpatients			
10 percentile	167	139	
Median	325	227	0.000 [‡]
90 percentile	552	417	
Outpatients/day			
10 percentile	372	284	
Median	787	572	0.000 [‡]
90 percentile	1 302	1 070	
Workers/100 beds			
10 percentile	83.2	70.6	
Median	112.3	101.3	0.000 [‡]
90 percentile	141.9	133.7	
Inhabitants			
10 percentile	38 594	32 002	
Median	141 221	93 015	0.074 [‡]
90 percentile	716 197	1 045 986	

[†] χ^2 test; [‡]Mann-Whitney *U*-test.

concerning the maximum number of working hours. The violation rates of Article 32 and 37 in this study, however, were higher compared with previous reports (Table 4).

In the previous reports, the rate of workplaces violating labor laws was defined as violating workplaces divided by inspected ones.^{2,3} In the present study, however, hospitals that had a disclosure system were substituted for inspected hospitals, because it was not known how many hospitals were inspected. The number of inspected hospitals (208 + x; Fig. 1) was at least 208 (if x was 0) and at most 369 (if x was 161), and 'violated hospitals/inspected ones' (208/[208 + x]) was higher than or equal to 'violated hospitals/ones with a disclosure system' (208/369).

Compared with the past reports,^{2,3} the violation rate of Articles 32 and 37 of the Labor Standards Act, involving the maximum number of working hours, might be highest in the present study.

The reason was unclear, but it might be due to the 24 h emergency medical services provided by most of the public hospitals. Many physicians, including not only residents but also attending physicians, must work for >32 consecutive hours to provide emergency services at night and on holidays.⁵ According to one study, it was reported that hospital physicians worked >70 h/week on average,¹¹ while it was reported in another survey that the mean working hours paid for male and female physicians were 41.8 h/week and 39.0 h/week, respectively.¹² The different working hours reported may be explained by the failure to pay employees for working overtime.

The violation rate concerning working hours in the previous report of 596 hospitals inspected by the labor authorities (2.8%)³ was much lower than in the present study (46.5% in hospitals funded by prefectures and major cities, 48.9% in hospitals funded by other cities and towns). A total of 249 (41.8%) of the 596

Table 4 Labor law violations

Inspected year	2009	2004	2002–2011
Reference	2	3	Present study
Workplaces			
Classification	All industries	Hospitals (public and private)	Public hospitals with ≥ 200 beds
Inspected	146 860	596	369 [†]
Labor law violations (%)	–	72.1	57.3
Offenses against Articles of the Labor Standard Act			
Article 32 (%)	20.4	2.8	48.0
Article 37 (%)	15.6	16.9	26.6

[†]No. hospitals where the presence or absence of warnings by the labor authorities was confirmed.

inspected hospitals, however, were requested by the labor authorities to improve personnel management concerning work on days off, and night work.³ It should be noted, however, that they were not warned of labor law violations concerning work on days off, and night work. There might be no difference in violation rates concerning working hours between this study and the previous research.³

In the present study, warned hospitals had more beds, more inpatients, more outpatients, and more workers/100 beds compared with hospitals without warning documents. Furthermore, hospitals that provided medical training programs and/or emergency services had a higher violation rate. It is likely that public hospitals that provide many medical services have labor law violations.

Long working hours result not only in health problems among medical workers including physicians, but also threaten patient safety. Landrigan *et al.* conducted a prospective randomized study comparing the rates of serious medical errors made by interns working according to a conventional schedule of extended work-hour shifts, which exceed 24 h every third night, and the rate of mistakes made by interns working according to a schedule with shorter work shifts of <16 h.¹³ During a total of 2203 patient-days involving 634 admissions, interns made 35.9% more serious medical errors during the conventional extended work-hour schedule compared with the shorter work schedule.

There is a limit of weekly working hours, including night and holiday duties for physicians in the USA (80 h/week)¹⁴ and EU (48 h/week).¹⁵ With some exceptions, violation of labor laws is subject to criminal punishment in the USA, the UK, Germany and France.¹⁶ Also in Japan, the Labor Standards Act sets a legal limit of 40 h/week, and violation of the law is subject to criminal punishment. Working hours can be extended beyond the limit, however, through contracts between employers and employees. Furthermore, prior to the judgment of the Supreme Court of Japan in 2005, medical trainees such as residents were not recognized as workers.¹⁷ Therefore, in reality, there is no limitation of working hours in Japan, and it is probable that many physicians in Japanese hospitals work beyond the limit without pay. The mean working hours of physicians in Japan was 70.6 h per week,¹¹ far higher than that in the USA (51 h/week),¹⁸ in France, and in Germany (approx. 45 h/week).¹¹

Disclosed warning documents were not limited to illegal personnel management of physicians, but many hospitals in Japan do not always pay physicians for overtime work because they do not regard night and holiday duties as work hours.¹ Nara Prefecture also reported that hospitals operated by six prefectures in Japan paid no increased wages to physicians for night and holiday duty.¹⁹ Of course, there needs to be a distinction between work hours described as 'on night and holiday duties with time for sleeping' and those described as 'providing 24 h emergency medical services without sleep', because increased hourly wages compliant with the Labor Standard Act must be paid for 24 h emergency medical services, while only one-third of the daily wage needs to be paid for the whole night and holiday duties with time for sleeping. According to the notification issued by the labor authorities, however, hospital workers providing at least 1 h

of medical services on one night and holiday duty should be paid increased hourly wages.²⁰ Most of the public hospitals that provide emergency services in the present study violate the law when they pay only one-third of daily wages for workers for the whole night and holiday duty.

Conclusions

Physicians in Japanese hospitals work long hours and might not always be legally paid in full. In order to prevent medical malpractice and burnout among physicians, proper personnel management of physicians alone is insufficient because of the shortage of physicians. Standardization of medical procedures and task shifting from physicians to other medical specialists should be considered.

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