

New occupational threats to Japanese physicians: karoshi (death due to overwork) and karojisatsu (suicide due to overwork)

It has been said that the Japanese have a “worker bee” attitude toward matters of employment. According to the International Labour Organization (ILO) report (2004), 28.1% of Japanese employees worked 50 hours or more per week in 2001.¹ This percentage is much higher than in European countries such as the Netherlands (1.4%), Sweden (1.9%), Finland (4.5%), and Germany (5.3%). Physicians are no exception; in fact, they may work more than other types of workers. Japanese physicians worked 66.4 hours per week on average in 2005, according to a report by the Ministry of Health, Labour and Welfare (MHLW) of Japan.²

This working style may cause physical health problems, such as ischemic heart disease and cerebral hemorrhage.³ “Karoshi,” which is sudden death due to overwork, is reported to be the most serious consequence.⁴ Overwork can kill if combined with high demand, low control, and poor social support.⁵ The MHLW reported that the sudden death of any employee who works an average of 65 hours per week or more for more than 4 weeks or on average of 60 hours or more per week for more than 8 weeks may be karoshi. In 2005, 328 Japanese employees suffered karoshi, according to the MHLW; this number is 7.3 times higher than that in 2000.⁶ At least 8 physicians suffered karoshi between 1996 and 2005.⁷ Their specialties varied pediatrics, anesthesiology, internal medicine, and surgery, for example.

Overwork can cause mental health problem as well. Depression and burnout syndrome are examples. Another serious consequence, “karojisatsu,” is suicide due to overwork.^{8,9} Failure to meet employers’ expectations, an increase in job responsibilities, and work-related psychological stress can lead to a depressive state and subsequent suicide. Forty-two employees committed karojisatsu in 2005, 2.2 times more than the number in 2000.⁶ At least 5 physicians committed karojisatsu between 1996 and 2005⁷: a surgeon, a pediatrician, an anesthesiologist, an internist, and a resident.

Japan has been restructuring work practices due to a long recession, and the instances of karoshi and karojisatsu have increased rapidly. For physicians, there has been no restructuring of work practices, but the number of practicing physicians has been restricted by a national policy to cap medical costs. In 2004, Japan ranked 27th in the number of practicing physicians (2.0 per 1,000 population) among 30 Organisation

for Economic Co-operation and Development (OECD)-member countries.¹⁰ Despite the lower number of practicing physicians, the number of individuals requiring medical care has increased rapidly with the rapid growth in the elderly population. In addition, new diagnostic and treatment methods have emerged yearly; thus, physicians' tasks have become more complex and risky. Patients' demands have also increased. Furthermore, the rapid increase in the number of lawsuits associated with medical accidents has added to the stress of physicians.¹¹ Japanese medical staff takes their responsibility toward patients very seriously, and the burden of physicians is becoming heavier. Physicians are reaching their limit in terms of the number of service hours they can provide without risking their own health. Instances of *karoshi* and *karojisatsu* among physicians are expected to increase rapidly.

To improve the working environment of physicians, the Japanese government decided to loosen the policy restricting the number of physicians from 2008. The total enrollment quota for schools of medicine will increase from approximately 8,000 to 9,000. But it takes years for those admitted to start working at hospitals as physicians. Immediate steps must be taken to avoid *karoshi* and *karojisatsu* among physicians. The government has started a temporary physician service to aid hospitals in meeting their staffing needs. Increasing the number of co-medical personnel and clerks may be another useful measure. However, these measures are not adequate. Fifty-five percent of workers who committed suicide had not consulted a psychiatric specialist.⁸ The system for counseling employees including physicians and referring them to a psychiatric specialist does not work as well in Japan as in other developed countries. Educational seminars aimed at educating medical staffs and students about *karoshi* and *karojisatsu* and the importance of consulting a psychiatric specialist are needed. In addition, accessibility to psychiatric specialists should be improved. The public stigma associated with mental health disorders should be eradicated. Overworked individuals should be able to consult a specialist without fearing the opinions of family, friends, and coworkers.

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1. Lee S. Working-hour gaps. In: Messenger JC, ed. Working time and workers' preferences in industrialized countries, New York, NY: Routledge 2004: 25-59.
2. Report of physicians' working conditions associated with demand and supply of physicians by the Ministry of Health, Labour and Welfare of Japan (in Japanese). <http://www.mhlw.go.jp/shingi/2006/02/s0208-12b.html>.
3. Uchiyama S, Kurasawa T, Sekizawa T, *et al.* Job strain and risk of cardiovascular events in treated hypertensive Japanese workers: Hypertension Follow-Up Group Study. *J Occup Health* 2005;47:102-11.
4. Iwasaki K, Takahashi M, Nakata A. Health problems due to long working hours in Japan: working hours, workers' compensation (*Karoshi*), and preventive measures. *Ind Health* 2006;44:537-40.
5. Michie S, Cockcroft A. Overwork can kill. *BMJ* 1996;312:921-2.
6. Report of compensations associated with work-related brain, heart and psychologic disorders (2006) by the Ministry of Health, Labour and Welfare of Japan (in Japanese). <http://www.mhlw.go.jp/houdou/2007/05/h0516-2.html#k7>.
7. Nomura K, Oda S, Kira S. Physicians' karoshi (in Japanese). *Nikkei Medical* 2007;8:42-55.
8. Amagasa T, Nakayama T, Takahashi Y. *Karojisatsu* in Japan: characteristics of 22 cases of work-related suicide. *J Occup Health* 2005;47:157-64.
9. Inoue K, Matsumoto M. Karo jisatsu (suicide from overwork): a spreading occupational threat. *Occup Environ Med* 2000;57:284-5.
10. OECD Health Data 2007--Frequently Requested Data. http://www.oecd.org/document/16/0,3343,en_2649_37407_2085200_1_1_1_37407,00.html.
11. Sasao S, Hiyama T, Tanaka S, *et al.* Medical malpractice litigation in gastroenterological practice in Japan: a 22-yr review of civil court cases. *Am J Gastroenterol* 2006;101:1951-3.