Editorial

Is the Statistics for Occupational Diseases Relating to Chemical Exposures in Japan Working Effectively?

In the last decade in Japan the number of newly compensated cases of occupational diseases has stopped declining and is fluctuating between 7,000 and 9,000¹). Excluding pneumoconiosis and asbestos related cancers, the incidences of typical occupational diseases relating to chemical exposures have almost been eliminated from the statistics and almost all the reported cases are from acute poisonings. Recently we studied the incidence of compensated cases of organic solvent poisoning in Japan, and reconfirmed that almost all cases were acute poisoning and no cases of typical occupational diseases or related chronic diseases. This may depend on the fact that this statistics rely on cases that had more than 3 d off from work by the disease and not including mild cases.

Considering the recent trend, it is becoming clear that the statistics we can get is not sufficient for making provision for the further prevention. For example, important issues of organic solvent poisoning among developed countries nowadays are chronic poisoning in subclinical state or symptoms at mild state, which will decrease the working abilities of the workers to some extent and might develop severe diseases in some cases. Skin diseases excluding chemical burn²⁾ and chronic neurological disorders³⁾ are well recognized targets. We have no reliable national statistics on these disorders.

Great Britain has the most advanced health statistics system on occupational health⁴⁾. The system includes Industrial Injuries Disablement Benefit (IIDB) statistics on compensated cases, Self-reported Work-related Illness (SWI) statistics derived from the national sampling survey Labour Force Survey (LFS), diagnostically reliable statistics from the Health and Occupation Reporting network (THOR) surveillance system, the data of which are reported from specialized medical doctors, the statistics reported by employers according to the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR 95) and others. The system can collect occupational health information in wide range from selfreported mild disorder to officially diagnosed typical occupational diseases. In the case of skin disorder by organic solvent, estimated incident rate was 0.28 per 100,000 workers from the statistics of THOR $(2007-2009)^{5}$). In Japan the incidence of newly compensated organic solvent poisoning case was 0.08 per 100,000 workers (averaged from 2002 to 2004). This rate is smaller compared to the incidence of skin disorder in Great Britain but has no big difference from Korean 0.13 (averaged from 2007 and 2009)⁶). These data may be explained by the fact that the statistical system of Korea is similar to Japan, where the statistics depend on compensated cases which requires more than 3 d of treatment²).

The use of statistics which cover cases with more mild disorder is becoming important to further improve occupational health states in developed countries. To fulfill the requirement, it is critically needed to construct effective surveillance system by medical doctors similar to THOR system in Great Britain. Our institute tried to construct the surveillance system using web page that could be accessed by hospital doctors and occupational health doctors, but was unsuccessful. Although developing the system that has no legal base was quite difficult in Japan, we have periodical health examination system at workplace⁶) that has been running for decades. To make a place for surveillance system in it will be a next potential option.

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