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## Abstract

### Occupational Diseases among Health Care Workers Approved by Korea Labor Welfare Corporation

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**Objectives:** This study was carried out to analyze the characteristics of occupational diseases among health care workers in Korea.

**Methods:** Using the database of the Korea Labor Welfare Corporation (KLWC), 5,460 approved occupational disease cases, between Jan 1, 1999 and Dec 31, 2000, and approved by the Jun 30, 2001, were collected. Of these, the 142 health care worker cases were investigated.

**Results:** The proportion of health care workers among the total cases reported in 1999 and 2000 was 2.6%, respectively. The diseases were infectious in 61 (43.0%), cerebro-cardiovascular in 60 (42.3%) and musculoskeletal in 18 cases (12.6%). The distributions of the occupational diseases by sex were 59 (41.5%) and 83 cases (58.5%), in males and females, respectively.

The distributions of the occupational diseases by age were 64 (45.1%), 30 (21.1%), 25 (17.6%) and 17 cases (12.0%), in their 20s, 30s, 40s and 50s, respectively. For the cases of infectious diseases by age there were 48 (78.7%) in their 20s and 12 (19.7%) in their 30s, for the cases of cerebro-cardiovascular diseases by age there were 17 (28.3%) in their 40s, 16 (26.7%) in their 50s and 12 (20.0%) in their 20s, and for the cases of musculoskeletal diseases there were 7 (38.9%) in their 30s and 4 (22.2%) in their 20s. The distributions of the cases of occupational diseases by department were 64 (45.1%), 19 (13.4%), 18 (12.7%), and 10 (7.0%) in the nursing, doctors, officers, and food services departments, respectively.

**Conclusions:** The major occupational diseases of health care workers, as approved by the KLWC, were the infectious, cerebro-cardiovascular and musculoskeletal diseases. A special management policy must be considered to prevent occupational diseases of health care workers in Korea.

**Key Words:** Health care systems, Workers, Occupational diseases, Social welfare

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61 (43.0%),

**Table 1.** Proportion of occupational diseases in health care workers by year

Year	No. of total occupational diseases	No. of occupational diseases on health care workers	Proportion (%)
1999	2,255	59	2.6
2000	3,205	83	2.6
Total	5,460	142	2.6

**Table 2.** Distribution of occupational diseases according to disease categories by year

Categories	1999		2000		Total	
	No.	%	No.	%	No.	%
Infectious disease	27	45.8	34	41.0	61	43.0
Cerebro-cardiovascular disease	28	47.4	32	38.5	60	42.3
Musculoskeletal disease	4	6.8	14	16.9	18	12.6
Others	0	0.0	3	3.6	3	2.1
Total	59	100.0	83	100.0	142	100.0

**Table 3.** Distribution of occupational diseases according to disease categories by sex

Categories	Male		Female		Total	
	No.	%	No.	%	No.	%
Infectious disease	14	23.7	47	56.6	61	43.0
Cerebro-cardiovascular disease	38	64.4	22	26.5	60	42.3
Musculoskeletal disease	6	10.2	12	14.5	18	12.6
Others	1	1.7	2	2.4	3	2.1
Total	59	100.0	83	100.0	142	100.0

60 (42.3%), 3 (2.1%) 가 18 (12.6%), 가 (Table 3). (Table 2).

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 (58.5%) . 40 가 25 (17.6%), 50 가 17 (12.0%) ,  
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 (64.4%), 14 (23.7%), 20 가 48 (78.7%) 가 , 30 가  
 6 (10.2%) . 12 (19.7%) . 40  
 47 (56.6%), . 22 가 17 (28.3%), 50 가 16 (26.7%) 20  
 (26.5%), 12 (14.5%) 12 (20.0%) . 30

**Table 4.** Distribution of occupational diseases according to disease categories by age

Age	Infectious disease		Cerebro-cardiovascular disease		Musculoskeletal disease		Others		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
20~29	48	78.7	12	20.0	4	22.2	0	0.0	64	45.1
30~39	12	19.7	9	15.0	7	38.9	2	66.7	30	21.1
40~49	1	1.6	17	28.3	7	38.9	0	0.0	25	17.6
50~59	0	0.0	16	26.7	0	0.0	1	33.3	17	12.0
60~69	0	0.0	6	10.0	0	0.0	0	0.0	6	4.2
Total	61	100.0	60	100.0	18	100.0	3	100.0	142	100.0

**Table 5.** Distribution of occupational diseases according to disease categories by departments

Departments	Infectious disease		Cerebro-cardiovascular disease		Musculoskeletal disease		Others		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Patient care (nurse)	44	72.1	11	18.3	8	44.5	1	33.3	64	45.1
Patient care (doctor)	9	14.8	6	10.0	4	22.2	0	0.0	19	13.4
Office	1	1.6	16	26.7	0	0.0	1	33.3	18	12.7
Food service	0	0.0	7	11.7	2	11.1	1	33.3	10	7.0
Maintenance engineering	1	1.6	4	6.7	0	0.0	0	0.0	5	3.5
Laboratory	5	8.2	0	0.0	0	0.0	0	0.0	5	3.5
House keeping	0	0.0	4	6.7	0	0.0	0	0.0	4	2.8
Others	1	1.6	12	20.0	4	22.2	0	0.0	17	12.0
Total	61	100.0	60	100.0	18	100.0	3	100.0	142	100.0

40 가 7 (38.9%), 20 가 4 (22.2%) (22.2%), 가 2 (11.1%)  
 (Table 4). 가 64 (45.1%) 가 , 가 19 (13.4%),  
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 10 (7.0%), 가 5 (3.5%),  
 가 5 (3.5%), 4 (2.8%)  
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**Table 6.** Distribution of occupational diseases according to disease subclassifications by types of job & year

Year		1999		2000	
Disease category	Disease subclassification	Job	Disease subclassification	Job	
Infectious disease	Tuberculosis	Nurse (20) Doctor (1)	Tuberculosis	Nurse (17)*, Doctor (2), Clinical pathology technician (1), Others (3)	
	Viral hepatitis	Nurse (1), Doctor (2), Clinical pathology technician (1)	Viral hepatitis	Nurse (2), Doctor (1), Clinical pathology technician (2)	
	Chicken pox	Nurse (1)	Chicken pox Measles	Nurse (1), Doctor (2) Nurse (2), Doctor (1)	
Cerebro-cardio vascular disease	Cerebral hemorrhage	Nurse (2)*, Doctor (1), Officer (2), Others (9)	Cerebral hemorrhage	Nurse (4)*, Officer (2), Others (8)	
	Cerebral infarction	Doctor (3), Officer (3), Assistnat cook (1)	Cerebral infarction	Nurse (1), Others (3)	
	Myocardial infarction	Nurse (1), Officer (3), Others (3)	Myocardial infarction	Nurse (1), Doctor (2), Officer (6), Others (3)	
			Atrial fibrillation	Technician (1)	
			Central retinal artery occlusion	Nurse (1)	
Musculo skeletal disease	Lumber HIVD	Doctor (1), Cook (1)	Cervical HIVD	Nurse (2)*, Doctor (2)	
	Others	Doctor (1), Physical therapist (1)	Lumber HIVD	Dentist (1), Nurse (3) <sup>†</sup> ,	
			Others	Nurse (3), Pharmacist (1), Cook (1), Cleaner (1)	
Others			Acute stress disorder	Cook (1)	
			Liver cirrhosis	Officer (1)	
			Allergic dermatitis	Nurse (1)	

( ): Number, \*included one nurse assistance, <sup>†</sup>included two nurse assistances

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