

**Table 3. Prevalence (%) of Soreness, Proportion (%) of Limitation of Motion among Cases, and Standard Errors (SE) in Health-care Workers by Job Category and Body Part**

| Body Part  | Doctors |                 |                           | Nursing Staff |                 |                           |
|------------|---------|-----------------|---------------------------|---------------|-----------------|---------------------------|
|            | Cases   | Prevalence (SE) | Limitation of motion (SE) | Cases         | Prevalence (SE) | Limitation of motion (SE) |
| Neck       | 78      | 35.8 (3.3)      | 5 (6.4)                   | 161           | 32.2 (2.1)      | 8 (5.0)                   |
| Shoulder   | 64      | 29.4 (3.1)      | 3 (4.4)                   | 183           | 36.6 (2.2)      | 11 (6.0)                  |
| Upper back | 30      | 13.8 (2.3)      | 2 (6.7)                   | 78            | 15.6 (1.6)      | 3 (3.8)                   |
| Elbow      | 4       | 1.8 (0.9)       | 0 (0.0)                   | 15            | 3.0 (0.8)       | 1 (6.7)                   |
| Lower back | 76      | 34.9 (3.2)      | 9 (11.8)                  | 241           | 48.2 (2.2)      | 12 (5.0)                  |
| Wrist      | 18      | 8.3 (1.9)       | 1 (5.5)                   | 77            | 15.4 (1.6)      | 14 (18.2)                 |
| Hand       | 8       | 3.7 (1.3)       | 0 (0.0)                   | 33            | 6.6 (1.1)       | 4 (12.1)                  |
| Hip        | 18      | 8.3 (1.9)       | 1 (5.6)                   | 33            | 6.6 (1.1)       | 2 (6.1)                   |
| Upper leg  | 15      | 6.9 (1.7)       | 0 (0.0)                   | 99            | 19.8 (1.8)      | 5 (5.1)                   |
| Knee       | 14      | 6.4 (1.7)       | 1 (7.1)                   | 57            | 11.4 (1.4)      | 4 (7.0)                   |
| Lower leg  | 33      | 15.1 (2.4)      | 2 (6.1)                   | 296           | 59.2 (2.2)      | 16 (5.4)                  |
| Ankle      | 9       | 4.1 (1.4)       | 1 (11.1)                  | 67            | 13.4 (1.5)      | 4 (6.0)                   |
| Other      | 0       | 0.0 (0.0)       | 0 (0.0)                   | 2             | 0.4 (0.3)       | 0 (0.0)                   |

  

| Site       | Medical technicians |                 |                           | Support staff |                 |                           |
|------------|---------------------|-----------------|---------------------------|---------------|-----------------|---------------------------|
|            | Cases               | Prevalence (SE) | Limitation of motion (SE) | Cases         | Prevalence (SE) | Limitation of motion (SE) |
| Neck       | 52                  | 43.0 (4.5)      | 5 (9.6)                   | 24            | 26.1 (4.6)      | 4 (16.7)                  |
| Shoulder   | 51                  | 42.2 (4.5)      | 2 (3.9)                   | 21            | 22.8 (4.4)      | 3 (14.3)                  |
| Upper back | 22                  | 18.2 (3.5)      | 1 (4.5)                   | 17            | 18.5 (4.1)      | 1 (5.9)                   |
| Elbow      | 15                  | 12.4 (3.0)      | 1 (6.7)                   | 20            | 21.7 (4.3)      | 0 (0.0)                   |
| Lower back | 55                  | 45.5 (4.5)      | 8 (14.5)                  | 20            | 21.7 (4.3)      | 0 (0.0)                   |
| Wrist      | 27                  | 22.3 (3.8)      | 3 (11.1)                  | 23            | 25.0 (4.5)      | 3 (13.0)                  |
| Hand       | 10                  | 8.3 (2.5)       | 0 (0.0)                   | 16            | 17.4 (4.0)      | 3 (18.8)                  |
| Hip        | 10                  | 8.3 (2.5)       | 1 (10.0)                  | 8             | 8.7 (3.0)       | 0 (0.0)                   |
| Upper leg  | 15                  | 12.4 (3.0)      | 0 (0.0)                   | 12            | 13.0 (3.5)      | 0 (0.0)                   |
| Knee       | 15                  | 12.4 (3.0)      | 3 (20.0)                  | 13            | 14.1 (3.7)      | 2 (15.4)                  |
| Lower leg  | 39                  | 32.2 (4.3)      | 1 (2.6)                   | 27            | 29.3 (4.8)      | 1 (3.7)                   |
| Ankle      | 9                   | 7.4 (2.4)       | 1 (11.1)                  | 11            | 12.0 (3.4)      | 2 (18.2)                  |
| Other      | 3                   | 2.5 (1.4)       | 1 (33.3)                  | 1             | 1.0 (1.1)       | 0 (0.0)                   |

fort.

Among the 3 types of musculoskeletal discomfort studied, numbness was most frequently associated with limitation of motion (40.7%), and among all conditions, numbness of lower kness most often resulted in limitation of motion (66.7%). About 5.4% of respondents recalled stopping work at a job because of musculoskeletal complaints in their career as health-care workers. Only 774 participants gave a definite answer (yes or no) to the question on lost workdays, among whom 42 (5.4%) had lost workdays due to musculoskeletal conditions in the past year. Among

them, 32 provided an estimate of the number of lost workdays, and the average was 9.7 days. The proportion of cases reporting that their musculoskeletal complaints were work-related was 69% among doctors, 76% among nursing staff, 52% among medical technicians, and 55% among support staff (Table 1).

## DISCUSSION

In this study, we tried to get a complete picture of the prevalence of musculoskeletal complaints among