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# Workplace Safety and Health in Singapore Healthcare Institutions

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2015

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**Abstract:** Ten healthcare institutions, employing about two-fifth of the healthcare workforce in Singapore, collaborated with Workplace Safety and Health (WSH) Institute to collate and analyse their data on work-related injuries and illnesses. A total of 1138 cases of workplace injuries, 373 workplace aggression cases, four cases of occupational disease and 75 near miss incidents were recorded in these institutions in 2013. For cases requiring >3 days of medical leave, slips, trips and falls was the leading incident type. For cases which required ≤ 3 days of medical leave, sharp injuries was the leading incident type. Work Environment is the leading root cause of work- related injuries and near misses.

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## **Background:**

Healthcare institutions represented in the Workplace Safety and Health (WSH) Council's Healthcare Committee initiated a study to collate and examine data on work-related injuries, illnesses and near misses within their institutions. As they collectively employ about two-fifths of the healthcare workforce, the findings would provide sufficient insights into the hazards faced by healthcare workers in Singapore.

## **Objective:**

The objective of the study was to identify priority WSH initiatives for the Committee's 2015 work planning exercise.

## **Method:**

Members of the WSHC Healthcare Committee were invited to participate in the study. In total, 10 healthcare institutions which employed about two-fifths of the healthcare workforce in Singapore participated.

The WSH data collected for the study was for the year of 2013. Following the initial requirements gathering, a questionnaire was jointly developed by WSH Institute, WSH Council office and the WSHC (Healthcare) Committee. Data collection started in July 2014. The data included all near misses and workplace injuries and ill health, irrespective of whether medical leave was taken by the employee. The data also included indication on whether cases were reported to the Ministry of Manpower (MOM) under the Workplace Safety and Health (Incident Reporting) Regulations.

The questionnaire covered the following areas:

- demographics – age, gender, nationality, institution setting, occupation and type of work shift;
- workplace injury and illnesses including near misses and workplace aggression incidents – number and nature of work-related incidents, root causes, incident types, duration of sick leave,; and
- WSH systems - tracking of first aid cases, incident reporting and accreditation systems.

Relevant clarifications on the completed questionnaires were made prior to data analysis by the WSH Institute.

## Organisation Profile:

Seven of the ten institutions had attained JCI<sup>1</sup> accreditation, three were certified OHSAS 18001<sup>2</sup> compliant and one each was certified ISO 9001<sup>3</sup> and bizSAFE level 3<sup>4</sup>.

The 10 healthcare institutions employed approximately 35,000 workers, or about two-fifth of the healthcare workforce in Singapore. Females made up 79.8%. 45% were nurses, 25% were support staff and allied health professionals and medical/dental practitioners made up another 20%. Among them, 6% belonged to middle and upper management.



Figure 1 Employment by Gender and Age

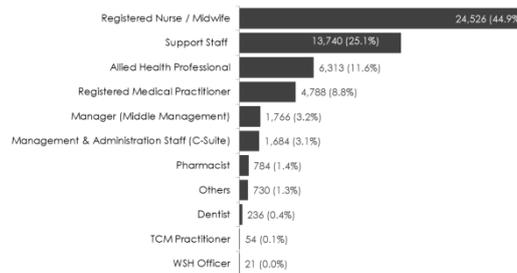


Figure 2 Employment by Occupational group

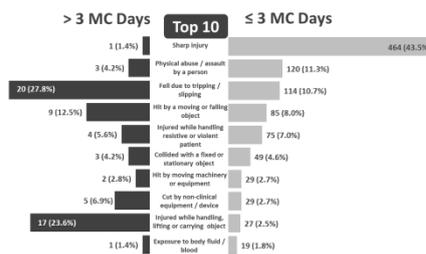


Figure 4 Injuries by Incident Type and medical leave

<sup>1</sup> JCI – Joint Commission International (JCI) works to improve patient safety and quality of health care in the international community by offering education, publications, advisory services, and international accreditation and certification.

<sup>2</sup> OSHAS 18001 - an internationally applied British Standard for occupational health and safety management systems.

<sup>3</sup> ISO 9001 - ISO 9001 certified organisation you will have implemented Quality Management System requirements for all areas of the business, including: Facilities; People; Training; Services; Equipment

<sup>4</sup> bizSAFE Level 3 - bizSAFE is a five-step programme that assists companies to build up their WSH capabilities so that they can achieve quantum improvements in safety and health standards at the workplace

## Findings:

A total of 1,138 workplace injuries, four occupational disease cases, 373 workplace aggression cases and 75 near miss incidents were reported. These included cases without medical leave.

### Workplace injuries

Out of 1,138 workplace injury cases,

- 1,066 (93.7%) injuries received  $\leq$  3 days of medical leave (MC). Sharp injury was the leading incident type with 464 (43.5%) cases, followed by slips, trips and falls with 114 (11.0%) cases and hit by moving or falling objects with 85 (8.0%) cases;
- 72 (6.3%) injuries received  $>$  3 days of MC. Table 1 shows the breakdown of the top 3 incident types from the study, which is comparable to that of the top 3 incident types for the 275 injury cases reported to MOM from the Healthcare sector.

Study on 10 healthcare institutions		National WSH Statistics 2013 report	
Top 3 Incident Types	%	Top 3 Incident Types	%
Slips trips and falls	27.8	Slips, trips & falls	26.8
Over-exertion while handling, lifting or carrying objects	23.6	Over-exertion / strenuous movements	19.2
Struck by moving or falling objects	12.5	Struck by moving objects	15.6

**Table 1** Comparison between top 3 incident types from study and WSH Institute's National WSH Statistics 2013 statistics for the healthcare sector.

### Workplace aggression

On workplace aggression, a total of 373 cases were reported to their internal reporting system from 7 out of the 10 institutions. Of these cases:

- 48.5% suffered physical abuse and 51.3% involved verbal abuse;
- Top 3 causes were:
  - mental instability of patients (38.5%)
  - frustration (30.3%)
  - anxiety (11.9%);
- Top 3 occupations involved were:
  - nurses and midwife (72.8%)
  - support staff (15.0%)
  - doctors (8.2%)
- Top 3 locations were:
  - inpatient wards (65.0%)
  - outpatient wards (24.8%)
  - A&E (6.6%).

However, only 36 physical assault / abuse cases were reported to MOM for the entire Healthcare sector.

### Occupational diseases

There were a total of four occupational disease cases from the institutions' responses. One case each was reported for skin disease and musculoskeletal disorders - trunk or back; and 2 cases for musculoskeletal disorders - neck or shoulder.

Based on the National Statistics Report 2013, there were 20 confirmed occupational disease cases from the Healthcare industry. Of these cases, 14 were cases of Work-Related Musculoskeletal Disorders (WRMSD), 1 case of occupational lung disease and 5 cases of Occupational Skin Disease (OSD).

Root causes:

For the work-related injuries and near misses reported, work environment was the leading root cause, contributing to 49% of cases. This was followed by components required to perform the tasks (17%) and competency related issues (12%). Fatigue is the leading root cause for work-related ill-health.

### **Recommendations:**

- **Risk Management**

As mentioned above, the top causes of workplace injuries were physical, sharps / needle stick / cuts, and sprain & strain / swelling. A relook at how risk assessments are done could be a possible way to prevent these injuries. Whenever possible, companies should adopt risk control measures as high as possible in the hierarchy of controls. To prevent injuries from sharps / needle stick and cuts, organisations can consider using safer sharp devices such as shielded needles or needleless devices. For slips, trips and falls due to poor workplace conditions, e.g. wet and uneven floors, cluttered walkways, and inadequate lighting, organisations can undertake measures to ensure a safe working environment e.g. use anti-slip floor coating, improved lighting, improved housekeeping.

- **Systems & Training**

To deter workplace aggression, organisations could have systems in place that would discourage aggressive behaviour, e.g. implementing a buddy system for frontline staff and displaying warning signs at counters. Additionally, frontline staff could be taught how to recognise warning signs of aggression and how to de-escalate conflict, complementing in-house warning systems.

**Limitations:** As the study was limited to only organisations in the committee, it would not accurately represent the entire healthcare sector. Thus, the committee may wish to consider expanding the number of organisations surveyed for future studies. The other main limitation is that this is a self-reporting survey and there could be biasness in reporting and under-reporting.

**Conclusion:** The study successfully surfaced new concerns as it covered all incident reports received by the ten institutions, not limited to the statutory incident reporting requirement of >3 days MC or hospitalisation for work injuries. Hence, sharp injuries which have  $\leq 3$  days MC surfaced as a new priority concern.

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1. Raffles Medical
2. Renci Hospital
3. Jurong Health Services
4. Singapore TCM
5. National Healthcare Group Polyclinics
6. Khoo Teck Puat Hospital
7. Changi General Hospital
8. National University Health Services
9. Parkway Group
10. Singapore General Hospital

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