

**Introduction** Providing of occupational health services for workers is considered as essential services. But informal workers have less accessibility to the services, and the cost of providing such services is not available. This study aimed to analyse the cost of providing occupational health services for informal workers at sub-district hospital level.

**Method** Data were collected from 14 Sub-district hospitals provided occupational health services in Khon Kaen province, Thailand. Fiscal year 2013. The Occupational health services comprised of both active services and passive services. The active services are; collecting baseline data of informal workers, workplace survey and risk assessment, health education and suggestion about work related diseases. The passive services are; health screening. Treatment of work related diseases, and reporting the occupational disease to the surveillance system. Data were collected using record form of details and resources used in providing each activity by the health officers. Cost comprised of labour cost, material cost and capital cost. Direct cost allocation method was applied in cost analysis.

**Results** The study revealed that total cost of providing occupational health service was 79 326 baths. Unit cost of active services was 37 161 baths (Range 19,804–136,862). Cost of key activities per capital such as workplace survey and risk assessment, health education suggestion and campaign, home visit and statement occupational health project were 2920, 15132, 598 and 5331 baths, respectively. While unit cost of providing passive service was 24 403 baths (Range 14,232–132,055). Cost of core activities per capital comprise of diseases screening, diagnosis and treatment, database development, record keeping and to the surveillance system were 1175, 1753, 4803 and 1432 baths respectively.

**Conclusion** The unit cost of providing active service was 37 121 baths and passive service was 42 165 baths. The results can be applied to budget allocation for occupational service at Sub-district hospital.

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#### RETROSPECTIVE STUDY OF THE PREVALENCE OF SKIN AND SUBCUTANEOUS DISEASES IN BRAZILIAN WORKERS RECEIVING SICK LEAVE BENEFITS

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**Introduction** Dermal exposure to hazardous agents can result in a variety of occupational diseases, including occupational skin diseases (OSD), which is characterised by skin alterations related to the work, and may be related to the lack of use of individual protective equipment. The objective of this study is to identify the prevalence of OSD in the worker's population and the relation with the working conditions.

**Methods** This was a cross-sectional study (November 2012 until February 2017) involving 49,391 employees receiving sick leave benefits from the Brazilian National Institute of Social Security. From these data, it was selected the cases related to occupational skin diseases including: gender, age, main occupation, hazard exposure and the international classification of diseases (ICD-10) codes to work-related skin lesions.

**Results** The study revealed that the OSD was present in 493 workers. The most prevalent dermatoses were skin and subcutaneous infection diseases (ICD L00-L08) in 216 workers. Followed by other skin and subcutaneous diseases (CID L80-L99) in 129 patients, 60 patients were diagnosed as skin accessory structures diseases (CID L60-L75) and dermatitis with ICD (L10-L30). The results showed that the participants were 55% female having a mean age of 39 y/o; The main occupational posts associated with OSD were agricultural workers (32%), health workers (22%) cleaning personnel (15%) and administrative employees (11%). Approximately 68% of the workers had related some contact with chemicals agents.

**Conclusion** The study confirmed the meaningful influence of OSD on the work absence specially in agricultural and health workers, and this occurrence may be related to skin disease infections, and other skin and accessory skin diseases among these workers. Furthermore, the work-related skin diseases may be a result of inappropriate use of individual protection equipment as well as the worker exposure to the chemicals and other trigger factors.

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#### SURGICAL SMOKE RISK – A SURVEY OF OPERATING ROOMSTAFF

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**Introduction** Surgical smoke exposure is an important occupational hazard posing risk to all working in Operating Room (OR) environments.

**Methods** A questionnaire was designed to evaluate the knowledge of OR staff about the risks of surgical smoke exposure. It was distributed to all OR medical and nursing staff within Antrim Area Hospital, United Kingdom.

**Results** The response rate was >75% and was representative of the study group. 98% of OR staff were aware that both the operator and scrubbed staff were at risk from smoke inhalation; whilst only 78% and 57% respectively were concerned about risk to non-scrubbed staff and the patient. 98% of respondents recognised electro-surgery as a source of surgical smoke, however less identified laser and ultrasonic surgical devices as additional sources. 61% knew that surgical smoke could potentially contain water, chemicals, bacterial and viruses; whilst 11% were unsure. 2% believed smoke exposure caused no symptoms. 35% of staff felt a standard facemask was protective. Only 22% and 63% respectively were aware of availability of smoke wands and portable evacuation devices as risk reduction measures within their unit. 76% deemed current risk reduction inadequate. The majority of staff (63%) were exposed to surgical smoke at least twice weekly; 32% for >90 min per episode. 59% of respondents experienced symptoms which they attributed to smoke exposure, most commonly headache (28%). 74% had multiple symptoms and 4% had had associated sickness absence.

**Conclusion** Those with the greatest exposure (frequency and duration) were more likely to have relevant symptoms and were the only group to have attributable sick absence. Evaluation of policies; staff education; and risk reduction measures are recommended.