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| Thesis Title | Factors Influencing the Utilization of Safety Measures Among Workers of the Spinning Department of Indo-Thai Synthetics Company,. |
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| Date of Graduation | 9 May, B.E. 2540 (1997) |

ABSTRACT

A factory based cross-sectional descriptive study on factors influencing the utilization of safety measures among the workers in Spinning Department of Indo-Thai Synthetics was conducted in Bangpain district of Ayuthaya province, Thailand in March to April, 1997. The study aimed to assess the socio-demographic characteristics, level of knowledge and attitude towards utilization, availability and accessibility of safety measures and the enabling factors related to safety measures. All 240 workers of the Spinning Department were interviewed by means of structured self-administered questionnaires.

The results of this study showed that the majority (95.5%) of the workers were female. Their age ranged from 16 to 59 years, having low level of education. Most of them came from Pathum Thani province and on average, had been working there for 5 years. They had a mid monthly income ranging from 5000-10000 baht. They had some habit of drinking stimulants (40.4%) and drugs

(21.3%) even during working hours. However, these habits did not show any association with the utilization of safety measures.

In addition, this study showed that only 49.2% had good knowledge of occupational health hazards and utilization of safety measures. Regarding attitude 67.5% had a positive attitude towards utilization of safety measures. A significant association was found between attitude of the respondents and utilization of safety measures. (P-value = < 0.005), but no association was established knowledge. For this it is recommended to carry out additional research to study profoundly the understanding of the workers towards utilization of safety measures.

The working condition were found dusty (95.8%) because of cotton fibers and there was a difficulty for hearing (66.3%) due to high intensity of noise emitted by machines in the Spinning Department. Lighting (illumination) (69.6%) was said to be sufficient.

A small percentage (20.4%) of the workers got safety training from the factory and most of them depended on the advice given by the foreman. About 91% of the respondents agreed on pre job and in service training but a large number (29.2%) of the workers' did not have access to safety training. This factor was found statistically significant associated with the utilization of safety measures (P-value = 0.0002)

Emergency alarm (81.7%) and fire extinguishers (62.9%) were found to be the main measures to prevent injuries. The utilization of the health center was moderate (36.3%). The personal safety measures applied by the majority were nose masks (95.0%) and earplugs (44.5%). The regularity was not followed by the workers.

The 94.5% of the workers were doing shifts, a majority of them did not like night (49.2%) and morning shifts (38.8%) because they felt tired and sleepy due to their working positions and were standing and walking (71.3%). In addition in night and morning shift the occurrence of injuries was high (87.5%). However no association was found between shift work and the utilization of safety measures.

A significant association was found among welfare facilities to the worker and utilization of safety measures such as personal sanitation (P-value = 0.0253), cloakroom, lockers and changing room (P-value = 0.003), drinking water and beverages (P-value = 0.0117). In addition canteen and food services (p-value = 0/02935), rest areas and entertainment (P-value = 0.0365) and further education and training (P-value = 0.0463) were statistically significant, associated with the utilization of safety measures. It was found that the welfare facilities were relatively good and satisfactory in comparison to other factories.

More than half (52.1%) of the workers did not have any participation and tri-partite relation to assess the risk at work place and implementing available solutions. The opinion on workers' organization and safety committee was found not influential to strengthen the activities for the harmony of the work place.

A majority of the workers (57.1%) were found not aware of Labour Law and Factory Act of Thailand, by which 44.2% were not sure if the provision were being applied in their work place or not.

The supervision on safety activities were not sufficient and visit from the Government Labour Inspector were not experienced.

The study indicates that the lack of attitude, adequate provision of safety measures, co-operation and co-ordination among the workers, employers

and government (tri-partite), pre-employment or in-service training, machine and working environment, health services, inspection were important factors that could cause under utilization of safety measures.

The result of this study can provide useful information for government authority and planners, employers and workers, especially those concerned with occupational health and safety in the future