

Developing ergonomics intervention for improving safety & health among smallholders in Melaka oil palm plantation: a participatory action oriented approach

ABSTRACT

In the Malaysia Economic Transformation Programmed (ETP) launched on 2010, palm oil industry has been highlighted as one of the key sector towards national economic development. There are a lot of concerns directed towards safety and health in the agricultural sectors where oil palm plantations are the main agricultural sectors in Malaysia. Correspondingly, several tasks by the small holders in the oil palm plantation have been shown to lead to musculoskeletal disorders which are attributed to various safety and health issues. This study intends to determine the effects of ergonomics interventions approach, highly promoted by International Labor Organization to resolve ergonomics issues specifically among oil palm plantation small holders and to improve Occupational Safety and Health aspects of the workplace. The study will be divided into two phases, the first phase of the cross-sectional design which will involve 360 male respondents working as small holders in the oil palm plantation. Questionnaires will be used to collect information on socio demographic data, occupational history, social lifestyle and prevalence of musculoskeletal disorders (MSDs) data. The second phase of the intervention study (Quasi Experimental) involve intervention program based on Participatory Action Oriented Training (PAOT) approach using qualitative observation and quantitative results of analysis during the first phase. A training program consisting of 3 primary instruments (lecture, action checklist and video), reinforcing activities (to increase knowledge, enhance understanding and associate practical application) and indicators (questionnaires and qualitative observation) were created, modified and customized to the small holders' working in oil palm plantation. Palm oil industry provides job opportunity for more than half a million people and living opportunity for more than 1 million people (MPOB, 2011). Improving safety & health for the small holders in the oil palm plantations become the overall outcome of the ergonomics intervention. Specifically, the ergonomics Intervention will be expected to increase Knowledge, Attitude and Practice (KAP) among the small holders, to be used as a program for occupational safety & health improvement in oil palm plantations around Melaka as well as to reduce risk of developing Musculoskeletal Disorders (MSDs) due to small holder's multi task in the oil palm plantations. As the current knowledge gap of agricultural workers such as small holders remains wide in terms of safety and health, awareness among the small holders in the rural areas is low. In addition, focus of research was generally low on agricultural workers especially of health components further increasing the knowledge gap and status of health of agricultural workers or specifically small holders in Malaysia

Keyword: Intervention; Ergonomics; Participatory; Small holders; Oil palm plantation