

Abstract

This study was to determine the level of protective gear and equipment use amongst welders. The main objective of the study was; to determine the level of use of protective gear among welders while carrying out their occupation. The specific objectives were;

1. To determine the different protective gear used in the welding workshops.
2. To determine the level of knowledge of welders on the use of protective gear.
3. To determine the common injuries experienced by the welders.
4. To determine the level of protective gear and equipment use by the welders.

Methodology: The study adopted a cross sectional survey using a sample size of 125 respondents purposively selected.

Results: Of the 125 respondents 121(96.8%) were male and 4 (3.2%) were female showing that welding is a male dominated profession.62 (49.6%) of all the respondents were between the ages of 15-25 years.120 (96%) of the respondents were aware of health and safety hazards associated in welding. Also noted was that most of the welders that is 118(98.3%) of 120 had experienced eye pain yet 107(90.7%) reported they wore welding goggles regularly during work. Statistical analysis revealed a strong relationship between wearing welding goggles and rate of experiencing ocular hazards($R=0.99$) and an increase by 1%of welding goggle use leads to a decrease in occurrence of ocular hazards by 3.3($Bo=3.3$). Findings also reveal that there is poor health seeking behavior among welders with only 22 respondents reported to have sought medical treatment from a health facility after an accident or incident. About 12 respondents reported the use of safety boots and it was evident that majority did not only lack safety shoes but were also working in open or canvas shoes and 38% had at least done some refresher courses related to welding mainly in metal arc welding. A number of protective gear and equipment to include eye goggles, facemasks, protective coats, helmets, and safety boots were being utilized by the welders.

It was also observed that majority of the workshops (18) operated in open spaces which provided adequate ventilation however many operated in small open spaces which also exacerbated the piling of work thereby inhibiting accessibility and escape in case of emergency.

Recommendations: The study recommends that government and other development partners come into collaboration with SMEs to enhance funding of occupational safety activities, frequent safety and health inspections to see whether most of these workshops meet the required set OSHA guidelines and use the standard protective gear and equipment. Also further research is needed to determine quantitative levels of exposure to welding related hazards to both workers and passersby.