ASSESSMENT OF OCCUPATIONAL HEALTH HAZARDS MANAGEMENT IN CONSTRUCTION INDUSTRY

BY:

JOSPHAT MARTIN MUCHANGI

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF DEGREE IN MASTERS OF PUBLIC HEALTH (*EPIDEMIOLOGY AND DISEASE CONTROL*) OF THE SCHOOL OF PUBLIC HEALTH.

MOI UNIVERSITY.

AUGUST, 2006.



ABSTRACT

Globally, the construction industry has a poor safety record compared to other industries. Population increase in Kenya has led to demand of infrastructures for different purposes making construction an important sector. The purpose of the study was to describe occupational health hazards and their management in construction industry in Eldoret municipality. The objectives were: To identify health safety hazards and their effects on the workers; to assess the health safety service at the work-site in the efforts to manage the hazards and to review regulations governing construction industry.

A cross-sectional study was carried out and using stratified and convenient sampling methods. Scoping exercise was done to identify the work-sites then they were divided into two clusters of residential and commercial construction sites. Stratification was made on basis of the stage of construction. The central business district was chosen as the starting point. A sample of 308 construction workers selected randomly from 82 construction sites was interviewed. 82 foremen from every site were interviewed on site management issues. Data was collected using questionnaires and a checklist. Existing laws and policies on occupational health and safety in the field of construction were also reviewed. The key variables examined were socioeconomic and labor characteristics, occupational health and safety hazards, their interventions, legal and policy framework. Data was analyzed with SPSS for frequencies, cross tabulations, binary logistics, Chi square and Mann Whitney U test; statistical significance set at P<0.05.

Data was collected from 308 study respondents (all male) aged 18-77 years (mean age 31.6 yrs. The majority of respondents (57.5%) had attained secondary education but most of the workers (57.5%) were unskilled. The mean daily wage was Kshs 215. Nearly all the respondents worked for 8 hours or more.

Ergonomic hazards accounted for the most commonly occurring hazards (89.7%) whereas metal cuttings hazards were the least (9.3%). There was no difference between observed workplace hazards at different stages of construction (P>0.05). Personal protective equipment was the common occupational health intervention cited while provision of warning signs was the least. There was no relationship between awareness of hazards and injury involvement (P=0.522). Most of the respondents (73.4 %) cited that they were responsible for their safety. There was no difference between residential and commercial construction sites in the mean ranking rate of the risks rating (P>0.05). There is one law governing occupational health and safety, which was inadequate to curb health and safety hazards in the construction industry in Kenya. There was no proper enforcement of existing occupational health regulations. The odds ratio indicated that there was likelihood of an injury occurrence on the sites where there were some hazards.

There should be joint efforts of agencies in the industry aimed at protecting health and safety of the construction workers. Laws enforcement, formulation of appropriate law(s), information and linkages, was recommended for better worksites hazards management.