



Musculo-skeletal disorders among the workers engaged in organized poultry farm

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ABSTRACT

The cardiac cost of work was higher while cleaning of hatchery, cleaning of layer house and slaughtering/defeathering/packaging as compared to all other activities that ranged from 120-130. There was not a big difference in working heart rate when different activities were taken under consideration. It ranged from 90-92.8 beats/min. as the same energy expenditure also ranged from 5.90-6.03 kJ/min. Paired t-tests, two sample t-tests and correlation coefficient showed that there was significant relationship between physiological cost due to different activities and physiological cost before and after the activity. In many respects heart rate is a better index of the overall physiological demands of work and can be used as a reliable indicator of stress. The workers, who were working since long years, were facing problems like asthma, allergic reaction and numbness.

INTRODUCTION

The world is heading towards 21st century with widespread mechanization and automation in every field but this advancement is seen more in the developed countries. In a country like India, because of its large population size and low general economic status, the use of manpower may likely persist on a larger scale in the coming decades. Most of the work force is employed in organized as well as unorganized sectors and many other occupations comprise men as well as women. Poultry sector is also one of them in which the maximum number of laborers are working and performing most of the activities manually. Poultry work involves considerable degree of manual efforts which are associated with body movements. If such movements are minimized by adopting motion economy and proper working postures, it would reduce fatigue to a considerable extent. While attempting such motion economy, one can take resource to biomechanical approaches and identify the wasteful movement or awkward body postures. If these are avoided through improvement in the work place layout, one can quantitatively evaluate the advantages gained

by using appropriate physiological and psychological indicators.

“OSHA defines ergonomics as “the science of fitting the job to the worker, and when there is a mismatch between the physical requirements of the job and physical capacity of the worker, work related musculo-skeletal disorders (WMSDs) can result. Workers who must repeat the same motion throughout their work day, who must do their work in an awkward position, who use a great deal of force to perform their jobs, who must repeatedly lift heavy objects or who feel a combination of these risks factors are most likely to develop work related musculo-skeletal disorders (WMSDs)”.

In recent years, there has been a significant increase in the reporting of musculo-skeletal disorders and other work related disorders due to ergonomic hazards. Much of the increase in musculo-skeletal disorders is due to change in process and technology that exposes employees to increase repetitive motion and other ergonomic risk factors.

There are a number of factors which are responsible for occupational health hazards in poultry industry. The goal of any health and safety programme is to prevent hazards and