# Let's make our workplace ergonomically correct!!

(Dr.ThanLwinTun, U Win Han, U ThanNyunt, Ministry of Health and Sports)

## **Definition of Ergonomics**

Ergonomics derives from two Greek words: *ergon*, meaning work, and *nomoi*, meaning natural laws, to create a word that means the science of work and a person's relationship to that work.TheInternational Ergonomics Association has adopted this technical definition: "ergonomics (or human factors) is the scientific discipline concerned with the understanding of interactions among humans and other elements of a system, and the profession that applies theory, principles, data and methods to design in order to optimize human well-being and overall system performance."

#### A Healthy Workplace

A healthy workplace is one in which workers and managers collaborate to use a continual improvement process to protect and to promote the health, safety and well-being of workers and the sustainability of workplace.

#### What Is the Study of Ergonomics?

At its simplest definition ergonomics, it literally means the science of work. So ergonomists, i.e. the practitioners of ergonomics, study work, how work is done and how to work better. It is the attempt to make work better that ergonomics becomes so useful. And that is also where making things comfortable and efficient comes into play. The simple way of your Office Ergonomics that makes adjusting your work station to fit your body.Ergonomics is a scientific discipline that has been around for many years. Traditionally concerned with factory workers and keeping their work environments safe and efficient, ergonomic professionals have expanded their work to include all types of workers from laborers toofficeworkers, students to seniors.

Ergonomics looks for ways to adjust our environment to decrease the risks of injury and illness and improve the quality of our work life.Ergonomics is concerned with how our environment interacts with our work. It also looks for way to adjust our environment to decrease the risks of injury and illness, enhance productivity, and improve the quality of our work life.

The profession of ergonomics has two main concentrations;

1. Industrial ergonomics - sometimes called occupational biomechanics is concerned with the physical aspects of work such as force, posture, and repetitive movements.

2. Human factors ergonomics looks as the psychological aspects of work such as mental stress and decision-making

The goals of ergonomics are Reduce work-related injury and illness, Help contain workers' compensation costs for employers, Improve productivity in the workplace, Improve the quality of work, Reduce absenteeism and Help employers comply with government regulations regarding work environments.

## How Ergonomics Improves Work and Safety

The association between work and injury and illness is centuries old. It is even thought that Ancient Man concerned himself with developing the right tools that allowed for the most efficiency and least amount of discomfort.Today, we continue to look for ways to improve the relationship between our "tools" and our jobs. One way to do that is to look at the risk factors in the workplace. These can be divided into 3 areas: physical characteristics, environmental characteristics, and workplace hazards.Physical characteristics of work includes Posture.Force, Repetition, Duration. Recovery time. Velocity/acceleration and Heavy dynamic exertion. Environmental characteristics of work includes Heat, Cold, Lighting, Noise and Whole body vibration. Workplace hazards includes Physical stress, Mental stress, Workload, Hours (shifts, overtime), Slips and falls, Fire and Exposure hazards (electrical, chemical, biological, radiation).

## The Union Minister for Ministry of Health and Sports has also guided that a staff should come to office with sense of happiness and should go back home with sense of satisfaction.

It is important for us to take a good hard look at our work environment for ourselves and for our employee's sake. A smart approach incorporating ergonomics in the work place will benefit worker's health and decrease absenteeism and work related injuries. It's not just the right thing to do, it also good business for an employer.

## Reference

(1)Ergonomics: The Human Body and Injury Prevention; Mary Rodts, DNP

(2)WHO healthy workplace framework and model by Joan burton

#### **Office Ergonomics**

