

Introduction

The Egyptian General Organization of Health Insurance (GOHI) is a Governmental non-Ministry of Health organization, under direct influence of the Minister of Health.

The GOHI is a non profit, high quality health care system with the participation of both the employee and the employer in the expenses.

In 1975 the GOHI role was redefined to include many activities among which is the Occupational Health. (GOHI, 1982 and GOHI, 1985)

In the Occupational Health setting, the GOHI is responsible for many duties mainly preplacement and periodic medical examination of exposed workers. Rehabilitation, treatment and disability evaluation are also the responsibility of GOHI. (Massoud et al., 1982)

According to the decision of the Minister of Social Affairs No. 218 of 1977 regarding the medical examinations of workers exposed to occupational diseases:-

- It is the duty of the GOHI to examine the workers exposed to occupational diseases listed in the Egyptian Schedule of Occupational Diseases. The GOHI is also responsible for determination of the exposed workers. (GOHI, 1982 and GOHI, 1985)

El-Samra et al., 1988 reported that the total number of examined workers by the GOHI increased in 1986 to 281,505 out of 976,583 insured workers

The introduction of a new Computerized Occupational Health Management System that is practical and suitable for the Egyptian environment (to replace the completely manual system), can much improve the practice and style of the Occupational Health care of the Egyptian workers.

OCCUPATIONAL HEALTH

Rom, (1983) defined Occupational Health as *"the process of recognition, evaluation, and control of those environmental factors or stresses arising in and from the workplace which may cause sickness, impaired health and well-being, or significant discomfort and inefficiency among workers or other citizens of the community"*.

The responsibility for this process is shared by an occupational health team, which may include occupational medicine physicians, occupational health nurses, safety engineers, chemists, toxicologists, psychologists, and epidemiologists (Rom, 1983).

The Occupational Health Program

Occupational health programs have undergone significant change over the last decade. The basic goal of occupational health remains the same, to ensure a safe and healthful workplace. However, there has been a change in the scope and responsibilities, that has increased demands on occupational health professionals and markedly broadened the range and type of information with which they must deal (McDonagh et al., 1981)

The American Occupational Medical Association in the statement, Scope of Occupational Health Programs and Occupational Health Practice, has emphasized the mix of skills required:

Comprehensive occupational health programs require the skill of persons trained or experienced in a variety of disciplines, including clinical and occupational medicine, industrial hygiene, toxicology, epidemiology and biometry, occupational health nursing, safety engineering, and human factors engineering (McDonagh et al., 1981)

A Computerized Occupational Health System

There can be little doubt that those in the health professions must manage rather than react to the known and unknown hazards of the workplace. Being effective health managers now requires being effective managers of information. The written files of **yesterday**, the medical records or sampling surveys, are useless in the information task unless a medium can be found which can rapidly collate and then selectively analyze any combination of data on selected populations of employees, hence the advent of occupational health computer systems (Hipp & Jirak, 1983)

Occupational Health System Functions

Whyte (1983) explained that although occupational health systems differ in size, capabilities and approach, they all have one or more of the following in common. These functions can be organized into any number of system components or modules.

Monitor employee health

This function is used primarily by occupational medicine specialists to manage records related to employee health surveillance. These records include all physical examination data, clinic visit records, occupational injury and illness records (including workers' compensation records), and biological monitoring results information that relates to the health of individual employees.

Monitor workplace conditions

This function manages data that relate to the work environment. Workplace identifications and descriptions, important for physically tracking employees within the organization, are maintained here. Industrial hygiene, health physics, environmental, or other sampling and inspection data that describe and quantify conditions in the workplace are also managed by this function.

Monitor environmental agents

This function allows the maintenance of inventory, toxicological, and material safety information on toxic agents within the workplace.

These agents include chemical, radiological, and physical hazards. Records on these agents are required to identify the toxic substances to which

employees are actually or potentially exposed and to maintain reference information on their properties, use, storage, and disposal.

Monitor protective measures

This function is used to maintain information on measures used or taken to protect employee health and safety. These measures include engineering controls, administrative controls for health hazards, and personal protective equipment. Protective measures also include health and safety training provided to employees.

Monitor regulatory, administrative, and action items

This fifth function maintains information on regulatory requirements, like standard permissible exposure limits. It is also used to track on-going problems or events that require follow-up such as schedules and accident reports.

Other functions offered by occupational health systems include demographic or personnel data on employee examinations and workplace monitoring, and statistical capabilities for data analysis.

The unique value of occupational health systems that incorporate most or all of these functions lies in their ability to manipulate and correlate data across functions in order to support comprehensive occupational health surveillance. They are also adding new possibilities for epidemiological research in the workplace. (Whyte, 1983)