

HEALTH HAZARDS AMONG HOSPITAL WORKERS

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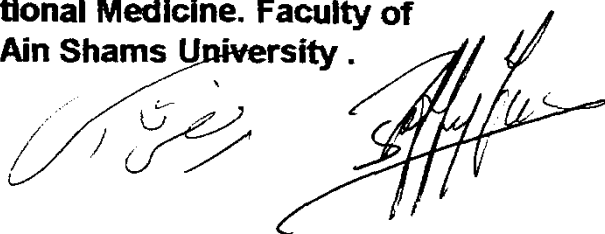
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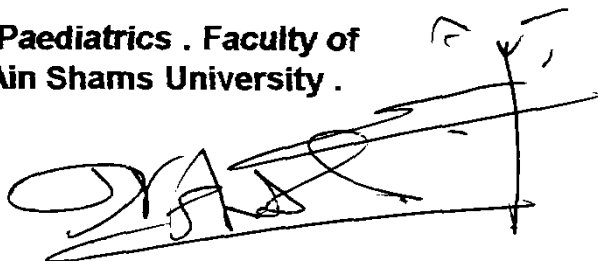
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Contents

*Introduction	1
*Aim of the study.....	8
* Review.....	9
*Materials & Methods.....	56
*Results	62
*Discussion.....	90
*Conclusion.....	125
*Recommendations.....	127
*English Summary.....	132
*References.....	135
* Appendix.....	
* Sample of questionnaire.....	
*Arabic summary.....	

INTRODUCTION

Health hazards among hospital workers

Health care workers at hospitals care for patients , treat them , but most of them are unaware that they are exposed to dozens of hazards . Even if they are aware of these hazards , and because of the nature of their work they promote the patients rights on the expense of their rights .

Hospital workers have a higher incidence of job-related injuries than do office workers or employees in other service fields (Accident facts. 1983) .

Certain categories of health care workers are perceived to carry a great inherent risk not only from contact with diseased subjects and blood and body fluids , but also from injury through the use of potentially dangerous equipment , one such occupations is post-mortem work where both technical and medical staff are at risk (Hall and Harrington ,1991)

Doctoring is stressful for most physicians , the literature reports a high incidence of depression , suicide , social isolation , alcoholism , and drug abuse among physicians and health care workers (McCue.1982) and (Gordon...et.al.1986)

Among the most serious risks are occupational accidents in hospitals ; infections , parasitic diseases , allergy , and dermatosis caused by various chemical products used in medicaments and sterilising agents .(International Council of Nurses .1983).

MEHL(1983) Stated that ; general practitioners are exposed to numerous hazards . Hospital doctors are all exposed to stresses involved in dealing with other people , namely the anxious patients , and those close to him , who want to discharge the weight of their worries on the doctor . Thus , those most liable to coronary affections were managers and others including doctors with professional responsibilities . The risk of occupational accidents are very numerous , and the circumstances vary according to speciality. They include road accidents in the case of general practitioners , burns suffered by surgeons as a result of explosions in operating theatre , septic cuts and scratches for biologists and anatomopathologists , the danger of septic liquid , or vaccine entering the eyes of the general practitioners , surgeons , and pediatricians...etc. Syphilis infection among gyneacologists and physicians in research laboratories , blows and wounds inflicted on psychiatrists by delirious patients , or bites and scratches from test animals . A large number of these accidents are particularly serious because of the infectious complications they involve . Occupational diseases of the medical practitioner may be listed under three headings :

- a) Infections and contaminations .
- b) Disorders due to ionizing radiations .
- c) Occupational dermatitis .

a) **Infectious Diseases** :consists of parasitic , fungus , microbe or virus diseases . Theoretically the possibility of contagion and contamination is very considerable owing to contact with patients and the need to handle septic objects . Certain medical acts such as bronchoscopy , or laboratory work are the most important causes of transmission of germs .The hospital environment is favourable to development of special strains of germs with a remarkable resistance to antibiotics . The principal groups are prtei , pyocyanic germs , pathogenic colibacilli and staphylococci . The sources of infection are patients , contaminated objects (taps of wash-basins, trollys , medical thermometeretc.and even the air of the premesis . Virus hepatitis is frequent and serious enough to remain very important . Its incidence among physicians is between 15 and 40 times greater than in the whole population . A survey covering (3000) physicians showed that particular exposure to risk exists in the case of those working in biological laboratories , followed by practitioners operating in internal medical services , pediatricians , urologists , surgeons , and ENT specialists . Doctors working in hospitals and clinics are two to three times more exposed than those in private practice .Virus hepatitis results in incapacity lasting at least four weeks , and partial incapacity induced by its sequelae can last as much as two years ; it can be very serious if cirrhosis develops . There are a number of occupational diseases that call for attention owing to the risk of embryopathy involved , since so many women are medical practitioners in numerous countries ; rubella is the most important of these . The

frequency of contamination attributable to laboratory work has been stressed in recent years .

b) Diseases caused by ionizing radiations:

This risk was for a long time limited to physics laboratories in the pioneer days of radiology , but it has now spread to radiodiagnosis and radiotherapy services and occurs pretty well anywhere ,at least in hospitals and clinics . Anaesthetists and surgeons are often exposed at the same time . The most dangerous operations include radioscopy , surgical operations , such as reducing fractures or seeking foreign bodies , cathetrisation under radiosopic control and radium needle plants for endo-curithery. In 1959 it was reported that 359 deathes had been recorded by radiological association throughout the world.

c) Dermatosis :

Leaving aside radio-dermatitis , precancerous lesions and epithelioma attributable to ionizing radiations , as well as infections, it is possible to say that the skin ailments of occupational origin incurred by physicians are more annoying than serious . The most common causes consist of allergic eczema of the hands , the fore-arms and face . Occupational eczema is more frequent among nurses,surgical dressers and other auxilliaries than among medical practitioners themselves . But the aetiology is the same , namely repeated contact with medicaments (particularly fungus antibiotics and chioropromazine) , anaesthetics (novocaine) and antiseptics (formol) . Incidence is increased by repeated washing with soap

and specially brushing of the hands and forearms , which destroys the fatty acid film protecting the skin and leads to damage.

MEHL(1983) mentioned that risk of intoxication is particularly high among anaesthetists . Mishaps due to anaesthetics are well known : it is enough to mention the haluthane hepatitis observed in persons who have undergone several successive anaesthetics , as a result of enzymatic induction . In operating theatres , pollution comes from equipment (cylinders , reducing valves , joints in pipes , flow-meters ,atomisers) and anaesthetic circuits (relief valves , expiratory valves in open systems) . It has been caculated that the anaesthetist inhales an amount of anaesthetic equal to one-thousandth of the dose administered to the patient . In the present state of knowledge it is reasonable to fear from :

- *neuropsychic troubles: tendency to somnolence , failiures in memory at the end of the day ; a high suicide rate has been observed among anaesthetists ;

- *irritation of the respiratory tract by haluthane and diethyl ether ;

- *hepatitis due to haluthane and methoxyflurane ;

- *kidney troubles due to flourine , the principal metabolite of methoxy -flurane ;

- *cellular and genetic effects : genetic anomalies due to haluthane particularly in association with nitrous oxide , observed in vitro , reduced spermatogenesis , due to nitrous oxide ; increases in the frequency of miscarriage , in the stillbirth rate and in congenital malformations.

*conduciveness to cancer , which has been established in experiments on animals for nitrous oxide , cyclopropane chloroform , halogenated anaesthetics and diethyl ether . (MEHL.1983)

Nurses are exposed to numerous risks to their health , physical and mental , in the course of their work . The health hazards can occur in any setting in which nurses are working and can sometimes have serious repercussion on their lives and health . Among the most serious risks are occupational accidents in hospitals ; infectious and parasitic diseases , allergy and dermatosis caused by chemical products used as medicaments or as disinfectants , the harmful effects of exposure to x-ray and other ionizing radiations , the physical and psychological strain of night work , shift work , work in psychiatric units and the emotional stress resulting from contact with physical deterioration caused by sickness and death .The frequency and gravity of occupational accidents among nurses are fairly high , particularly in hospitals . One type of accident calling for special attention , because of its seriousness , is the explosions caused by static electricity and explosions due to anaesthetic gases in operating theatres . Other groups of accidents are caused by falling or slipping , or by carrying objects or lifting patients . Infectious diseases contracted in the course of duty are another occupational hazard frequently affecting nurses . Exposure to ionizing radiations represents one of the most serious hazards for the health of nursing personnel working in x-ray departments . Frequently neglected are health hazards of nursing personnel connected with mental health , the

emotional stress which accompanies the nurses work caring for the sick and easing so much physical and mental suffering affects their own mental state and behaviour. The consequences can be serious not only for nurses but also for the patients they are in charge .(International council of nurses.1983)

Knowing that the health care workers exposed to all these previously mentioned hazards , creates a great necessity to study those hazards in detail , to find out the prevalence of different risks and to rank them so as to put them in order of priorities for preventive measures to protect health care workers , and to put policies for protection .

Aim of the study

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- 1-To determine the knowledge of hospital workers about the existence of hazards in their work.
- 2-To find out the prevalence of possible exposure to work-related health problems in such population.
- 3-To report about and recommend for the current measures carried by hospitals' managers for prevention and management of work-related health hazards.