

Chapter 13

Promoting and Protecting the • Health of the Working Population 2021

Objectives

- Define occupational health and occupational health nursing.
- Identify major objectives for occupational health
- Discuss the types of occupational hazards
- Discuss occupational health programs
- Apply the main roles and functions of community health nurse in occupational health.

Occupational Health

- It was defined by WHO as all activities aiming at promotion and maintenance of the highest degree of physical, mental and social-wellbeing of workers in all occupations
- One of the important aims of occupational health is to provide a safe “occupational health environment”.

Occupational Health Hazards

- Defined as a source of potential harm and can include substances or machinery methods of work and other aspects of work organization
- Causes of hazards
 - Unsafe act such as inadequate skills, inappropriate attitude, inappropriate knowledge
 - 2- Unsafe working environment, working procedures and condition of equipment and product material used.

Objectives of Occupational Health

1. To control the work hazards as chemical, physical, biological, ergonomic and psychological hazards.
2. To prevent work related illness and injuries.
3. To promote and maintain the highest degree of physical, mental and social well-being of workers in all occupations.

4. To provide effective measures to protect workers vulnerable to adverse working conditions.
5. To ensure that the physical and mental demands imposed on people at work by their job are properly matched with their individual and psychological capabilities.

Types of Occupational Hazards

- 1- Physical hazards
- 2- Chemical hazards
- 3- Biological
- 4- Ergonomic hazards
- 5- Psychological hazards

Types of Occupational Hazards

1. Physical hazards: include:

- extreme temperature
- Lighting
- Noise
- Radiation
- Work space
- Heat
- Energy sources
- vibration and illumination

Types of Occupational Hazards

2. Chemical hazards

When a worker is exposed to any chemical preparation in the workplace. BY

1. Inhalation

- Gases
- Dusts
- Metal and their compounds
- Insecticides

2. Local action\CONTACT

3. Ingestion

Types of Occupational Hazards

3. Biological

- Expose to infective and parasitic agents at the place of work. The occupational diseases are tetanus, anthrax, brucellosis ETC.
- Exposure to blood borne pathogens (HB virus, HIV, AIDs) has deadly effect on health care workers.

Types of Occupational Hazards

4. Ergonomic hazards

- include all the interaction between person and the demand of the job, the work setting and the overall environment.
- These factors include the design of necessary tools, equipment, physical position and motion the worker make to do their work and tasks to match the physiological, anatomical, and psychological characteristics and capabilities of the workers

Types of Occupational Hazards

5. **Psychosocial stressors/ hazards**

- Are conditions that put a threat to psychological and social well-being of workers as high work load and poor interpersonal relationship

Types of Occupational Hazards

6. Mechanical

- **These mainly cause work accidents and injuries than occupational diseases.**

Occupational Health Team

- Industrial physician
- Industrial nurse
- First aid workers
- Dentist
- Industrial hygienist
- Safety engineer
- Chemical industrial persons



Health Problems due to Industrialization

- Environmental sanitation problems (housing, water pollution, air)
- Communicable diseases
- Food sanitation
- Mental health
- Social problems
- Accidents
- Morbidity and mortality

Occupational Health Nursing

It is application of nursing principles to ensure the health of the workers in all occupations.

Objectives

1. Protect the workers from occupational health hazards.
- 2- Promote a safe and healthful workplace
- 3- Facilitate efforts of the workers and workers' families' to meet their health and welfare needs
- 4- Promote education and research in the field.

Occupational Health Programs

1. Disease Prevention Programs

- **Prevention of Occupational Diseases**
- **Medical Measures**
 - Pre-placement examination (place the right man in the right job)
 - Periodical health examination
 - First aid and medical care

Occupational Health Programs

2. Health Protection Programs

- **It becomes essential when hazardous exposures can't be eliminated.**
- **For example, wearing hard hats and steel toed safety shoes to protect workers from falling objectives.**
- **Health care workers who exposed to body fluids wear gloves, gowns, masks, and/or eye protectors.**
- **Protection achieved through legislation and regulations. These programs include plant surveillance, safety violation reporting, and worker safety education**

Occupational Health Programs

3. Health Promotion Programs

It is designed to promote healthy lifestyles by encouraging necessary behavioral change.

Typical health promotion programs include

- Exercise**
- Weight loss**
- Smoking cessation**
- Nutrition education**