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Community Health Nursing Department
lecture -11
Occupational Health Care Nursing

Occupational Health : deals with all aspects of health and safety in the workplace and has a strong focus on primary prevention of hazard .

Health of the workers has several determinants, including risk factors at workplace leading to

1. Cancer
2. Accidents
3. Musculoskeletal diseases
4. Respiratory diseases
5. Circulatory diseases
6. Hearing loss
7. Communicable diseases and others

Definition Of Occupational Health Nursing :

The specialty practice that focuses on the promotion, prevention, and restoration of health within the context of a safe and healthy environment. It includes the prevention of adverse health effects from occupational and environmental hazards.

Occupational health program services offered :

1. Health risk appraisal and assessments for research animal work and identified lab safety programs and other university programs that involved higher risk work and activities
2. Health risk counseling for allergies, ergonomics, reproductive and immune status issues that may impact your job functions
3. Medical clearance and fit testing for required respiratory protection
4. Job specific TB screening
5. Job specific vaccinations and titers
6. Job specific drug testing
7. Treatment of minor work-related injuries and illnesses
8. Management of complex work-related injuries and illnesses including post-exposure follow-up
9. Fitness for duty consultations where a medical condition may present a serious safety risk.

Principles Of Occupational Health

1. The occupational health program should be in conformity with the provision of the Occupational Safety and Health Acts .
2. Occupational health care is essentially an interdisciplinary team effort.
3. Occupational health unit must be staffed by qualified, professional personnel, must have administrative stability.

4. Quality of work environment is of vital importance and is center to the prevention of disease.
5. Workers themselves must participate to prevent injury in achieving a common goals and a high level of wellness as for quality of life.
6. Occupational health professionals must understand the dynamics of work

Objectives of Occupational Health : These are as follows :

1. Protect employee against any health hazards in the work environment.
2. Facilitate placement and ensure the suitability of the individual according to the individuals ability and physical and emotional make-up.
3. Ensure adequate medical care and rehabilitation of the occupationally ill and injured.
4. Encourage personal hygiene maintenance among all employees.

Function Of Occupational Health :

1. Occupational health nurse plans and develops nursing care that is consistent with overall objectives of the parent company health programme.
2. Occupational health nurse plans and submits an annual budget proposal to support nursing services.
3. Occupational Health Nurse participates in research designed to improve delivery of nursing services.

Health and safety hazards:

1. Biological hazards such as TB , hepatitis , HIV/AIDS , SARS
2. Chemical hazards such as glutaraldehyde , ethylene oxide
3. Physical hazards such as noise, radiation , slips trips and falls
4. Ergonomic hazards such as heavy lifting
5. Psychosocial hazards such as shift work , violence and stress
6. Fire and explosion such as using oxygen ,alcohol sanitizing gels
7. Electrical hazards such as frayed electrical cords

WHO's activities regarding occupational and work-related diseases include:

1. Carrying our estimates of the global burden of disease from major occupational risks , such as injuries , airborne exposures, carcinogens, ergonomics stressors, noise and other specific risks
2. Incorporating occupational diseases and their causes in the 11th revision of the International Statistical Classification of Diseases and Related Health problems
3. Working with (International Labour Organization (ILO) to develop diagnostic and exposure criteria for occupationaldiseases and to enable primary and secondary health care providers to detect and report such diseases.

OHN activities:

1. Observation and assessment of both the worker and the work environment

2. Interpretation and evaluation of the worker's medical and occupational history , subjective complaints and physical examination
3. Interpretation of medical diagnosis to workers and their employers
4. Appraisal of the work environment for potential exposures
5. Identification of abnormalities
6. Description of the worker's response to the exposures
7. Management of occupational and non-occupational illness or injury
8. Documentation of the injury or illness

Epidemiological models in Occupational health :

Epidemiological models are useful to understand the relationship between work and health.

Host

Any susceptible man is a host. All employees and groups are potentials at risk of being exposed to occupational hazards. Certain host factors are associated with an increased risk of adverse response to hazardous exposure in the workplace. These factors include age, gender, chronic illness, work practices, immunological status and lifestyle habits.

Agent

Work related hazards or agents, represent potential and actual risks to the health and safety of workers. Theses agent may be classified as :

- Biological, Chemical, Occupational, Mechanical, Physical, Psychological.

Environmental factors

- The environmental factors influence the occurrence of host-agent interaction and Outcomes of these interactions.
- The environmental factors include physical and psychological aspects. Physical environment includes the workplace, ventilation, hygienic condition, water supply.
- Psychological environment include characteristics of work itself, as well as interpersonal relationships required in work setting.

Types of occupational hazards and associated health effects :

Category	Exposures	Health Effects
Biological	<ul style="list-style-type: none"> • Blood or body fluids. 	<ul style="list-style-type: none"> • Bacterial, fungal, and viral infections (e.g. hepatitis B).
Chemical	<ul style="list-style-type: none"> • Solvents. • Lead. • Asbestos. • Acids. • Mercury. 	<ul style="list-style-type: none"> • Headache& Central nervous system dysfunction. • Central nervous system disturbances. • Burn.

Enviro-mechanical	<ul style="list-style-type: none"> • Lighting. • Shift work. • Electrical. • Slips and falls. 	<ul style="list-style-type: none"> • Musculoskeletal disorders. • Back injuries. • Headache and eye strain. • Sleep disorders. • Electrocution.
Physical	<ul style="list-style-type: none"> • Noise. • Radiation. • Vibration. • Heat. 	<ul style="list-style-type: none"> • Hearing loss. • Reproductive effect and cancer. • Heat exhaustion and heat stroke.
Psychosocial	<ul style="list-style-type: none"> • Stress. • Work-home balance. 	<ul style="list-style-type: none"> • Anxiety reactions and variety of physical symptoms.

Standards of Occupational Health Nursing practice:

1. Standard I: Assessment
2. Standard II: Diagnosis
3. Standard III: Outcomes identification
4. Standard IV: Planning
5. Standard V: implementation
6. Standard VI: Evaluation
7. Standard VII: Resource management
8. Standard VIII: professional development
9. Standard IX: Collaboration
10. Standard X: Research
11. Standard XI: Ethics

Functional roles of occupational and environmental health nurses :

1. Clinician. 2. Case manager. 3. Occupational health service coordinator.
4. Health-promotion specialist. 5. Manager. 6. Nurse Practitioner.
7. Collaborate Director . 8. Consultant. 9. Educator. 10. Researcher.

Apply level of prevention Applied to Occupational health :

- **Primary level** :Nurse provide education and safety in the workplace to prevent injury.
- **Secondary Level**: Nurse screens for hearing loss resulting from noise levels in the plant.
- **Tertiary Level**: Nurse works with chronic diabetic workers to ensure appropriate medication use and blood glucose screening to avoid lost work days.