



KZN INFECTION CONTROL PROGRAMME

INTRODUCTION

A significant number of hospitalized patients acquire an infection after admission, that is, one which is not present on incubating at the time of admission. Such nosocomial infection increase the duration of hospitalization and costs. Nosocomial infection may also result in permanent disability. Other infection or communicable disease may be brought into the hospital by patients, personnel or visitors.

RESPONSIBILITY

Infection control is the responsibility of all health personnel.

STAFFING NORM: Infection control Practitioner: - 200 patients.

CONDITIONS THAT COMPROMISE A PATIENT'S ABILITY TO FIGHT INFECTION

There are many condition that compromise the patients ability to fight infection including the following:

- ❖ Pre-existing underlying diseases.
- ❖ Immunosuppressive drugs.
- ❖ Antibiotic therapy
- ❖ Treatments, which provide a portal entry for micro-organisms.
 - Surgery
 - Intravenous therapy
 - Urinary catheters
 - Invasive diagnostic procedures

The hospitals microbial population.
Re-usable equipment.

INFECTION CONTROL INTERVENTION APPROACH

- ❖ Environmental hygiene and appropriate sanitation.
- ❖ Aseptic technique.
- ❖ Appropriate use of antibiotics.
- ❖ Implementation of the infection control policies.
- ❖ Isolation of patient's with communicable disease.
- ❖ Safe injections and intravenous devices.
- ❖ Appropriate waste managements.
- ❖ Appropriate pest control measures.

HANDWASHING

This is the most effective infection control measure.

INFECTION CONTROL COMMITTEE

The multidisciplinary infection control committee consists of representatives from all wards and departments.

- ❖ The Hospital Manager
- ❖ The Medical Manager
- ❖ The Infection Control Doctor.
- ❖ The Microbiologist/Lab Technology
- ❖ Infection control Practitioner
- ❖ System Manager
- ❖ Financial Manager
- ❖ Pharmacist
- ❖ Physiotherapist
- ❖ Engineering Department
- ❖ Laundry
- ❖ Catering
- ❖ Maintenance
- ❖ Mortuary
- ❖ Various departmental representatives
 - Medicine
 - Surgery and orthopedics
 - Outpatients
 - Nursing/Medical School
 - Primary Health Care
 - Pediatrics
 - EMRS
 - CDC
 - O & G and E.H.P.

Infection control members are appointed either permanently or temporarily but commitment and experience contribute to the success of the committee.

DUTIES OF THE INFECTION CONTROL COMMITTEE

The multidisciplinary infection control committee has the responsibility to:

- ❖ Direct and monitor the infection control program in the institution.
- ❖ The infection control team is part of the hospital management team and reports to the hospital manager directly or indirectly through the nurse manager.
- ❖ The departmental managers have the responsibility to ensure compliance with the infection control policies and procedures by all subordinates.
- ❖ The infection control committee defines the important issues to be addressed, puts in place the infection control action plan.

IMPORTANT ASPECTS OF THE INFECTION CONTROL PROGRAMME

- ❖ Surveillance for infections in patients and personnel.
- ❖ Education for infection prevention.
- ❖ Consultation in infection prevention.
- ❖ Communication.

SURVEILLANCE:

Definition of Surveillance

It is the outgoing systematic collection, analysis and interpretation of health data essential to the planning, implementation and evaluation of health care practices.

It is integrated with timely dissemination of collected data to the stakeholder's nosocomial infection surveillance system maybe:

- ❖ Sentinel event based or
- ❖ Population based or both.

SENTINEL INFECTION

This is clearly indicates a failure in the hospitals efforts to prevent infections (Glen Mayall : 1017)

POPULATION BASED SURVEILLANCE

Surveillance of patients with similar risks.

PURPOSES OF SURVEILLANCE

- ❖ Reduces infection rates within a hospital
- ❖ Identifying outbreak.
- ❖ Convincing medical personnel.
- ❖ Evaluating control measures.
- ❖ Satisfying regulators
- ❖ Defending mal practice cleaners

SURVEILLANCE METHODS

Case funding: - Passive surveillance through filling in of forms by doctors and nurses.
 - Active surveillance – looking for information by trained infection control practitioners.

PATIENTS BASED SURVEILLANCE

- ❖ Counting nosocomial infections.
- ❖ Assessment risk factors.
- ❖ Monitoring patient care procedures and practices for adherence to infection control principles.
- ❖ Ward rounds and discussions with care givers.

LABORATORY BASED SURVEILLANCE

- ❖ Detection is based solely on the findings of laboratory studies.

PROSPECTIVE SURVEILLANCE

- ❖ Monitoring patients while they are still hospitalized.

RETROSPECTIVE SURVEILLANCE

- ❖ Medical record review after patient discharge.

HOSPITAL WIDE SURVEILLANCE: (ongoing, total, and comprehensive)

INCIDENCE SURVEILLANCE

- ❖ Continual monitoring of all patients for new (hospital acquired infection).
- ❖ Provides a global view of what is happening in hospital.
- ❖ Potential cluster of infection.
- ❖ Antibiotics resistance.

PREVALENCE SURVEILLANCE

- ❖ Surveillance for all active nosocomial infections (existing or new).
 - Point prevalence-single day record.
 - Period prevalence –several days record.
- ❖ Prevalence surveillance is rapid, inexpensive.
- ❖ Prevalence survey can be used to assess the effectiveness of the infection control program.
- ❖ To heighten the awareness of nosocomial infection problems in institutions.

TARGETED SURVEILLANCE

- ❖ Focused on certain areas in the hospital.
 - Patients group e.g. surgical patients.
 - Site directed: Unit directed e.g. ICU
- ❖ This approach has a tendency of missing that infection that is not under surveillance.

OBJECTIVE/PRIORITY DIRECTED OBJECTIVES:

Also called surveillance by objectives takes into account the hospital prioritized infection control objectives.

- ❖ It helps because specific measurable objectives are set.

LIMITED PERIODIC SURVEILLANCE

A combination of hospitals wide and site specific targeted surveillance.

POST – DISCHARGE SURVEILLANCE

- ❖ Shorter postoperative stay warrants surveillance of surgical site infections post – discharge.
- ❖ This can be done through:
 - Telephone
 - Mail
 - Observation in clinic at predetermined interval.
- ❖ Some patients maybe lost to follow up.

IDENTIFYING OUTBREAK

Definition

- ❖ An outbreak is an unusual statistically significant increase in the incidence of a particular disease.
- ❖ Viable surveillance system is a prerequisite.
- ❖ Setting of a threshold rate as a guideline of when to initiate the investigation.
- ❖ Experience with surveillance and data analysis.

DATA DISSEMINATION

- ❖ To complete the surveillance procedure data is disseminated to those who will use it to prevent and infection control.
- ❖ Confidentiality is maintained when handling patient information.
- ❖ Data is not used for punitive exercises but augment quality improvement.
- ❖ Data is presented in tables; graphs and surveillance reports to the infection control committee.

MANAGEMENT PROTOCOLS

- ❖ Policy guidelines must be available at all institutions and workstations.
- ❖ Staff must be trained in the appropriate implementation of the infection control protocols.

EDUCATION AND TRAINING

- ❖ Master institutional infection control orientation and in service education program –for all level of staff.
- ❖ Wards/departmental in service training program.
- ❖ Infection control seminars/workshops and symposia.
- ❖ Appropriate records of attendance kept.
- ❖ Establish standards.

CONSULTATION OF THE INFECTION CONTROL SERVICES

- ❖ Purchase and use of supplies.
- ❖ New devices.
- ❖ Disinfectants.
- ❖ Waste management.
- ❖ Isolation techniques.

COMMUNICATION

- ❖ E.H.P.
- ❖ C.D.C.
- ❖ Expanded Programme on immunization.
- ❖ O.H.S.
- ❖ Reports.
- ❖ Clinics, Schools, Training schools (multidisciplinary).
- ❖ Traditional leaders, healers.
- ❖ Patients and contacts.
- ❖ Supply stores.
- ❖ Pharmacy and
- ❖ Other stakeholders PRN.

CONCLUSION

Infection compliance requires a worked increase of commitment, behavioral attitude and cultural change in all levels of health care workers!

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