

INFECTION CONTROL IS EVERYONE'S BUSINESS – GET INVOLVED

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INTRODUCTION

Infection control is one of the most challenging issues facing health care organizations from a quality, safety and financial prospective.

THE COMPLEXITY OF HOSPITAL ACQUIRED INFECTIONS (HAIs)

The centres for disease control and prevention (CDC) estimates that approximately 1.7 million new cases of infections are acquired by patients during their stay in a hospital. Of these, approximately 99,000 results in death, making health care acquired infections (HAIs) one of the top ten causes of death in united states¹. This translates in to approximately cost of \$4.5 to 6.5 billion a year.

At any given time, 1.4 million people in the world are suffering from a HAI². Available data suggest that developing countries experience HAIs more frequently than developed countries³. Developing countries experience HAIs more frequently than developed countries i.e. 5 – 19%. The number of critically ill patients is twice as higher – up to 51% in some ICUs. Also patients from developing countries experience more SSIs and Neonatal HAIs.

HAIs represent more than just numbers. Infections results in increased in increased length of stay, longer recovery time, and increased treatment costs. The human dimension of this problem is that people suffer needlessly, experience diminished quality of life and sometimes must contend with lasting damage.

INFECTION CONTROL IN HOSPITALS

30% to 35% of most HAIs are preventable by appropriate infection control measures.

INFECTION CONTROL PROGRAM

Each hospital needs to develop a program for the implementation of good infection control practices and to ensure the well being of both patients and staff by preventing and controlling Hospital Acquired Infection (HAI). This overview has been abbreviated from WHO guidelines for hospital infection control.

OBJECTIVES OF THE INFECTION CONTROL PROGRAM

- Monitoring of hospital-associated infections;
- Training of staff in prevention and control of HAI;
- Investigation of outbreaks;
- Controlling the outbreak by rectification of technical lapses, if any;
- Monitoring of staff health to prevent staff to patient and patient to staff spread of infection;
- Advice on isolation procedures and infection control measures;
- Infection control audit including inspection of waste disposal, laundry and kitchen, and
- Monitoring and advice on the safe use of antibiotics.

INFECTION CONTROL ORGANIZATIONS IN A HOSPITAL

Infection control organizations are essential features of an infection control program. These organizations are:

1. Infection Control Committee (ICC)

Representatives of medical, nursing, engineering, administrative, pharmacy, CSSD and microbiology departments are the members. The committee formulates the policies for the prevention and control of infection. One

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member of the committee is elected chairperson and has direct access to the head of the hospital administration. The infection control officer is the member secretary. The committee meets regularly and not less than three times a year.

2. Infection Control Team (ICT)

Members are the people who undertake the day to day measures for the control of infection. One team is formed for each location with Clinician, Nursing supervisor and housekeeping staff.

3. Infection Control Officer (ICO)

The Infection Control Officer is usually a medical microbiologist or any other physician with an interest in hospital associated infections.

Functions

- Secretary of Infection Control Committee and responsible for recording minutes and arranging meetings;
- Consultant member of ICC and leader of ICT;
- Identification and reporting of pathogens and their antibiotic sensitivity;
- Regular analysis and dissemination of antibiotic resistance data, emerging pathogens and unusual laboratory findings;
- Initiating surveillance of hospital infections and detection of outbreaks;
- Investigation of outbreaks, and
- Training and education in infection control procedures and practice.

4. Infection Control Nurse (ICN)

A senior nursing sister should be appointed full-time for this position. Adequate full-time or part-time nursing staff should be provided to support the program. The ICNs should be trained in basic microbiologic techniques.

Functions

- To liaise between microbiology department and clinical departments for detection and control of HAI;
- To collaborate with the ICO on surveillance of infection and detection of outbreaks;
- To collect specimens and preliminary processing;
- Training and education of other health care personal under the supervision of ICO, and
- To increase awareness among patients and visitors about infection control.
- To maintain a database of all infections in the hospital.

5. Infection Control Manual (ICM)

It is recommended that each hospital develops its own infection control manual based upon existing documents but modified, for local circumstances and risks.

PROBLEMS IN THE IMPLEMENTATION OF INFECTION CONTROL PROGRAMS

If 30% to 35% of most HAIs are preventable and such detailed guidelines are available, then why urinary tract infections, surgical site infections, pneumonia, and blood stream infections are common?

The simple answer is not as simple as patients are weak or already sick, or that microorganisms have become resistance to drugs. Those are significant factors but issues such as hand hygiene, effective cleaning and disinfection of the equipment and the areas where patients receive care, appropriate staffing, and use of personal protecting equipment (PPE).

CRUX: HALTING INFECTIONS REQUIRES IDENTIFYING AND TACKLING RISKS ON MANY FRONTS.

The broad scope of infection prevention programs are complex by their very natures and must involve staff in virtually every department and service of an organization. Practices that can lead to infections are diverse, each with their own set of issues. Everyone in an organization should work together to protect patients.

WHAT NEEDS TO BE DONE?

Clinicians have to take charge. They need to get involved; take initiatives; follow standard guidelines and protocols. They need to follow rational prescription practices and take initiatives to educate the nursing and support staff and the patients.

Nurses need to follow guidelines regarding Hand hygiene, PPE use and adhere to safe injection practices. They also should educate the patients, their relatives and the support staff.

ROLE OF STRUCTURAL DEPARTMENTS

Architects and designers should design buildings in a way to give due consideration to infection control practices.

The Maintenance team should take structural defects /faults in a war footing and should allow repairs to go on without compromising infection control guidelines and patient safety.

House keeping Department needs to keep the premises efficiently clean and adhere to hospital guidelines regarding cleaning schedules.

ADMINISTRATION & MANAGEMENT

Should make prevention of HAIs, one of the primary goals of hospitals. They need to provide adequate resources for infection control activities in the form of budgetary allocations, materials and equipments for cleaning, disinfection and sterilization and adequate manpower for these activities in a sufficient space.

PATIENTS AND ATTENDERS

Need to realize that infection control is also their primary responsibility. They need to follow hand hygiene and instructions regarding medication use and isolation procedures and PPE.

INFECTION CONTROL IS AN ONGOING, COMPLEX PROCESS

Preventing and controlling infection is at heart of patient safety, and health care facilities must thrive for reducing risks. To be effective, an effective, ongoing program with adequate surveillance is required.

Infection control is everyone's business - Get involved ; Contribute; Innovate; Follow guidelines.

REFERENCES

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