



Development of Strategies for Infection Prevention and Control in Hospital Setting: Bangladesh Perspectives

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Infection prevention and control is very essential in hospital setting to reduce morbidity and mortality of the patients. It has been estimated that one out of every 20 hospitalized patients will contract a healthcare-associated infection¹. The spread of these infections, however, can be prevented and controlled. Several simple and cost-effective strategies can help to prevent infections which is starting from hand hygiene to the team-oriented approach of Comprehensive Unit-based Safety Programs. The best strategies for prevention of infections have been established by experts.

The first strategy is hand hygiene. This is the simplest approach to preventing the spread of infections and needs to be incorporated into the culture of the organization. Surgical team personnel should wash their arms and forearms before a procedure and put on sterile gloves, according to CDC guidelines for infection control. The "clean in, clean out" approach is the best wherein hands and equipment are cleaned or disinfected on the way into the patient's room and on the way out again. One of the most common sources of transmission of infection is environmental surfaces. Certain types of microbial bacteria are capable of surviving on environmental surfaces for months at a time. When healthcare providers or patients touch these surfaces with their skin, the bacteria can be transmitted, causing infection. Thus, it is essential that the environment be kept clean and disinfected. Patients and their families are now the biggest advocates of medical safety especially with respect to maintaining a clean and sanitary environment. It is also important to involve multidisciplinary environmental hygiene teams in meetings regarding adherence to infection prevention protocols. Part of the preoperative health evaluation process should include consistent screening of patients. These

patients must then be treated prior to surgery or any other procedure. However, it is essential that patients who are suffering from the same disease or infection should be kept together in a designated area. Infections can spread easily from one patient to another if they are being treated in the same area, with the same staff and shared patient care equipment. Some infectious agents are even airborne. The staff at a healthcare organization may sometimes be the cause of the spread of infections. They come into contact with patients with different types of diseases and may contract infections. As a result, organizations must make sure that recommended vaccinations are being administered to their staff as recommended. It results in decreased transmission risk to co-workers and patients. Through surveillance, organizations should gather data regarding infection patterns at their facility. They should also regularly assess current infection prevention protocols. Having a robust infection surveillance program helps organizations measure outcomes, assess processes of care and promote patient safety. The misuse and overuse of antibiotics can put patients at a risk of contracting infections. Inappropriate antibiotic use may also result in patients becoming resistant to some drugs. If those patients contract an infection, it becomes harder to treat them and the risk of it spreading increases.

Breakdown of communication in the surgical preparation, planning and postoperative care management among various care providers during the care transition process can lead to surgical site infections that could otherwise be avoided. Often, the concept of stopping the line is not practiced, which is when care providers are doubtful if certain necessary infection prevention or surgical preparation activities have been completed by the

previous care providers, and they halt the care transition process until the matter is resolved. Organizations must avoid situations where a certain process is overlooked by a department that assumes another department has already completed that it. There needs to be coordination of care and communication within the surgical team as well². There is a risk of breaking the sterile field in the surgery room particularly around the portion of the surgical procedure when multiple, critical activities are taking place at the same time that require staff to multitask, she says. Care coordination goes a long way in preventing surgical site infections.

Keeping abreast of the latest findings regarding the spread of infections and strategies for prevention is essential for a successful infection prevention program. Infection preventionists must continually monitor the professional literature and attend educational conferences for the latest information with preventing infections. An organization's culture may need to shift from thinking that only infection preventionists are accountable for infection prevention, because every patient encounter throughout the care continuum presents all healthcare workers with an infection prevention opportunity. The Comprehensive Unit-based Safety Program is a structured strategic framework for patient safety improvement that integrates

communication, teamwork and leadership. Each unit should have its own infection prevention champions, with these individuals becoming an extension of the infection prevention and control department.

These strategies help organizations keep the spread of infections at bay. When implemented, supported and carried out together, these strategies are instrumental in ensuring the success of an infection prevention program at an organization. [*Bangladesh Journal of Infectious Diseases*, 2015;2(1):1-2]

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References

1. Vaidya A. 10 Best Strategies for Infection Prevention and Control. April 05, 2013. ©ASC communications 2016 Web address: <http://www.beckershospitalreview.com/quality/10-best-strategies-for-infection-prevention-and-control.html>
2. World Health Organization. 2016. Infection prevention and control in health care. Global Alert and Response. Web Address: http://www.who.int/csrb/riskreduction/infection_control/en/