

Role of Biosafety and Biosecurity in Healthcare

According to WHO “biosafety is a strategic and integrated approach to analyzing and managing relevant risks to human, animal and plant life and health and associated risks for the environment. It is based on recognition of the critical linkages between sectors and the potential for hazards to move within and between sectors, with system-wide consequences”. Biosafety is therefore a combination of practices, procedures, and equipment that are put in place to protect all healthcare workers, the public, and the environment from the infectious agents and or their toxins. The tragedy of SARS-CoV-2 and the disease it causes, COVID-19, is the current humankind greatest scare and to combat it, application of biosafety and biosecurity principles is paramount in ensuring the safety of healthcare workers. Biosafety put emphasis on the agent containment principles, approved technologies and practices that are implemented to prevent the unintentional exposure to the pathogenic agent and toxins, or their accidental release to the environment. Ensuring a quality and biologically safe work environment promotes good and effective delivery of laboratory and clinical services for patients. When biosafety guidelines are followed during complex laboratory procedures, staff can work with a certain level of confidence that they will not contract any infection or disease. The spread of infectious agents from clinical and medical laboratories to other healthcare workers, patients, and the community is preventable by applying appropriate biosafety practices. Training on biosafety and biosecurity to all healthcare workers is vital, either as a focused training program or as part of the medical training curriculum. Laboratory managers, section heads, and supervisors should also be trained in biosafety, including topics covering bio-risk management and biosafety program implementation. Proper handling and disposal of medical wastes is necessary to prevent disease transmission as more often than not these medical waste is contaminated and therefore hazardous.

Key words

Biosafety, Biosecurity

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