

Editorial

Compliance with Biosafety and Biosecurity Protocols in Academic and Healthcare Institutions

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Lack of compliance with biosafety and biosecurity protocols in academic and healthcare institutions is the top ranking health security concern today. A little breach of protocol while working with deadly pathogens put the whole system at risk.

Biosafety is personal safety and protection from dangerous biological agents, while biosecurity is restricting unauthorized access to harmful biological agents. In other words, biosafety is to protect ourselves from germs while biosecurity is to protect germs from people. In either case, protective and monitoring measures are extremely crucial in the working environment where pathogens are found.

It has been observed as a common practice in the healthcare institutions that healthcare workers in the hospitals do not comply with SOPs while managing patients. Proper and necessary infection control precautions are not followed in touching patients, changing gloves between patients, touching the beds, bed sheets, and bedside equipment in hospitals. The healthcare workers do not really care about it. This practice could partly be because of lack of basic necessary knowledge, underestimating or not realizing the possible threats, or lack of necessary hospital resources with the staff. In either ways, the consequences are extremely threatening and the germs dissemination poses a consistent threat to humanity. Same malpractice is seen in the laboratories in the academic institutions. Students experimenting

with deadly pathogens do not strictly comply with the safety protocols. Even the donning and doffing of gloves and coats are not properly followed. This practice not only risks their own lives but they also help spread the pathogens in the environment thereby risking the very lives of the entire community.

Infectious diseases are considered the greatest health security threat today, and are been widely predicted as the leading cause of deaths in the near future. Thus there is an urgent need of the day to make policies that not only define the Principles, Practice and Protocols (PPP) for biosafety and biosecurity but such protocols should be legally binding too.

One of the obvious issues in working with pathogens or lack of compliance to any SOPs, in general, is that the policies that define such practices are not legally binding. There should be strict legislations in this regard. And to implement and ensure sustainability of the policies, every institution must establish an Institutional Biosafety and Biosecurity Monitoring Department (IBMD). Few of the developed countries have ensured that all institutions working with hazardous or potentially hazardous substances to the public health and environment must have institutional review boards to check the working environment in the laboratory for compliance with safety protocols so that environmental health and safety is guaranteed. However, majority of the developing countries do not have any such infrastructure and that is very devastating because infectious agents respect no boundaries. A biothreat in a small unit in an isolated place in a healthcare or academic institution is a threat to the whole community, and to the entire population at large.

We are in a state of emergency to realize such health security threats, and formulate policies with strict implementations to contain such threats in the right time; otherwise they will soon challenge the very existence of human race.