



## Exploring the Importance of Infection Prevention and Control Measures in the 2014 Outbreak of Ebola

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### DEAR EDITOR,

The 2014 outbreak of Ebola virus, which originated in Guinea in March 2014 has been acknowledged as an international public health emergency.<sup>[1]</sup> Since its origin till the end of first quarter of 2015, almost 25213 cases and 10460 Ebola associated deaths have been reported among the affected nations.<sup>[2]</sup> The Ebola infection is transmitted through close contact with various body fluids of infected reservoir species or through direct contact with different body fluids of infected or deceased people.<sup>[3]</sup>

Even though, factors such as lack of preparedness, weak public health system, poor awareness among people, rituals, and absence of vaccine played a significant role, inadequate implementation of infection prevention and control measures in both hospital and community settings, allowed the disease to go beyond epidemic proportions.<sup>[1,3,4]</sup> In-fact, Senegal has been declared Ebola-free, especially because of improvement in the infection prevention and control measures.<sup>[5]</sup>

In order to strengthen the infection prevention and control measures in the affected nations, the World Health Organization has advocated for various measures like ensuring safe processing of laboratory samples; adhering to standardized precautions while handling any patient regardless of the their clinical features; isolating confirmed/suspect cases in earmarked isolation wards; taking all measures to regulate the movement of health workers and family members in isolation rooms; instructing health care workers to persistently use personal protective equipments; promoting safe handling of biomedical wastes; encouraging consistent use of appropriate disinfectants for decontaminating the surfaces and equipments; maintaining complete hand-hygiene;

establishing a mechanism to enable quick assessment for Ebola disease among health professionals or individual exposed to infectious body fluid; sensitizing the team of health workers to provide adequate and prompt case management to minimize further disease transmission; and constituting a committee to not only supervise, but even guide the health authorities to manage the overall activities in both hospital and community settings.<sup>[1,3,4,6]</sup>

In addition, it is very important to realize that owing to the absence of infection prevention and control measure in community settings, an unprecedented rise in number of Ebola cases has been observed.<sup>[3]</sup> Thus, it is indispensable to exercise the practice of contact tracing and follow-up of the identified contacts for a period of minimum 21 days.<sup>[7]</sup> Furthermore, steps like orienting outreach workers to use alcohol-based hand rub solutions at the time of contact tracing; creating awareness among the general population regarding precautions needed while taking care of a patient in family or at times of travel/burial of deceased; restricting any kind of contact with reservoir species; and maintaining good personal and hand hygiene; can also be implemented in community settings to prevent initiation of any new chain of transmission.<sup>[3,6,7]</sup>

In conclusion, in order to minimize the caseload of Ebola among affected nations, it is the responsibility of local public health managers and other stakeholders to ensure the strengthening of infection prevention and control measures in both hospital and community settings.


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