

## Neglected zoonotic diseases: It's now time for action urges WHO

Sir,

Zoonoses refer to those diseases that are naturally transmitted from vertebrate animals to humans and vice versa.<sup>[1]</sup> In fact, zoonotic disease accounts for almost two-third of the infectious agents that can affect humans by causing more than 200 diseases.<sup>[2]</sup> Neglected zoonotic diseases (NZDs) are a subset of the neglected tropical diseases and are so called because they primarily affect the poor and marginalized populations living in close proximity with domestic or wild animals in resource-constrained settings (poor health and sanitary conditions) across the globe.<sup>[1,2]</sup> Further, these NZDs such as anthrax, brucellosis, leptospirosis, rabies, echinococcosis, taeniasis/cysticercosis, food-borne Trematodiasis, human African trypanosomiasis, leishmaniasis, and schistosomiasis impose a double burden on the quality of life of people not only by compromising their health, but even by compromising the life of the livestock on whom they heavily depend for their survival.<sup>[1,2]</sup> However, the findings of a recently released report have suggested that most of the NZDs can be contained through the use of existing knowledge and tools.<sup>[3]</sup>

Acknowledging the enormous impact of NZDs on human population, in the year 2008, a global One Health concept was formulated to promote an interdisciplinary and multisectoral approach to deal with those diseases that precipitates when humans and animals share a common environment.<sup>[2]</sup> However, the success of One Health approach is dependent on the strategic planning, multilevel integration of existing interventions, and involvement of stakeholders at both policy maker and community levels.<sup>[1-3]</sup> Furthermore, some of the nations across African (such as African Trypanosomiasis control in Uganda), Latin America and Asian region (such as Brucellosis control in Mongolia) have successfully implemented One Health approach to contain specific prevalent NZDs.<sup>[3-5]</sup>

In order to successfully contain NZDs, a project by the name Advocacy for neglected zoonotic diseases (ADVANZ) was initiated in the African region not only to persuade the policy makers about the public health importance of the NZD, but also to empower the concerned stakeholders, and to share the experience of nations from the African region with international

partners.<sup>[3,6]</sup> In addition, other measures, such as quarantine, test and slaughter, environmental hygiene, mass immunization, vector control, reservoir control, and early diagnosis with prompt treatment, have also been recommended.<sup>[1-3]</sup>

However, a wide range of challenges, such as poor political commitment, lack of financial support, deficiency in the public health system, civil rights, lack of resources, lack of coordination between international and national agencies, and weaker surveillance mechanism, have also been identified that are halting the progress of the nations.<sup>[3,4,6]</sup>

In addition, the WHO, Food and Agriculture Organization, and World Organization for Animal Health have joined their hands and pledged to reduce the magnitude of NZDs.<sup>[1]</sup> Subsequently, more emphasis was given to overcome the global impact of NZDs (*viz.* rabies, cysticercosis, echinococcosis, and leishmaniasis) at the World Health Assembly meet in 2013.<sup>[2,3]</sup> In fact, a comprehensive policy framework (with well-defined roles of different stakeholders like decision makers, veterinary specialist, community, etc.) has also been developed by the WHO to involve the concerned sectors and thus collectively speed up the elimination of different NZDs.<sup>[1,3]</sup>

It is very essential to understand that for the control of NZDs, there is an indispensable need for a multisectoral (*viz.* policy making, veterinary science, food safety, and agriculture) approach, empowerment of the leaders and engagement of the local community.<sup>[3,5]</sup> However, the primary step is to systematically assess the local and regional burden of the NZDs so that cost-effective strategies can be planned and implemented.<sup>[3,4]</sup> In addition, interventions such as formulating guidelines for the surveillance, prevention, control and treatment of specific diseases; establishing mechanisms for facilitating the exchange of information across relevant sectors and programs in nations; strengthening of the public health care delivery system/surveillance; increasing financial allocation or adopting innovative funding mechanisms to strengthen the prevention and control activities; consolidating the achieved gains and maintaining momentum for control and elimination of NZDs; creating awareness among members of community regarding the do's and don'ts for specific NZDs; and facilitating applied research activities, also deserves a crucial place in containment of the zoonotic diseases.<sup>[1,3-6]</sup>

To conclude, even though neglected zoonotic disease continues to be a major cause of poor health among rural populations worldwide, nevertheless they attract least priority in most of the nations. Thus, it is high

time that the international community must rise up to this challenge and take complete responsibility for the control and elimination of the NZDs.

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