

## Role of Veterinarians in One Health

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### Introduction

One health though an emerged and global branded important concept of disease control all over the world. The concept of inter connectedness between medical sciences and veterinary sciences can be utilized for framing steps and strategies to encounter the advancement of prevention and control of disease spread between human and animals. Recent global trends in concept of one health provides countries to initiate their preparedness for upcoming or existing diseases to be in control. Zoonotic diseases are always a thread in human and animal relationship. Proactive and holistic way of approaching to the emerging infectious or existing diseases is the concept of one health. Transdisciplinary approach to combat the spillover or spread of diseases among human or animal (Kelly *et al.*, 2017).

Veterinary sciences aim at the disease control and spread of the infectious diseases among the animals. The role of veterinarians is important in improving the health of the animal and also to contribute to the welfare of the society. Veterinary education aims now at improving the understanding of one health concept among the veterinary graduates. Veterinary sciences are at stronger position in advocating on one health (Samantha and Paul, 2012).

### Global strategies on one health

Collaborative work of multiple groups or disciplines both inter countries and global steps taken by American veterinary medical association in 2008. The world health organization emphasises on the definitive strategies to be followed and guidance the human and animal interactions. The world organization for animal health (OIE) has imposed set of rules and regulations on animal food safety for consumptions.

The newer or existing infectious diseases studies and research has always been a support for the development of prevention and mitigations to combat the zoonotic diseases. The mitigation has not



only made set of rules to be followed in production of animal foods and also in handling of the companion animal.

Disease investigations and control programmes adopted by the world countries have been set up and regulated by the world health organization in collaboration with other organizations including the animal health organization (OIE) (long *et al.*, 2007).

In the context of emerging zoonotic diseases, veterinarians play a major role in the following aspects of one health (Katherine *et al.*, 2020).

- Disease surveillances and information gathering.
- Mitigation and disease control programmes at the state and country level.
- Proper utilization of epidemiological studies of animal and human disease spread and measures to be taken on public health.
- Following on the hygienic production of animal food products and supply to public.
- Companion animal health care, vaccinations and human animal interaction awareness among the people.
- Organizational responsibilities at college and non-governmental organization working on awareness and training programmes for students and graduates.
- Control and measures taken on human and wildlife.
- Use of effective immunization, diagnosis and disease treatment among the companion and wildlife animals.

### **One world – one health**

Interdependence and holistic view of the one health in the concept of ecological systems. This interdependence is among the geographical, human, ecological and agricultural components interacting and depending on each, has the importance in bring the one health concept in to global level. Many diseases among the bovine populations have shown to be life threatening to the species and disease spread among the other species also make it a endemic at certain diseases e.g. Bovine foot and mouth disease. The vector borne diseases have a greater chance to spread as a zoonotic threat in mist part of the Asian and also African countries.

Adequate discussion and plan of frame work for the global and regional level disease control programmes have to be conducted. Improve the inter-agency and cross collaborations among the neighbouring countries should be framed and mitigated.

The concepts of climate change are also an emergency issues to be discussed among the global organization and frame works developed by these bosies should be in useful purposes that brings the



effect strategies to be followed. Veterinarians' role in to reduce production of greenhouses gases from animal production has a importance in the animal and environment health.

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