

Veterinarians: A Professional Serving to Animals and Humanity

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There is a very common quote that, “*Medicos can cure men, but only veterinarian has the potential to cure the humanity*”. This is quite enough to explain the importance of veterinarian in society. Veterinary profession is one of the oldest professions in the planet. It is as old as civilization. There is manifold increase in demand for vets all over the world either due to awareness about animal health and production or increase in demand of products of animal origin. Animal products are rich source of protein for the developing countries. The animal based economy is also growing and most of the farmers depend on animals and their products. So, maintaining the animal health is crucial and in this role of veterinarian is very critical. Veterinarians are not only instrumental in treating the ill animals but also an integral and indispensable part of public health system. Apart from that veterinarian also play a crucial role in development of eco-tourism by attracting tourist towards biodiversity, national parks, animal safari, bird sanctuaries etc.

Role of veterinarians as specialized professionals: Some glimpse of crucial role of this profession in some of the burning issues is as follows:

1. **Food security to human beings:** As per the World Veterinary Association, “Veterinarians are present at every link in the chain and have the knowledge and expertise to audit the standards of animal health, animal welfare and public health from “stable to table”. To cope up the increasing demand of food by population growth, there will be requirement of animal based food products like milk, egg and meat. Vets may be helpful in advising the farmers and animal owners to produce the healthy food for the human beings by reducing the use of antibiotics, chemicals and other harmful drugs.
2. **Value added products:** Vets may also be helpful in increasing the value added products based on milk and meat. This may be helpful for increasing the wealth of animal producers and farmers. Designer products like designer milk, designer egg, designer meat etc. may be helpful for human beings with special requirements. Apart from that some biotechnological tools like protection of amino acids, fat, protein, probiotics and genetic manipulation of rumen microbes etc. may also be applied for increasing the availability of nutrients to the animals.
3. **Environmental health and hygiene:** Now a day, global warming is an important issue due to burning of fossil fuels. Veterinarian may be helpful in rearing the animals in eco-friendly ways. Global warming has increased the risk of arthropod borne disease. This may be reduced with the help of veterinarian. Methane production by the animal excreta is one of the most common causes of green house effect. Vets may advise the animal owners by modification in diet to reduce methane production. Simultaneously, production of biogas and its utilization as fuel may be helpful in making the environment green and clean.
4. **Contribution to economy:** Livestock sector contribute significantly to the gross domestic product (GDP) of the nation. Export of animals and their products generate the revenue or foreign currency. Veterinarian may also be helpful in maintaining the health, growth rate of animals, which ultimately help in generating the foreign currency for the nation.
5. **Restricting the outbreaks of zoonotic diseases:** These are the diseases which are creating havoc in the society for last few decades and all the efforts of veterinarian are to not only control the infectious agent but to assure timely and sure prevention

of further spread of such conditions. Some deadly zoonotic diseases like bird flu, swine flu and Japanese encephalitis etc. where the source of transmission are animals or birds, it is up to veterinarian to control the disease from spread to make humanity safe.

6. **Maintenance of good germplasm:** Productivity of the animal depends on genetic potential and feeding of the animals. Genetic selection of animals to cull the poor germplasm and maintaining the good producing genetic makeup. Thus, propagation of good germplasm and upgradation of inferior quality animals is a prime objective of animal breeding practices. This may be achieved by using the artificial insemination (AI), embryo transfer techniques, cloning and transgenic animals etc.
7. **Controlling the emerging and re-emerging infectious diseases:** Veterinarians play a crucial role in controlling the emerging and re-emerging diseases by prompt diagnosis, effective vaccination and control strategies. A wide variety of animal diseases viz., rabies, avian influenza, severe acute respiratory syndrome (SARS), viral encephalitis and haemorrhagic fever; Hendra and Nipah viral infections, rift valley fever, Monkey pox and Kyasanur forest disease (KFD), brucellosis, leptospirosis, lyme disease, psittacosis, plague, tuberculosis, human monocytic ehrlichiosis or parasitic viz., alveolar echinococcosis etc. are transmitted from wild life to human population. Veterinarians do undertake lead roles in epidemiological investigations on the involvement of wild animals in broadcasting of these zoonotic diseases.
8. **Diagnosis and treatment of animal diseases:** Rapid diagnosis is the key to treat and control the diseases. Developments in the diagnostics require validation and calibration of test methods, which is possible through trials on laboratory animals viz., monkeys, chimpanzees, guinea pigs, rat and mice. The pre, during and post trial preparations and observations need continuous watch on the animals by a veterinarian.

Conclusion and Future Perspectives

Veterinarian works round the clock for the well-being of the society in many ways but mostly remains low profile. There is requirement of awareness to make sure that the health of animal, human, soil and environment is safe and sound. The production of good quality hygienic food from animals and animal products is utmost necessary for the society. Veterinarian in the society interacts with the emerging and re-emerging diseases including the zoonotic diseases. Last but not the least; in the modern era of globalization and industrialization, veterinarians are playing crucial roles in various industrial sectors for the future generations of global veterinarians.

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