

Short Communication

THE FUTURE ROLES OF VETERINARIANS IN FOOD SAFETY IN NIGERIA

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INTRODUCTION

It is incontestable that food is a basic necessity of life. Every individual irrespective of gender, race, colour and background essentially requires food for a healthy, productive and reproductive life. Food-borne diseases affect millions of people over the world. Sometimes ago, it was Bovine Spongiform Encephalopathy, at another time, it was African Swine Fever. Avian Flu is the most recent. In fact, globalization of trade in animals and food is an impetus to food safety and has exceptionally propelled food safety to an international issue. The Codex Alimentarius Commission and Office of International Epizootic have set standards, codes of practice, guidelines, regulations and recommendations, which are benchmarks of international standing on all aspects of food and food-related subjects. Approach to food safety has changed from Hazards Analysis and Critical Control Points to a risk-based system. Food safety can be defined as the all procedures and practices that assure the consumer that he or she can normally ingest food without danger to his or her health (Lean, 1973). The primary aim of a sound food safety programme or policy is to control risk at every stage of food chain, from the point of production via processing and packaging, to the level of ingestion by the final consumer; that is to say "from the stable to the table." Considering the recent approach to food safety in the international arena, it is envisaged that veterinarians will be faced with new challenges in which the veterinarian's role is bound to shift from the source of production at farm level to areas very close to the final consumer of food. It is expected that veterinarians and relevant veterinary bodies take note of these anticipated challenges for instituting necessary preparations for them.

KEY WORDS: Veterinarian, Role, Food safety

THE CODEX ALIMENTARIUS

The Codex Alimentarius Commission (CAC) was established in 1963 by the joint FAO/WHO to develop food standards, guidelines, codes of practice and recommendation to be treated as benchmark or reference point by all countries of the world. The primary motive for creating the commission was to protect health of food consumer and ensure fair practice in food trade. Indeed, there are more than 200 standards in prescribed formats for individual food or groups of food. There are standards for food hygiene, food additives, contaminants and toxins in food and for irradiated material. The Commission was able to establish maximum level of residues pesticides

and veterinary drugs, as well as for additives in order to ascertain that consumers are not exposed to hazardous material.

APPROACH TO FOOD SAFETY

Food safety measures are best assured by an integrated, multidisciplinary approach, embracing all phases of food chain. Preventive approach of eliminating food hazards at source (such as treating a diseased animal before slaughter) is less costly and more effective way of reducing risk of food-borne diseases than the control of final product. When a raw material is bad, the product derived thereof can never be transformed to be good through a final quality check. The judgment of the quality check on such should be condemnation in

parts or whole.

In the past, the approach to food safety was traditional control based on good practices such as Good Agricultural Practice, Good Hygiene Practice Good Processing Techniques etc. The traditional approach transcends into a more targeted food safety systems based on Hazards Analysis and Critical Control Point (HACCP) system. This system identifies some areas of food processing considered to be very vulnerable to contamination or infection and such areas are preferentially handled with greater caution and diligence (Cross, 1996). Presently, the approach to food safety is risk-based approach using risk analysis. The later stipulates that signatories must ensure their sanitary and phytosanitary measures are based on assessment of the risks to human, animal or plant life or health, taking into consideration risk assessment techniques developed by relevant international organization and agencies (FAO/WHO1999).

PRESENT ROLES OF VETERINARIANS

One of the statutory roles of veterinarian is to improve the quality and wholesomeness of food of animal origin, (Lombin, 1999). The masked responsibilities towards lower animals are meant to facilitate their uses by man as companion-, working-, recreation- or food animals. Prophylactic and therapeutic treatments of animals at the farm level and meat inspection are among the major present roles of veterinarian. These ensure elimination of food-borne diseases at source. Slaughter-house inspection of live animal (ante-mortem) and the carcass (post-mortem) are crucial towards surveillance network for animal diseases and zoonoses as well as ensuring the suitability of meat and by-products for their proposed use (OIE, 2007).

Meat inspection that is to satisfy the above recommended standards looks like a mirage in the absence of a standard abattoir and adequate competent personnel. According to Alonge (1992), an abattoir is a special facility designed and licensed for receiving, holding, and slaughtering of meat animals before releasing to the public. When an animal is slaughtered in places, which are

frequently polluted with blood and faecal materials and not protected from insects, flies and rodents, meat produced thereof undergoes deterioration quickly due to bacterial load. Simultaneously, meat by-products that could have been an asset by putting in to proper use turn to be a public health hazard. It is noteworthy to mention that the later is the state of affairs in most abattoirs in Nigeria, (David West, 2002). The mode of transporting these animals to the abattoir alone left much to be desired. Ayo and Oladcle (1996) reported that road transport stress is the most tedious stress suffered by animals and compromises the quality of the meat. Other roles of veterinarian include certification of food animal for exportation and investigating, formulating and implementing control measures for zoonotic diseases. In the United States, about 10% of the total veterinarians are employed either full or part-time in food inspection of some type (Lean, 1973).

FUTURE ROLES OF VETERINARIANS

With the new approach to food safety, the role of veterinarian is going to evolve from the stable through the processing to the table, and hence move more closely to the consumer. The occurrence of residues of drugs especially antibiotics in meat have been reported (Dipeolu and Ayinde, 2001). In places like United States, the veterinarians are held responsible for all residues in food of animal origin by the Federal Department of Agriculture (Anon, 1973). The same is envisaged in Nigeria. This would pose challenge to the veterinarian to be trained towards understanding the causes of residues in animals. The production of fresh fish, shellfish and crustaceans is becoming a booming business in Nigeria. The veterinarians rather than playing a passive role in this sector have to be actively involved in formulating and implementing a food safety programme to be designed for fish and seafood. Milk is an excellent medium for bacteria, yeast and moulds that are common contaminants of milk particularly at ambient temperature (Owolana, 1986). Contaminations of milk and milk products have been reported by many authors (Adesiyun, 1984, Okolocha et al, 2006). It is expected that dairy industries are going to engage

the service of veterinarians who are conversant with these standards and its accomplishment. Ogundipe (2001) has emphasized the need to constantly review veterinary laws in Nigeria so as to remove ambiguities and update the provisions and the penalties. Veterinarians are going to be involved in such review and also in enacting laws that will ensure strict adherence to standards by all stakeholders in the food chain.

RECOMMENDATIONS

The veterinary curricula in our veterinary schools should be looked into and areas that have to do with food hygiene and food safety should be fortified further for better strengthening of veterinarian's potential to contribute more on food safety and the policies thereof. Training and re-training of veterinarians is imperative for the veterinarian to meet the challenges ahead in this area. Perhaps, this is part of the continual improvement of professional knowledge and competence to which every individual veterinarian is obliged. The government has to be more responsive to the agitation of veterinarians on the need to bring sanity to food processing industry and in complying with international laid-down standards on food safety. Abattoirs across the nation should be looked in to and corrective measures in term of infrastructure and personnel instituted for it to play a better role in food safety. Governmental agencies like National Agency for Food and Drugs Administration and Control ought to have a veterinary directorate manned by experienced veterinarians.

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