PESTE DES PETITS RUMINANTS VACCINATION AWARENESS AND CONSULTATION OF VETERINARY SERVICES AMONGST SMALL RUMINANT FARMERS IN SOUTH EAST NIGERIA

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Extended Abstract

INTRODUCTION

Peste des petits ruminants (PPR) has been identified as one of the major diseases that pose a serious challenge to successful small ruminant farming. It is acute, highly contagious, trans-boundary viral disease of sheep and goats that poses a threat to livestock production in many developing countries and produces variable rates of morbidity and mortality that can reach 100% and 90%, respectively (El-Yuguda *et al.,* 2009). The economic loss due to PPR outbreaks in Nigeria was estimated to be 6.8 billions of Naira (NGN) (Fadiga *et al.*, 2013). Close contact between susceptible animals is important for the transmission of PPR virus (the aetiologic agent) to occur as discharges from the eyes, nose, mouth, as well as the loose faeces contain large amounts of this virus. Fine infective droplets are released into the air from these secretions and excretions, particularly when affected animals cough and sneeze (Ezeibe *et al*., 2008). There is no specific treatment for PPR. The most effective control measures among others is mass vaccination of small ruminants with the homologous PPR vaccine (OIE, 2012). The homologous PPR vaccine has been widely used to protect small ruminants against PPR virus, but outbreak of the disease is still being reported and thus the continuous spread of PPR infection (Albina, *et al.,* 2013). This study was conducted to find out the level of PPR vaccination awareness and consultation of veterinary service amongst small ruminant farmers in South East Nigeria.

MATERIALS AND METHODS

Three states: Anambra, Ebonyi and Enugu(latitudes 7°07′N and 3°90′N and longitudes 6°51′E and 8°30′E) in South East Nigeria were randomly selected for the study.Scheduled structured interviews were conducted on sheep and goat farmers/traders and veterinary doctors. Information elicited includes: the most encountered disease symptoms among their flock, farmer's awareness of PPR vaccination and consultation of veterinary services and also the availability of PPR vaccine in Veterinary establishments. The pretested structured interview used for the study was validated by an epidemiologist in the Department of Veterinary Public health and Preventive Medicine, Faculty of Veterinary Medicine, University of Nigeria, Nsukka. Data obtained were subjected to descriptive statistics.

RESULTS

Seventy-eight (52%) of the 150 farmer respondents indicated they used herbal medicine in the treatment of their ruminants while 57 (38%) and fifteen (10%) employed orthodox and both herbal and orthodox medicine in small ruminants, respectively. Forty (55.5%) of those that practise orthodox medicine usually consult the services of a veterinarian while 32 (44.4%) purchase their drugs from local drug stores on the drug seller's prescription. None of the respondents has ever vaccinated his/her flock against PPR. Among the symptoms listed, diarrhoea caused the biggest problem (92%) in their flock. This is followed by catarrh (85%), cough (64%) and the least abortion (10%). Out of the 100 practising Veterinary doctors that were interviewed, none had homologous PPR vaccine available at their establishments at the time of the study. Nearly all (90%) of the practicing Veterinary doctors never had the vaccine in their establishments, while 10% had the vaccine at a time.Also 97% of the

practicing Veterinarians said there was no demand of the homologous PPR vaccine by their clients (farmers/small ruminant keepers).

DISCUSSIONS

The small ruminant rearers/raisers were engaged in indiscriminate use of antimicrobial without prescription. The rearers resort to selling their sick animals when they are seriously sick and weren't responding to their medications. This correlated with the low demand for veterinary services for small ruminants recorded in the study area compared to veterinary services for dogs and poultry. This corresponds with the report of Obua (1992) in his study in Southern Nigeria. Sheep and goat rearers tend to consult butchers or sell off their ill animals instead of veterinary doctors. The self-medication practiced by small ruminant farmer/traders offers room for the development of antimicrobial resistance due to misuse and overuse of antibiotics. Sales of animals on medication and before the withdrawal period for human consumption leads to the development of antibiotics resistance in human. Inappropriate prescription practices and the use of antimicrobials in animal production has been reported to lead or cause the development of antibiotics resistance (Ayukekbong *et al*., 2017). Taking ill animals to the market for sales equally serves as a source of spread of the disease to other animals from different households and communities. Animals not sold or those bought are taken home to other flock. This practice encourages outbreaks of the disease. The non-availability of homologous PPR vaccine at the time of visit in the veterinary establishments/outlets in the studied States was another major finding. Lack of demand and inadequate power to preserve the vaccine (maintenance of cold chain), expiration of stored vaccines were the chief complaint recorded from veterinary doctors. Thus, lack of awareness of PPR vaccination amongst small ruminant farmers, lack or limited use of veterinary services by sheep and goat rearers, non-availability of vaccine at veterinary establishments in the sampled States are potential risk factors of PPR prevalence in South East Nigeria. Poor consultation of veterinarians by farmers will lead to poor management of the disease and delayed or lack of treatment, will in-turn create room for further contamination of the environment and spread of the disease. Based on our findings, there is need for extension program on the importance and benefits of PPR vaccination and the use of veterinary services with stakeholders and farmers. This will serve as a tool for effective planning of nationwide vaccination campaign for improved control of PPR in South East Nigeria and the country at large.

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