

The need for veterinary nursing in Nigeria

Funmilayo A. Okanlawon⁽¹⁾, RN, PhD, FWACN & Benjamin O. Emikpe⁽²⁾, DVM, PhD

Summary

Traditionally, nursing care has been identified as an integral part of human medicine but is not well recognised in veterinary medicine as practised in Nigeria. In caring for human beings, a nurse is expected to have the fundamental understanding of disease aetiology, manifestations, diagnosis, management, rehabilitation, prevention and control. This is equally applicable to the care of animals. The role of veterinary nursing in veterinary medicine is significant considering the multitude of issues involved in the care of animals. The keeping of domestic animals is becoming popular and consequently the spread of infectious diseases from animals to human beings is on the increase. It is vital for human beings and animals to coexist in a healthy environment. The authors examine the importance of nursing care in veterinary medicine, the current situation in Nigeria, the role of veterinary nurses, the inter-professional approach to veterinary medicine, preparedness for the emergence of infectious diseases and career opportunities for veterinary nurses. This premise falls within the context of the 'One Health' concept.

Keywords

Animal health, Career, Emerging diseases, Nigeria, Nurse, One Health, Preparedness, Veterinary nursing.

La richiesta di infermieri veterinari in Nigeria

Riassunto

Per tradizione l'assistenza infermieristica in Nigeria è parte integrante della medicina umana, tale status non è riconosciuto nella medicina veterinaria. Il personale infermieristico che assiste gli ammalati deve avere una conoscenza di base su eziologia, sintomi, diagnosi, gestione del paziente, riabilitazione, prevenzione e controllo delle malattie. Ciò vale anche per gli infermieri veterinari, i quali svolgono un ruolo importante, in considerazione dei molteplici problemi associati alla cura degli animali. Poiché gli animali domestici sono sempre più numerosi anche il rischio di trasmissione di alcune malattie dagli animali all'uomo è in aumento. È di fondamentale importanza che uomini e animali convivano in un ambiente sano. In relazione a queste riflessioni, gli autori esaminano i seguenti aspetti: importanza dell'assistenza infermieristica veterinaria, situazione attuale in Nigeria, ruolo degli infermieri veterinari, approccio interprofessionale alla medicina veterinaria, capacità di intervento in caso di emergenze epidemiche e opportunità di carriera per gli infermieri veterinari. Questi aspetti sono inerenti al concetto di "One Health".

Parole chiave

Assistenza infermieristica veterinaria, Capacità di intervento, Carriera, Infermiere Malattia emergente, Nigeria, One Health, Salute animale.

(1) Senior Lecturer, Department of Nursing, College of Medicine, University of Ibadan, 900001 Oyo Road, Ibadan, Oyo State, Nigeria
funmilayookanlawon@yahoo.com

(2) Senior Lecturer, Department of Veterinary Pathology, University of Ibadan, 900001 Oyo Road, Ibadan, Oyo State, Nigeria
banabis2001@yahoo.com

Introduction

A survey of veterinary practice in Nigeria has shown that there are no trained veterinary nurses in Nigeria. A few veterinary institutions and clinics have what they call 'para-veterinary technicians'. Veterinary nursing is due for consideration in Nigeria for many reasons which are described below.

Animals, like human beings, need good nursing care. They need general, medical and surgical care and some may require hospitalisation with intensive care. Since veterinarians can neither usually afford the time for nursing nor for training individuals as nurses, the need for the services of competent veterinary nurses to ensure the successful outcome of their surgery as expected is expedient.

Para-veterinary technicians are generally not trained to do the job of nurses because they do not have adequate understanding of nursing principles and ethics.

Nursing is a nodal profession, with other professionals acting, in general, within his/her parameters. The coordinating role of nursing is not in doubt. The nursing role is associated with caring. Nurses consider the degree of risk of each potential health problem identified, ranking them accordingly. Appropriate care is instituted to reduce the possibility of health care related problems and the most threatening risks. Standards of nursing care are measured in accordance with institutional procedures, protocols and practice habits based on selected data. In veterinary practice, the nurse is usually under the direct (or indirect) supervision of the doctor.

As stated by Banning (1), a nurse develops a sense of saliency as she gains experience in the assessment of homeostasis of patients. All these attributes are applicable to the care of animals. Veterinarians need the services of competent and compassionate nurses who will be able to recognise and understand the why, what, where, when and how in the different aspects of animal care. The authors evaluate the current situation and the need for nursing care in veterinary practices in Nigeria, in an attempt to focus on the possible need to

develop veterinary health care delivery that may include veterinary nursing as a career.

Method of evaluation

The evaluation of the present state of veterinary practice was based on observations of one of the authors as a pathologist in a teaching veterinary hospital for over a decade, personal and phone interviews with some government clinicians/veterinarians in all the teaching hospitals in six geo-political zones of Nigeria. The views of some private veterinarians were also sought. The possible role of nursing in veterinary care was evaluated by a careful review of literature devoted to the effort towards the development of veterinary nursing. The outcome of the evaluation is described below.

Present state of veterinary training and practice in Nigeria

Nigeria has nine veterinary schools, each with teaching hospitals with varying degrees of manpower and infrastructural development (Fig. 1). Veterinary training started in 1962 with the first Nigerian graduate in 1967 being Professor Basil Ikede. Presently, registered Nigerian veterinarians total over 6 000 and they cater for Nigerian's abundantly endowed animal population consisting of over 13.9 million cattle, 22 million sheep, 34 million goats, 3.4 million pigs and 2.8 million dogs (9).

Facilities available for nursing care in public and private veterinary practice are scanty. The facilities available for nursing care are available in the few public veterinary practices with exceptional boarding and nursing facilities in private practice in Lagos and Abuja, the economic and government capital cities of Nigeria. Personnel development is lacking in these facilities with most being handled by animal technicians who are not usually knowledgeable in veterinary nursing and hence the need for professional training in handling of nursing in veterinary health care delivery. This training is inevitable as avoidable cases resulting in death are being reported, such as a case of isolated splenic

torsion in a Rottweiler (2) and that of massive intestinal resection in rabbits (3).

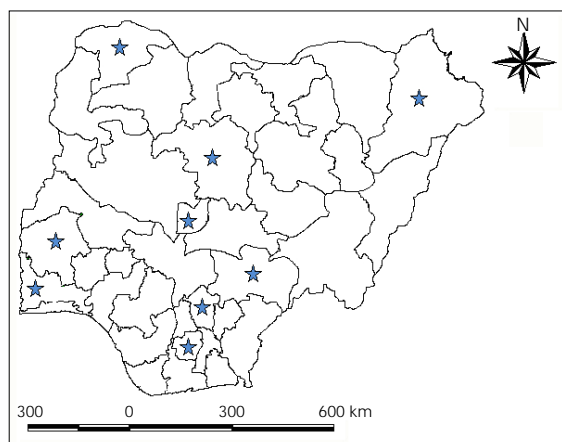


Figure 1
States of Nigeria showing the location of veterinary schools and teaching hospitals

Interprofessional approach to veterinary medicine

Okunade described health care as a social system (7). As a social system, health care cannot accomplish its goal of promotion and maintenance of health, prevention of diseases and rehabilitation, if any, within the professional subsystem does not perform its role effectively and efficiently to the extent that it cannot achieve its set objectives which are critical to the success of the system. For example, all the efforts of physicians and surgeons may be in vain if nursing and other professions are not efficient. One can imagine what happens after a surgeon has laboured hard for hours in the operating theatre for a successful surgery and the client is left in the hands of mediocre nurses for post-operative care. The outcome may be disastrous despite the competence of the surgeon. The inter-relatedness and interdependency of all health care professions, i.e. One Health principles (6) demands the efficient performance of their individual roles and functions in the caring for animals as is the case in similar situations with human patients.

Preparedness for emergence of infectious diseases

Emerging diseases are increasingly being recognised as a significant threat to both domestic animal and human health (10). As identified by Prowse *et al.*, habitat loss and movement of wildlife has altered the spread of disease from animals to humans as the patterns of contact change (8). As human and animal demographics have changed, so too has the risk of the spread of disease amongst the different populations. For instance, as reported by Prowse *et al.* (8) in September 1994, a prominent Queensland horse trainer and his stable hand, along with most of the horses in his stable fell ill. Within several days, the trainer and 14 horses were dead. Hendra virus was subsequently isolated from specimens obtained during this outbreak of respiratory and neurological disease in horses and humans in Hendra, a suburb of Brisbane, Queensland. Prowse *et al.* added that horses show signs of clinical disease following infection (8). People who care for sick horses or undertake post-mortem examinations on infected dead horses are at significant risk of infection.

The case reported by Prowse *et al.* is just an example, one of many that are yet to be identified, not only in horses but in other animals. Surveillance and identification of infectious diseases that commence in animals and may subsequently affect human beings attract less attention in Nigeria. This is probably due to the fact that such cases have not been reported in the country, at least, in the recent times. Nevertheless, there is a need for planning against such events and hence a need to train animal and human infectious disease specialists in the application of One Health principles (6). Preparedness may result in better management and mitigation of the risks associated with an outbreak event. Lack of preparedness leaves the animals and humans vulnerable.

The role of veterinary nurses

Qualified veterinary nurses are a valuable asset to the efficient running of any veterinary practice or hospital. Their roles are multidimensional and are highly considered in countries like Australia, Canada, Japan, Malaysia, South Africa, the United Kingdom and the United States. The role of veterinary nurses can be classified as outlined below.

Medical nursing

Medical nursing involves the treatment of hospitalised animals, progress reports to owners, the keeping of comprehensive hospital records, administration of intravenous fluid therapy in dogs, cats and rabbits, blood transfusions, subcutaneous and intraperitoneal rehydration, catheterisation of male cats and dogs, chemotherapy and intensive care.

Surgical nursing

Surgical nursing includes surgical suite preparation, sterilisation of instruments, pre-operative assessment and preparation of animals for surgery, sedation, induction and maintenance of anaesthesia and pain management.

Bandaging

Bandaging requires the understanding of the principles of the applications of plaster of Paris casts, pressure bandages, splints and dressings where needed and an additional role which may include laboratory work as veterinary nurses may be expected to take blood samples from the jugular vein, the cephalic vein and the lateral saphenous vein of dogs and cats or the ear vein in rabbits. Veterinary nurses are trained to take skin scrapes for microscopic examination. Some are trained to operate X-ray machines and take radiographs of different areas of animals' bodies, including the limbs, skull, pelvis, spine and soft tissues, such as

heart, lungs, kidneys, abdomen and urinary bladder (4).

Career opportunities

Apart from veterinary nursing practices, qualified veterinary nurses may have the opportunity to work in many places. This depends on curriculum design and professional and educational preparation. In countries where veterinary nursing programmes exist, the Bachelor degree in veterinary nursing is a full-time four-year programme with not less than 18 months of practical training within the first three foundation years at a wider range of facilities. The final year consists of research techniques and specialty programmes (5). Job opportunities outside the veterinary practice include working in research establishments, laboratories, universities, colleges, zoological/wildlife parks, charities and pharmaceutical companies. Based on experience, veterinary nurses can work as veterinary insurance claims assessors and marketing.

Conclusions

In many developing countries including Nigeria, infectious diseases that originate in animals and that may subsequently affect human beings are not considered important until a spill-over event occurs that may have an economic or public health impact. It should be noted that outbreaks of animal diseases are important to detect, contain and monitor, hence the advocacy for veterinary nursing as part of the integrated partnership in veterinary medicine which falls within the context of the 'One Health' concept.

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