General Articles

"Rethink Communication Skills Content in African Veterinary Curriculum and Practice": A Comparative Review

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Abstract

Globalization, emerging and re-emerging diseases are creating opportunities for the review of veterinary curricula and continuous professional development courses in Africa; by pointing to professional inadequacies in the face of these challenges. Communication Skills is one of the areas that is lacking not only among veterinarians but in other scientific fields amidst these challenges.

This paper presents comparative literature review of communication skills course in science fields in general and specifically veterinary curriculum in Africa. It urges that communication has for a long time been a rejected corner stone in veterinary medicine curriculum in Africa and acknowledges its recent recognition as a disease prevention and control approach in lieu of emerging and re-emerging diseases and the development of concepts like One Health and renewed interest in animal welfare.

The paper points out key areas of communication that can find use in veterinary medicine training and practice and advocates for the review of communication in the training curriculum and continuous professional development activities in Africa.

Key words: Communication, veterinary curriculum

Background to communication as it relates to veterinary medicine

Communication is a purposive and persuasive process of creating a commonality in meaning through the act of selecting and sending messages from a source through a chosen channel to a target audience(s) with the aim of eliciting a desired action. Effective

communication serves to reduce uncertainty by informing, educating and changing attitudes covertly and is overtly illustrated by appropriate audience behavior in circumstances that call for the application of the shared meaning. Communication involves a process of negotiation and exchange of meaning, in which messages, 'people-in cultures' and 'reality' interact so as to enable meaning to be re-produced or understanding to occur" (O'Sullivan et al.1994).

Human beings are social beings and continually communicate with self and with each other. Communication is thus a universal human behavior through which cultures are formed and shared within communities and across generations. Although other living things also communicate; human communication is advanced with a fully developed system of symbols, guiding principles and theories. These communities have a frame of experience around which communication occurs; in the scientific community this frame of experience may be the shared scientific knowledge and the question is how this frame of experience can be shared with the lay public who are the end consumers of science. The common denominator in any effective communication process is the shared meaning and collective action by the source and the message recipients. Science is about gaining a better understanding of our environment, explaining and seeking solutions to problems encountered by civilizations; inventing and applying results to benefit humanity and satiate curiosity where nature startles. Communication therefore has a critical role to play in the realization of multiplier effect of science and must consequently be integrated in its study. This has resulted the emergence of sub-specialties for example science communication, agricultural communications, health communication, development communication among others.

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Veterinarians are integral players in public health and must therefore be conversant with health communication which is an already acknowledged tool in the training and practice of public health (Bernhardt 2004). The Centre for Disease Control (CDC) defines health communication as the study and use of communication strategies to inform and influence individual decisions that enhance health. In the veterinary realms communication can be defined as the study and use of communication strategies that enhance information sharing and positively change the animal owner's attitudes to adopt health practices that will minimize spread of diseases while enhancing the welfare and production of animals.

Communication has metamorphosed from liberal arts to health and physical sciences for the realization of the multiplier effect of science disciplines through effective dissemination of information. The very process of learning and practice of veterinary medicine is anchored on communication as it involves the transfer of meaning from sources through channels to various audience groups. The importance of interpersonal communication is crucial in the delivery of comprehensive medical care to clients and patients and therefore communication skills are essential for veterinarians in academia, public health, agricultural industry and government (Gelberge & Gelberge 2001, Bonvicini & Keller 2006).

According to Michael (2007) 73% of human diseases emerge from animals. Reports in the public media indicate that some of the difficulties encountered in controlling the current Ebola virus disease in the West African countries arise from inadequate communication to the affected communities or variations of perspectives of interpretation of messages on disease management (BBC 2014); hence effective communication by veterinarians can play a significant role in ensuring public health.

Communication is among the soft skills required for the development of emotional intelligence which is needed by all graduates (Birkett, 1993). Unlike in human medicine where the doctor in most instances directly communicates with the patient; a veterinarian has to use a third party to get information on his patient, the animal; thus a veterinary doctor has to apply more emotional intelligence to make head and tail of his case. According to Silverman et al. (2004) there are three broad categories of communication skills namely content, process and perceptual skills. Content refers to the

messages that a doctor has in relation to patients' problem, process is how this message is delivered and perceptual skills are the cognitive and emotive skills in the identification and solving of the problem.

Brunnet et al. (2001) defined Communication skills from a human medicine point of view as those skills involved in the performance of certain behaviors such as taking a medical history, explaining a diagnosis, giving therapeutic instructions and interpersonal skills as those inherently relational and process oriented; the effect of communication, such as relieving anxiety or establishing trust.

The Demise and Reincarnation of Communication in Medical and Agricultural Sciences

Though included in curriculum of most medical and agricultural courses, communication skills is inadequately taught. The demise of communication in earlier sciences curricula was occasioned by a trend where most science disciplines emphasizes development of hard skills at the expense of the soft skill (Coll et al. 2002). In most courses communication is taught during the initial academic years as Communication Skills and is grouped under common courses offered before students developed a holistic appreciation of the scope of their academic disciplines. This has resulted in communication being seen as a peripheral course to undergraduates with this attitude spilling over to the job market. The content of communication skills course, the instructors and mode of teaching raises pedagogical, androgogical and communication issues as well. So how can the students appreciate such a communication course?

Communication is a process and should be viewed as a chain reaction with every stage contributing to the overall quality of the end product. The source must know what information to package into messages as per the target audience characteristics, the most effective channels to use and how to analyze feedback to perfect the process. Similarity between the source and target audience creates liking which enhances communication thus a communication lecturer without a veterinary background teaching communication skills to veterinary students or practitioners is pedagogically and androgogically disadvantaged. As they may not be able to give relevant examples that create an appreciation of communication and thus reduce the effectiveness of instructional process as the source is not similar to the audience. Earlier researches by Davis & Nairn (1992)

and Schmidt et al. (1993) noted that the lecturer's subject matter expertise has an influence on students' efforts and achievement in problem based learning.

Majority of veterinary teaching staff lack adequate training to teach a communication program and several may not buy in to the importance of communication. As a consequence many students are unaware of the importance of communication skills for professional practice (Mulling, 2013). The end result has been poor morale by students to learn communication skills, poor communication to clients during professional veterinary practice and among professional colleagues.

World Organization for Animal Health (OIE) lists communication skills among core units in veterinary medicine curriculum and as specific competences required of a day one veterinary graduate. However the guidelines given by OIE are not exhaustive and states in part that ".....Course content in communication will allow the veterinary student to become proficient in composition/writing, public speaking, critical reading and critical thinking in his/her common language". While these are some of the communication competences required in veterinary practice; the guideline leaves out key competences like crisis communication, risk communication and health communication.

The OIE is cognizance of the importance of communication has national communication focal points in every country who are required to give communication technical backstopping to their countries. OIE organized a global training for veterinary communication focal points in 2008 at the height of avian influenza outbreak but no other training has since been done despite the glaring possibility of other zoonotic diseases outbreaks, like the current outbreak of Ebola virus disease in West African countries; the DRC and Marburg virus disease in Uganda (WHO) where ineffective communication is blamed for failure to control diseases spread across populations (BBC, 2014).

The changing landscape in the practice of veterinary medicine in the contemporary globalized world, the changing climate and the emergence and re-emergence of zoonotic diseases and technological advancement in ICTs offers an opportunity for veterinarians to acquire communication skills to be able to play their critical role not only in disease control but development as well. The control and prevention of zoonotic diseases like Ebola and Avian Influenza requires extensive awareness

and behavior change communication campaigns in which veterinarians must take the lead as credible sources of information; such a role can only be successful if veterinarians have adequate communication skills to disseminate health information to the lay public. To effectively execute at source control of zoonotic diseases mass media advocacy and lobbying are a critical in ensuring policy makers prioritize these problems accord them attention and financial resources allocation.

The emergence and re-emergence of zoonotic diseases has helped to bring to the fore animal welfare issues which though enshrined in laws of most African countries are hitherto observed; due to inadequate awareness and advocacy by subject matter specialists. Veterinarians have an important role to play in animal welfare issues both at training, client and policy levels through advocacy (Millman et al. 2006), since animal welfare is a war that can best be fought and won in the minds of people who abuse animals. The University of Guelph for example is incorporating communication in teaching animal welfare to students. Behaviour change is critical in animal welfare and veterinarians are credible information sources in these area. In a continent where animal welfare abuse is on the rise: communication and veterinarians have their role clearly cut out?

Veterinarians in Africa are facing diverse range of clients to whom they have to disseminate relevant messages and win their goodwill. The clients range from pastoralists with deeply rooted cultural animal husbandry practices to well informed elitist pet owners connected to real times news on scientific advances in veterinary medicine and who know what they want.

In Agriculture

A Training Needs Assessment (TNA) carried out by the Regional Agricultural Information Network (RAIN) and the Association for Strengthening Agricultural Research in Eastern and Central Africa in (ASARECA) in 2005 established that agricultural professionals were deficient in information and communication management skills. Thus the irony that the continent remains home to hungry mouths when its libraries are full of research thesis on virtually every problem affecting her farmers. This inadequacy probably traces back to the deficiency in the agricultural curricula in communication skills. According to Dest (2002) the lack of communication skills negatively affected the

value of talented and intelligent graduates in the job market.

To address this problem identified by the TNA, a postgraduate diploma and masters degree courses in Agricultural Information and Communication Management (AICM) were developed to be implemented in ten countries in the ASARECA region namely Burundi, Democratic Republic of Congo, Eritrea, Kenya, Madagascar, Rwanda, Sudan, Tanzania and Uganda.

The centrality of communication in Agricultural Extension in developed countries has resulted in curriculum reviews that have seen agricultural extension course changed to Agricultural Communication, Agricultural Extension Communication to match the communication needs and preferences of agricultural industry (Weckman et al. 2000, Levander 2000 and Doerfert & Miller, 2006).

In Human Medicine

Communication skills are considered as core clinical skills in human medicine unlike in veterinary medicine; communication is an integral part of the curriculum in many medical schools worldwide and has continued throughout the practice for the last three decades (Shaw and Ihle 2006, Kurtz 2006). The field has grown and there are several published books like "Skills for Communication with Patients" and "Teaching and Learning Communication Skills in Medicine". There is adequate literature on empirical studies on human medical communication (Silverman et al. 2004 and Shaw et al. 2004).

Various regional conferences to deliberate communication skills and interpersonal skills in human medicine have been held for example the Toronto Conference in 1991 that yielded the Toronto consensus on physician-patient communication, the Kalamazoo I & II consensus that resulted from conferences organized by the American Academy on Physician and Patient at Fetzer Institute in Kalamzoo in 2001 and 2002 respectively. In addition there is also the Calgary-Cambridge guide for medical interview for various medical staff cadres. There have been efforts to borrow these guidelines for use in the veterinary medicine field in the developed countries. While the same can be done for Africa there is need for more research to inform its practicability.

Communication in Veterinary Training and Practice

There is limited literature on communication in the veterinary field (Frankel 2006). In Africa such literature is almost non-existent. In the developed countries it has been noted that most complaints to regulatory bodies are related to poor communication and deficient interpersonal skills among veterinary practitioners (Russel, 1994). A survey carried out among veterinarians in America found out that they had high scientific, technical and clinical skills, but they lacked management and communication skills necessary for successful private practice (KPMG study in Shaw et al. 2004). Adams and Kurtz, (2006) asserts that communication is a core clinical skill of veterinarians and must be taught and learned to the same degree as other clinical skills.

Royal Veterinary College and Veterinary Defense Society acknowledge the importance of effective communication in veterinary training and practice with the later attributing 80% of professional negligence claims to poor communication. Importance of communication in veterinary medicine has been recognized more recently and the Communication skills curriculum is being reviewed in America, UK and Australia (Adams and Kurtz 2006). Effective and empathetic communication was identified by the Australian Veterinary Schools through a survey in 2002 as essential requirements for training and practicing veterinarians (Mills, 2006). Recognizing the relationship between inadequate communication and deleterious health outcomes has secured a place for communication among the core clinical competences in human medicine education (Adams and Kurtz 2006). While communication in human medicine involves the doctor and the patient in the veterinary field its mediated through the animal owner and is thus more complex and requires more empirical research.

There is need for veterinary medicine training institutions in Africa to review their veterinary curriculum to make their graduates relevant in the changing global arena. Below are some areas in communication that veterinary students and practicing veterinarians can benefit from if they are introduced in teaching curriculum and continuous professional development workshops.

i) Client Communication

Veterinarians aim at improving patient and client health. promoting adherence to medical recommendation and ensuring client satisfaction with their services (Shaw et al. 2004). How the veterinarians communicate to their clients will determine rate of adherence to these recommendations. In human medicine the strongest predictor of patient satisfaction is how much information has been provided to the patient (and Shaw et al. 2004). In the same breadth talking to clients contributes to the pleasure of and satisfaction of practice (Antelyes, 1988). The amount of information shared is directly proportional to the effectiveness of the communication process.

The disclosure of bad news like death of a pet, complex cases, adverse drug reactions, drug with holding periods, medical errors among others are contentious communication problems that can result in legal actions, distress to animal owners and the veterinarians. Despite their grave importance very few veterinarians in Africa are trained to address such cases through effective client communication.

There is a growing interest in communication between veterinarians and clients and communication skills are frequently cited as necessary for successful vet practice but the curriculum is inadequate (Bonvicini & Keller 2006). To better inform the client communication approaches more empirical research is needed (Shaw et al. 2004).

ii) Veterinary Advocacy and Development Communication

Development communication refers to the strategic communication that is specifically designed to support a particular development programme. It is "all forms of communication that are used for the improvement of an individual, community or country's material, cultural, spiritual, social and other conditions" (Malan1998). In 2006 the World Congress on Communication for development noted the importance of participatory dialogue with the people most affected by poverty as a strategy for sustainable social and economic development. Veterinarians in sub-Saharan Africa have unique encounters with such audience groups and are continually involved in poverty alleviation programmes. The congress noted the importance of training in development communication to professionals like veterinarians.

Advocacy on the other hand refers to communication strategies that aim to influence favorable policy and financial support for a given course by the policy makers at local, national, regional and international levels. Advocacy is listed by OIE among the day veterinary graduate competences; but do our students step out of class knowing the definition of advocacy?

iii) Veterinary Risk and Crisis Communication

Threats of disease outbreaks aren't uncommon events in veterinary public health. During such situation panic destabilizes even market prices of animal products. A crisis is any incident or situation, whether real, rumored or alleged, that can result in negative attention on an issue. John Hopkins School of public health defines risk communication as "the exchange of information about the likelihood and consequences of adverse events. In an emergency, effective risk and crisis communication are vital because they help the public to respond to the crisis, reduce the likelihood of rumors and misinformation and demonstrate good leadership."

Risk communication is an interactive process of exchange of information and opinion on risk among risk assessors, risk managers, and other interested parties. It is basically the interactive exchange of information about risks between interested parties during risk management. Risk communication diffuses public concerns, produce informed audiences that is involved, interested, reasonable, thoughtful, solution-oriented and collaborative (Corvello 1998).

Africa has had its fair share of veterinary/health risks and crisis that have caused unnecessary public anxiety and economic losses. The Avian Influenza outbreak threat and its outbreak in some countries are recent examples where mere threats caused drastic drop in demand and market prices of poultry products. Health risks and crisis easily get to public limelight due their threat to national safety, public health coupled with poor communication. Such scenarios put the veterinarians at the centre of the crisis but deficient of the critical tool – communication to lower the risk and handle the crisis.

Both risk and crisis communication target diverse audience groups with different interests, values, different levels of education and understanding this requires audience segmentation and development of different messages for the groups and even phases of the crisis. The mass media is a critical player in risk and crisis communication and veterinarians must have the knowledge on how to positively engage the mass media during crises. Veterinarians can reclaim their leading role as credible sources of information during health crisis. A research done by Burke in 1999 found out that empathy has a positive effect on risk communication. He however notes that any message that is heavily science based is likely to be a barrier to public understanding and engagement as is normally the case with scientific results that are always written in unemotional language.

iv) Veterinary Health Communication and Social Mobilization

Health communication is gaining recognition in part because of its emphasis on combining theory and practice in understanding communication processes and changing human behavior (Parrot 2004, Lapinski & Rimal 2005). Health communication aims at promoting and sustaining safe behavior within audience groups by disseminating of health messages through a variety of channels.

Social Mobilization is defined by UNICEF, as an integrated campaign to engage people's participation in achieving a specific health goal through self-reliant efforts. Through participatory involvement of national leaders, local leaders, opinion leaders, policy makers, mass media, technical experts, religious leaders, NGOs, individuals among others through a well planned decentralized process that seeks to facilitate change through a range of players engaged in interrelated and complementary efforts.

Social mobilization is demand driven and takes into account the felt needs of the people, embraces theoretical principles of community involvement, and seeks to empower individuals and groups for action.

V) Veterinary Knowledge Management

Any professional field yields both tacit and explicit knowledge through its practice. Knowledge management is a relatively new concept coined in early 1990s. Knowledge management was defined by Davenport (1994) as the process of capturing, distributing, and effectively using knowledge. This was later modified by Dulon in 1998 as "a discipline that promotes an integrated approach to identifying, capturing, evaluating, retrieving, and sharing all of an enterprise's information assets. These assets may include databases, documents,

policies, procedures, and previously un-captured expertise and experience in individual workers."

Recommendations

There is need for veterinary training institutions to re-think the content of communications skills curriculum, it mode of teaching and review it with the aim of realigning it to the current industry needs and in line with the dynamic global environment within which veterinary medicine is practiced.

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