Leading a Clinical Communication Program in a Remote Setting: Practical Considerations from ROSS University School of Veterinary Medicine, St. Kitts

Elpida Artemiou[1], Cindy L. Adams[2]

Corresponding author: Dr Elpida Artemiou eartemiou@rossvet.edu.kn
Institution: 1. ROSS University School of Veterinary Medicine, 2. University of Calgary, Veterinary Medicine
Categories: Educational Strategies, Medical Education (General), Teaching and Learning

Received: 13/02/2017
Published: 17/02/2017

Abstract

In this paper, we describe the challenges in leading and delivering a clinical communication program in a remote geographical location at Ross University School of Veterinary Medicine on the island of St. Kitts, West Indies. We suggest five premises of progress and discuss a special consideration, namely addressing cultural context.

Keywords: globalization, internationalization, medical education, veterinary education, OSCE

Introduction

The challenges and implications surrounding the development and sustainability of medical schools in developing countries are critical, though frequently neglected, as greater emphasis is often placed on issues that are more relevant to industrialized nations (Aronson, 2004; Oman, Khwa-Otsyula, Majoor, Einterz, & Wasteson, 2007). In addition, only 10 percent of biomedical research funding is used to address problems in developing countries, resulting in an unfavorable impact on medical education and healthcare in these regions (Resnik, 2004). While inequalities between industrialized and developing countries continue to widen, Western curricula and educational methods continue to be introduced in exponentially increasing rates across developing countries, often without adequate consideration of non-Western perspectives and cultural contexts (Bleakley, Brice, & Bligh, 2008). This internationalization of medical education has many facets, including students seeking overseas academic experiences, the establishment of branch campuses facilitated by transferable credits and degree compatibility, the formation of collaborations between institutions in industrialized countries and corresponding institutions in developing countries, as well as the opening of off shore educational institutions (Altbach & Knight, 2007; Oman et al., 2007). We cannot underestimate efforts to support medical education in developing countries through, for instance: studies by the World Health Organization (WHO) assessing medical education priority needs and the
efficiency in delivering support (Grzegorzewski, 1965); the Foundation for Advancement of International Medical Education and Research (FAIMER), which offers opportunities for global collaborations and courses relevant to medical education and leadership (Norcini, Burdick, & Morahan, 2005); and notable improvements in access to online scientific resources for developing nations (Aronson, 2004). Yet, there remain significant challenges in delivering medical education in developing countries.

Undoubtedly, all educational institutions experience challenges. Difficulties in developing countries, however, tend to be more critical, but not necessarily always a top priority, as more basic economic development needs in developing countries take precedence (Grzegorzewski, 1965). Some of the common challenges experienced in medical education in developing countries include: limited professional expertise and support services; limited funding; logistical challenges such as lack of access to the Internet or unreliable service; equipment and supply shortages, and high costs and long wait times in resourcing supplies (Aronson, 2004; Grzegorzewski, 1965). These challenges are often exacerbated by remote locations.

Recognizing the challenges of implementing medical education in developing countries, and in remote locations in particular, our objective in this paper is to highlight educational research that can guide the development and delivery of such programs, specifically in the area of communication curricula. Indeed, there is increasing pressure to teach communication skills in medical settings; effective communication improves patient outcomes, and patient and client satisfaction, as well as enhances accuracy, efficiency, empathy and wellbeing (Silverman, Kurtz, & Draper, 2005; Street, Makoul, Arora, & Epstein, 2009). In doing so, we draw upon our experiences in teaching, learning and assessing communication skills at Ross University School of Veterinary Medicine (RUSVM) on the island of St. Kitts in the West Indies, taking into account its remote geographical location as well as local societal needs, attitudes, and cultural perspectives. We emphasize the importance of creativity and embracing makeshift approaches in order to design and deliver evidence-based programming that facilitates students' development of communication skills.

**Context**

**The sister islands of St. Kitts and Nevis**

The Federation of St. Kitts and Nevis is part of the Leeward Islands, Caribbean region and has a population of 35,217 people. St. Kitts extends along 168 square miles and is divided to nine parishes. The Parish of St. George includes the capital Basseterre and has the highest population density of 462 people per square kilometer. The majority (92.4 percent) of the population is considered of African descent with 85 and 13.5 percent respectively born locally versus abroad. Data surrounding the highest level of education attainment indicate that 1.3 percent of the population received no education, 18.4 percent completed primary (4-6 years) education, and 53.7 percent attained their secondary diploma. Just a little over 7 percent completed a university education (CARICOM Capacity Development Programme: National census report, 2000). In 2005, St. Kitts closed its sugar production industry and since then has slowly been diversifying employment through agriculture, services, and tourism (Clarke & Barker, 2012). Currently, the tourism industry contributes over 5 percent of the federation’s gross domestic product (GDP); though the transition from sugar production to a service sector has been complex and confounded by resistance to training programs, lack of educational qualifications and low skill levels (Clarke & Barker, 2012). In contrast, St. Kitts hosts three off-shore private higher education institutions; one veterinary and two medical universities. These foreign universities are heavily funded by their governing institutions and could provide promising employment opportunities for Kittitians; unfortunately, however, the limited local expertise often results in a very small number of Kittitians being directly involved in the teaching and learning of the university curricula. Specifically, the majority
of teaching and learning is primarily delivered by faculty hired outside St. Kitts which adds to difficulties surrounding recruitment and retention, as well as a continuous need for training to ensure a quality outcome-based program.

Clinical Communication: Theoretical Framework

Unequivocally, there is increasing pressure in veterinary education to teach and assess communication skills due to its link to therapeutic outcomes, and fostering of collaboration and care. In the North American hemisphere, communication skills are considered a core clinical competency, yet the American Veterinary Medical Association (AVMA), the Council on Education (COE), and the North American Licensing Examination (NAVLE) do not delineate minimum standards and expectations. Such poses a great difficulty for all universities interested in developing communication curricula and often results in variations of communication programs (Hodgson, Pelzer, & Inzana, 2013).

Particular challenges exist for developing countries that may lack additional financial resources, expertise and infrastructure, and/or an emphasis on the importance of and support for teaching communication skills given the remote nature of these training sites. Certainly, what would be considered norms for mainland communication experts, such as invitations to address media, access to an array of industry sponsors who include communication experts at their booths at major academic meetings, as well as easier access to attend and present at continuing educational meetings, is simply not the norm for remote communication programs. Even pedagogical techniques such as experiential learning, which presumably work in any context, present challenges in remote, developing locations.

Evidence supports the notion that communication skills can be effectively taught through experiential learning where students in small groups can practice skills through role play using trained facilitators and simulated clients (SCs) along with discussions and feedback (Adams & Kurtz, 2012, 2016; Adams & Kurtz, 2006; Berkhof et al., 2011). On St. Kitts, however, there is a very limited access to actors to select for SCs, and the lack of such a resource pool poses a dual challenge surrounding recruitment and training. Our clinical communication program is on average supported by 10 simulated clients. Maintaining this SC pool requires a continuous recruitment of a new SC about every three to six months. Training a new SC involves 20 hours that includes a four hour presentation/discussion, followed by 16 hours of observing experiential practice supported through in-the-moment feedback and coaching. Furthermore, our small pool of SCs stipulates the requirement that all SCs are cross-trained to portray all cases used in the program with little to no flexibility in ideally matching SC attitude, physical characteristics, age etc. as it necessitates in most authentically matching the requirements of the portrayed cases. This often necessitates further extensive training as well as SC effort to portray the desirable affect and skills that each case demands.

Furthermore, students must be provided ample opportunities to practice skills within standalone experiences as well as integrate with other clinical skills following an incremental and helical framework (Adams & Kurtz, 2016; Silverman et al., 2005). A large component of the author’s (EA) PhD research is devoted in development and assessment of an on-line communication module, as well as deepening knowledge and research in the area of communication ensuring the continuing development of the communication program. The on-line module teaches the fundamental skills surrounding communication skills; this preparation facilitates a relief in professional resources at the student preparation level and a more focused and deliberate use of professional expertise time during face-to-face small group experiential practice.

Finally, in regards to assessment, the Objective Structured Clinical Examination (OSCE) offers a standardized and objective simulated environment that can be deliberately designed to achieve high validity and reliability to evaluate students’ communication competence (Artemiou et al., 2014; Artemiou, Hecker, Adams, & Coe, 2015; Brannick,
Erol-Korkmaz, & Prewett, 2011; Khan, Gaunt, Ramachandran, & Pushkar, 2013; Khan, Ramachandran, Gaunt, & Pushkar, 2013). Running communication OSCEs can have several implications for a small SC team requiring that SCs are cross-trained to portray several OSCE cases, and in addition, our large class sizes often result in running a four to five-hour OSCE that poses additional challenges surrounding SC burnout, fatigue and reliability.

**RUSVM**

RUSVM was founded in St. Kitts in 1982 and presently offers the degree of Doctor of Veterinary Medicine (DVM) as well as dual degrees in Master of Science and PhD degrees in areas supported by the university’s research such as public health, conservation medicine, and medical education. The RUSVM DVM curriculum is accredited by the AVMA COE and follows an accelerated program that requires successful completion of seven 15-week pre-clinical semesters on the island of St. Kitts, West Indies, followed by three clinical semesters at an affiliated AVMA institution. RUSVM students can complete their clinical semesters internationally in the United States, Scotland, Ireland, Australia, and New Zealand.

**RUSVM Communication Program**

The RUSVM communication program was initiated in 2010, and following the premises of outcome based programs the first OSCE was introduced in August 2012 (Please contact corresponding author for an outline of the RUSVM Communication Program) (Artemiou, Adams, Vallevand, Violato, & Hecker, 2013). Although the associated costs for developing, delivering and enhancing the RUSVM communication program are funded by DeVry Medical Institution, there are still challenges of program design and delivery in light of being remotely geographically located.

**The RUSVM Clinical Communication Framework**

The clinical communication program at RUSVM offers stand-alone experiences as well as experiences integrated with other clinical skills, and extends throughout the pre-clinical years. The teaching, learning and assessment at RUSVM follows the principles of the Calgary Cambridge Guide (CCG) that delineates 73 communication skills organized across five sequential stages (Initiating the Consultation, Gathering Information, Physical Examination, Explanation and Planning, and Closing the Consultation), and two stages that occur throughout the consultation (Providing Structure and Building Rapport with Client) (Adams & Kurtz, 2016; Silverman et al., 2005). Presently, students complete two OSCEs: first, a formative OSCE at the end of semester 3 (equivalent of year one in traditional educational systems) that supports self-assessment and feedback; and second, a summative integrated OSCE at the end of semester 6 (equivalent of year two in traditional educational systems) that is used as a performance examination for passing the clinical skills course.

**The Set Up**

Setting up a clinical communication program at RUSVM required that the university hire one long-term outside expert as the Director of the Clinical Communication program and one first author (AE) invested in pursuing a PhD with a focus on clinical communication, ensuring that the university could appropriately lead and meet the program’s needs. The presence of additional, short-term outside expertise as well as continued frequent visits to other universities with an already established clinical communication program further enhanced knowledge, skills and development of the program. Presently, the delivery of the small group experiential work is supported by one full-time, and a second part-time faculty, as well as two SCs that are additionally trained to facilitate small group experiential work. We support small group learning while accommodating for large class sizes by developing and incorporating on-line interactive resources; it would be have been too difficult to add further face-to-face small
group experiential learning opportunities considering our limited facilitator and SC availability. Faculty are responsible for developing both teaching and learning material and cases, as well as facilitator and SC training.

**The Remote Challenge: Professional Isolation**

At RUSVM, we can experience professional isolation based on our geographical location, a challenge that is further accentuated by the fact that our veterinary school is not embedded within a larger university on the island. In response, we further rely on developing peer support groups with colleagues across the world and more often will use technologies such as Skype or FaceTime to engage in meaningful and important conversations that allow us to exchange ideas, share challenges, as well as pose questions surrounding the teaching, learning and assessment of communication skills. It also becomes imperative to attend conferences and international meetings that further foster professional interactions and collaborations. In addition, we broaden our access to knowledge and scientific evidence by heavily investing in online library resources. Our geographical boundaries can further confine our already limited professional expertise to transient and finite timelines (often between 1 to 3 years), which compels a continuous recruitment of identifying and training new facilitators to support the continuation of our communication program.

**The Remote Challenge: Infrastructure Requirements**

The lack of onsite collaborative resources further demands that we also develop all required infrastructure to support a communication program. We share our example of our first communication OSCE venue (Please refer to Figure 1). The initial OSCE venue followed a very simple setting; we built 16 cubicle rooms using 4 x 8 sheet (48 x 96 inches) plywood material that was actually purchased and intended for hurricane protection. Each four cubicles shared a common wall and all plywood sheets were outfitted with insulating material to minimize noise.

Presently the RUSVM simulation laboratory includes two sets of adjacent observation (213 square feet) and examination rooms (215 square feet) that are separated by a one way mirror. The consultation rooms are outfitted with an examination table and a working station that mirrors a practice environment (Please refer to Figure 2). The rooms are equipped with audio-visual technology that allows observation, videotaping, and streaming of the student-client interview, coupled with the ability to annotate specific communication skills on the recorded interactions.
Figure 1: First RUSVM Communication OSCE setting
Premises of Progress

We cannot assume that all communication programs have the support and resources to create communication curricula. Based on our experiences, we share five premises that can help overcome challenges and support the development of evidence-based communication programs.

Build Program on Evidence and Outcomes

In developing our communication program, we heavily invest time in gathering and learning the research evidence that supports communication teaching, learning, and assessment. We share a specific example in regards to the assessment of communication skills where we identified and used rubrics that had already been developed and standardized in human medicine and adapted these for the specific goals and learning objectives of our program. We purposely used a 21-item rubric that was based on the Calgary Cambridge Guide (CCG) and an adapted form of the Liverpool Undergraduate Communication Assessment Scale (LUCAS); both instruments are validated in human medicine to evaluate students' communication skills and we adapted these for veterinary communication OSCEs (Artemiou et al., 2013). Likewise, we also implement the validated approach in human medicine of engaging standardized clients in portraying their assigned roles as well as being trained in the role of the assessor for our veterinary communication OSCE (Artemiou et al., 2014).

Think Globally and Create Locally
In order to cope with the lack of actors to fulfil the roles of standardized patients, we recruit and train everyday people from within our community with an interest in working with students and that are able to fulfil the requirements of the client role and program. Recruiting real people with real perspectives and expectations adds authenticity to the communication program and increases student interest and engagement. We suggest always identifying your local expertise; such can be your students, staff, faculty as well as your community at large to ensure sustainability of clinical communication programs.

Consider that Less can be Good Enough

In our experience, we always prioritize and allocate our limited resources to train facilitators, examiners and simulated clients which means that, through the development of our communication program, we have to make sacrifices. For example, we acknowledge that when we developed and implemented our first communication OSCE, there were concerns with surrounding noise and lack of a private and individualized space for students to demonstrate their skills in privacy. Though the setting was not ideal, it was functional and cost effective (Artemiou et al., 2013; Artemiou et al., 2014).

Plan Ahead and Allow for Extra Time

An additional difficulty we experience that has an impact across various levels relates to time. On the island of St. Kitts, we commonly face environmental challenges such as hurricanes that may disrupt our program, as well as often experience unexpected delays in importing required equipment and materials needed for our communication program. As such, we suggest that additional attention is paid in planning ahead as well as in building flexibility that will accommodate for these unexpected delays. Appropriate timing is also addressed during our teaching, as we can experience unexpected and prolonged periods with no internet service and students as well as facilitators are deliberately reminded to attend to required exercises long prior their due time.

Special Consideration

Understand and Address your Individual Context

While internationalizing veterinary medical education, it is imperative that we place emphasis on and evaluate the meaning of diversity and acculturation surrounding the human-animal bond. Limited information exists regarding animal ownership and attitudes in the Caribbean region and likewise in St. Kitts; though, generally, animals are often valued for their roles in providing safety and control of pests and less for companionship. Local experiences show that animals are often not confined indoors, and large free-roaming populations of dogs and cats are common, which can raise animal welfare issues among tourists. Indeed, there is a difference in attitudes in regards to the human-animal-bond compared to strong companionship role that pets hold in developed counties. Thus, a specific curricular initiative engages all incoming students in a two-hour small group discussion to raise awareness surrounding diversity, multiculturalism, the notion of earned and unearned privileges, explicit and implicit stereotypes, and how these complex meanings can shape students’ daily interactions while in St. Kitts, as well as their future practice in veterinary medicine. As such, specific to veterinary medicine and practice, RUSVM students have the unique opportunity to experience and explore a different culture and develop their cultural awareness and competency on issues surrounding variability in husbandry practices, the role of the animal, as well as animal welfare. Future consideration involves developing cases with a strong cultural component for students to practice through face-to-face small group experiential work.
Future Directions

It is an obligation that we provide students with authentic learning opportunities that will allow them to develop their competencies to practice globally. In particular, it is necessary that clinical communication is integrated across other clinical skills and assessed in high-stake examinations; emphasizing its importance and relevance in improving outcomes for the patients, while minimizing risks for errors, and increasing satisfaction and efficiency, as well as fostering an empathic culture. While our manuscript focuses on communication, these findings have broader relevance to other types of education in remote settings.

Take Home Messages

Notes On Contributors

Elpida Artemiou, PhD, Assistant Professor of Clinical Communication, Department of Clinical Sciences, Ross University School of Veterinary Medicine, Department of Clinical Sciences, West Farm, PO Box 334, St. Kitts, West Indies. E-mail: eartemiou@rossvet.edu.kn.

Cindy L. Adams, PhD, is Professor, Department of Veterinary Clinical and Diagnostic Science, Faculty of Veterinary Medicine, University of Calgary, 330 Hospital Drive NW, Calgary AB T2N 4N1 Canada. E-mail: cadams@ucalgary.ca.

Acknowledgements

We would like to thank Professor Trevor Gibbs and AMEE for their vision in enhancing medical education by reaching across species and past professions, and in working with countries across the globe to promote shared values and practices for the benefit of all.

Bibliography/References

Adams, Cindy L., & Kurtz, Suzanne. (2012). Coaching and Feedback: Enhancing Communication Teaching and Learning in Veterinary Practice Settings. Journal of veterinary medical education, 39(3), 217-228.

https://doi.org/10.3138/jvme.0512-038R

Adams, Cindy L., & Kurtz, Suzanne. (2016). Skills for Communicating in Veterinary Medicine. Parsippani, NJ: Dewpoint Publishing.

Adams, Cindy L., & Kurtz, Suzanne M. (2006). Building on Existing Models from Human Medical Education to Develop a Communication Curriculum in Veterinary Medicine. Journal of veterinary medical education, 33(1), 28-37.

https://doi.org/10.3138/jvme.33.1.28
Altbach, Philip G, & Knight, Jane. (2007). The internationalization of higher education: Motivations and realities. Journal of studies in international education, 11(3-4), 290-305.

https://doi.org/10.1177/1028315307303542

Aronson, Barbara. (2004). Improving online access to medical information for low-income countries. New England Journal of Medicine, 350(10), 966-968.

https://doi.org/10.1056/NEJMp048009

Artemiou, Elpida, Adams, Cindy L., Vallevand, Andrea, Violato, Claudio, & Hecker, Kent G. (2013). Measuring the Effectiveness of Small-Group and Web-Based Training Methods in Teaching Clinical Communication: A Case Comparison Study. Journal of veterinary medical education. https://doi.org/10.3138/jvme.0113-026R1

Artemiou, Elpida, Adams, L Cindy, Hecker, G Kent, Vallevand, Andrea, Violato, Claudio, & Coe, B Jason. (2014). Standardised clients as assessors in a veterinary communication OSCE: a reliability and validity study. Veterinary Record: Journal of the British Veterinary Association, 175(20).

https://doi.org/10.1136/vr.102633

Artemiou, Elpida, Hecker, G Kent, Adams, L Cindy, & Coe, B Jason. (2015). Does a Rater's Professional Background Influence Communication Skills Assessment? Journal of veterinary medical education, 42(4), 315-323.

https://doi.org/10.3138/jvme.0215-023R

Berkhof, M., van Rijssen, H. J., Schellart, A. J., Anema, J. R., van der Beek, A. J., Berkhof, Marianne, van der Beek, Allard J. (2011). Effective training strategies for teaching communication skills to physicians: an overview of systematic reviews. Patient education & counseling, 84(2), 152-162.

https://doi.org/10.1016/j.pec.2010.06.010

Bleakley, Alan, Brice, Julie, & Bligh, John. (2008). Thinking the post-colonial in medical education. Medical education, 42(3), 266-270.

https://doi.org/10.1111/j.1365-2923.2007.02991.x

Brannick, Michael T., Erol-Korkmaz, H. Tugba, & Prewett, Matthew. (2011). A systematic review of the reliability of objective structured clinical examination scores. Medical education, 45(12), 1181-1189.

https://doi.org/10.1111/j.1365-2923.2011.04075.x

CARICOM Capacity Development Programme: National census report (2000). St. Kitts and Nevis: CARICOM Capacity Development Program.

Clarke, Joyelle, & Barker, David. (2012). Sugar, land and female livelihood in transition in St. Kitts. Dialogue and Universalism, 3(1), 1-26.

Grzegorzewski, Edward. (1965). Medical Education in Developing Countries. Academic medicine, 40(9), 862-867.

Hodgson, Jennifer L., Pelzer, Jacquelyn M., & Inzana, Karen D. (2013). Beyond NAVMEC: Competency-Based

Page | 10
Veterinary Education and Assessment of the Professional Competencies. Journal of veterinary medical education, 40(2), 102-118.

https://doi.org/10.3138/jvme.1012-092R

Khan, Kamran Z, Gaunt, Kathryn, Ramachandran, Sankaranarayanan, & Pushkar, Piyush. (2013). The objective structured clinical examination (OSCE): AMEE guide no. 81. Part II: organisation & administration. Medical teacher, 35(9), e1447-e1463.

https://doi.org/10.3109/0142159X.2013.818635

Khan, Kamran Z, Ramachandran, Sankaranarayanan, Gaunt, Kathryn, & Pushkar, Piyush. (2013). The objective structured clinical examination (OSCE): AMEE guide No. 81. Part I: an historical and theoretical perspective. Medical teacher, 35(9), e1437-e1446.

https://doi.org/10.3109/0142159X.2013.818634

Norcini, John, Burdick, William, & Morahan, Page. (2005). The FAIMER Institute: creating international networks of medical educators. Medical teacher, 27(3), 214-218.

https://doi.org/10.1080/01421590500126379

Oman, K, Khwa-Otsyula, B, Majoer, G, Einterz, R, & Wasteson, A. (2007). Working collaboratively to support medical educational in developing countries. Education for health, 20(1) (12).

Resnik, David B. (2004). The distribution of biomedical research resources and international justice. Developing world bioethics, 4(1), 42-57.

https://doi.org/10.1111/j.1471-8731.2004.00066.x

Silverman, J., Kurtz, S. A., & Draper, J. (2005). Skills for communicating with patients. Oxford, San Francisco: Radcliffe Publishing

Street, Richard L, Makoul, Gregory, Arora, Neeraj K, & Epstein, Ronald M. (2009). How does communication heal? Pathways linking clinician–patient communication to health outcomes. Patient education and counseling, 74(3), 295-301.

https://doi.org/10.1016/j.pec.2008.11.015

Appendices

Declaration of Interest

The author has declared that there are no conflicts of interest.