Simulated clients in final year dental rotations

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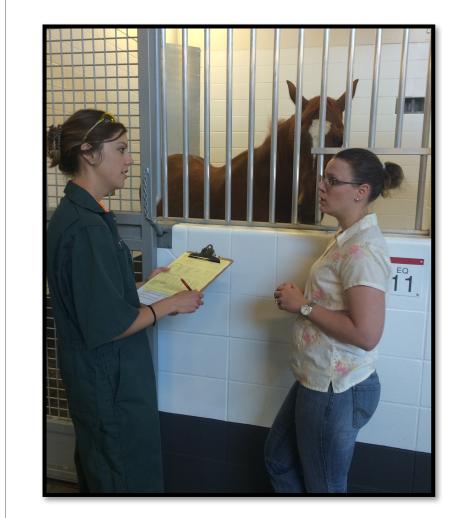
Introduction

- Students in the University of Calgary's Faculty of Veterinary Medicine (UCVM) spend a significant portion of their time in the first three years learning about clinical communication in simulated client experiences. In the final year of their studies, there is no formal communications component.
- Hoezler et al., (2015) found that the use of simulation encourages active learning where students can experience challenging client-patient scenarios. Standardized clients are routinely leveraged in simulated communication scenarios in many veterinary curricula, including at UCVM. Adams and Kurtz (2006) insist that communication cannot be taught as a 'hit and run' approach but rather must be viewed as 'helical' with continual reinforcement.
- UCVM dental final year rotations are 'blended' including cadaver laboratories, lectures, and live animal cases. The live animals in these cases are not accompanied by a client or owner. Student evaluations of such rotations have reflected the lack of opportunity for interaction with clients.

The purpose of the study was to determine if the use of simulated clients in dental cases, where the owner is absent, enriched communication experiences in final year dental rotations.



Methods



- Two final year dental rotations provided the opportunity for each student in the rotation to interact with simulated clients while diagnosing and treating dental patients.
 - Small animal (2015): UCVM owned animals—7 students Equine (2016): UCVM owned and non-profit organizations' horses 9 students
- Students were anonymously and randomly assigned into the each following treatment groups during three dental cases:

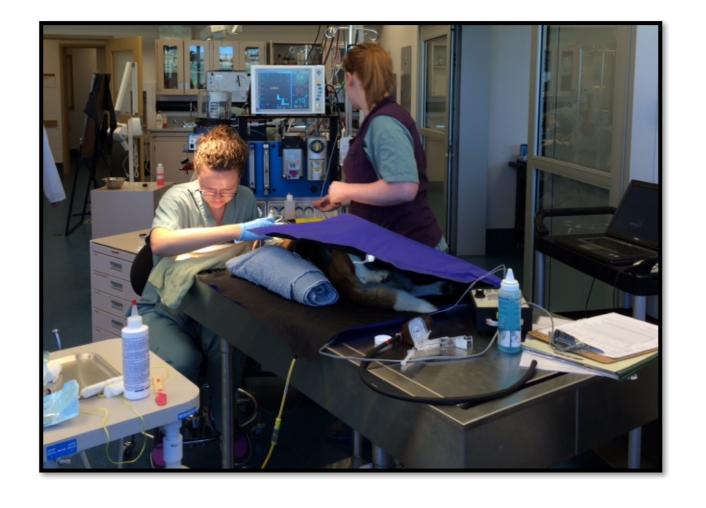
Group	Treatment
Δ.	Medical record for the patient only (no simulated client
Α	interaction) and clinical post-procedure rounds
В	History & admitting interaction with simulated client, and rounds
	History & admitting interaction with simulated client, rounds, and
С	patient discharge interaction with simulated client

- Medical records were provided for each patient regardless of treatment group
- Students anonymously completed brief pre-procedure, post-procedure, and post-interaction surveys. Simulated clients completed a feedback form after each interaction.

Results

Small Animal Rotation (July 2015):

- Two thirds of the students felt that they would like to have more opportunity to work with simulated clients for admissions and discharges.
- The use of the simulated clients revealed that students lacked ability to adequately obtain informed consent and discuss costs related to dental procedures.
- Students did not recognize the information in patient's medical records as part of the patient history.





Equine Rotation (June 2016):

- Students during the equine rotation had a much better understanding and ability to obtain informed consent from the simulated client, however, they felt very uneasy discussing financial aspects of the dentistry.
- During the interactions, the students did not ask the client about their prior knowledge or how in depth they would like the dentistry descriptions. Omitting this key communication skill resulted in many cases to assumptions of prior client knowledge or extended descriptions of procedures that were not required. Two students also noted in their survey that the simulated clients did not have enough understanding of equine dentistry to allow a good interaction.
- During Group A (no simulated client) cases, students did not feel that their confidence related to communication of dental procedure, financial costs or follow up owner care were enhanced. This highlights students' learning compartmentalization either procedural or communication.
- Most students identified in all three experiences that they do not feel adequately prepared to formulate a discharge plan for equine dental patients.

Equine and Small Animal Combined:

• Forty-four percent of students inadvertently self-identified as unconscious incompetents in clinical communication when they commented that they did not feel the need for more client interactions and the correlating feedback from the simulated clients indicated that those students displayed the most need for improvement.

Surveys

Pre-Procedo	ure Studen	t Survey				
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Not Applicable
The amount of history provided allowed me to fully						
understand the patient's needs (History including the						
patient record +/- client interaction)						
I feel confident that I can develop a financial plan for an						
owner relating to the patient's dental needs						
I feel confident that I can relate dental procedural						
knowledge to the client						
I feel confident that I can obtain informed consent from						
a client for a dental procedure						
I feel confident that I can relate the value of dental						
procedures to the client						
I feel prepared for performing the procedure on the						
patient						

Post-Procedure Student Surve

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Not Applicable
The case helped me to understand the concepts of routine dental care						
The case helped me to improve my ability to perform techniques required for routine dental care						
The case helped me to improve my communication skills relating to the patient's dental needs						
I feel confident that I can develop a discharge plan for an owner relating to the patients dental needs						
I feel confident that I can discuss dental procedural detail to the client that was performed on the patient						
I feel confident that I can demonstrate effective at home dental care to the client						
Post-Interac	tion Stude	nt Survey		•	•	

Post-Interaction Student Survey

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Not Applicable
The client simulation was realistic						
The clients perspective, expectations and						
understanding of dental procedures was elicited in the						
simulation						
The client simulation helped me to understand the						
patient's dental needs						
The client simulation aided in my ability to understand						
dental concepts and techniques						
My ability to communicate with a client has been						
enhanced by the client simulation						
My comfort level when communicating with a client						
was enhanced by the client simulation						
In general, client simulations are an effective way to						
help me learn to communicate with real clients						
Given the time, I would like to take advantage of the						
client simulation for every dentistry case in the rotation						



Simulated Client Feedback Form

Initiation, Gathering Information, Relationship Development: Did the student		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	N/A
1.	Effectively use open ended questions, exploring your						
	story, screening, silence etc. to understand why you						
	wanted to talk to them today?						
2.	Acknowledge your perspective and use empathy						
	statements in a non-judgemental way to understand						
	how the animal's problems are affecting you?						
3.	Restate your concerns, explain how the interview would						
	unfold and what they wanted to you talk about and ask						
	about other concerns?						
4.	Use authentic, respectful and empathetic						
	supportive/partnership statements and were they?						
5.	Really listen to you?						
6.	Offer sufficient opportunity to ask questions?						
7.	Discuss your expectations and your ideas?						
8.	Respond appropriately when you left cues that you						
	needed more information or emotional support?						
	lanation and Planning Phase: Did the student						
9.	Assess your starting point by asking for prior knowledge						
	early in the discussion and try to discover your wish for						
	information?						
10.	Give information at the appropriate time?						
11.	Organize the explanation into sections that would help						
	you remember?						
12.	Relate the explanation to your perspective, beliefs,						
	concerns, values, expectations, reactions and feelings?						
13.	Offers suggestions and choices versus directives when						
	discussion options?						
14.	Explore and negotiate a management plan with you?						
	Closing: did the student						
	Contract with you regarding next steps?						
17.	Summarize the session?						
18.	Perform a final check of your comfort level with the						
	procedure, ask if you had any last questions or other						
	items to discuss?						
Hov	w likely would you be to return to this veterinarian?						

Conclusions

- By utilizing simulated clients to enrich owner-absent clinical dental cases, some areas of communication weakness in the curriculum were identified including: obtaining informed consent and discussing costs of the procedure.
- Explaining the procedure and treatment options to the simulated client gave students a the opportunity to become more confident in their own knowledge and procedural skills.
- The helical approach of teaching communication skills in final year rotations is important in the veterinary curriculum. While this would ideally occur in real life appointments or farm calls with real patients, the use of simulated clients in owner absent cases provides a viable alternative.
- The unique combination of client simulation, real cases, and reflective surveys allowed instructors to identify the students' stage of communication competence and self-awareness of their skills.

References:

Adams, CL. and Ladner, LD. (2004). Implementing a Simulated Client Program: Bridging the Gap Between Theory and Practice. *Journal of Veterinary Medical Education*. 2004 Summer, 31(2):138-45.

Hoelzer, BC., Moeschler SM., and Seamans, DP. (2015). Using Simulation and Standardized Patients to Teach Vital Skills to Pain Medicine Fellows. *Pain Medicine*. 2015 Feb 12. doi: 10.1111/pme.12694.

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