Veterinarians' Experiences of Adverse Events in Spay Neuter Surgical Practice: a Qualitative Study

Sara White, DVM, MSc
sheltervet@mac.com

Spay ASAP Inc.
Hartland, Vermont
and

ergovet
Ergonomic Solutions in Veterinary Practice

Background

- Every veterinary care provider experiences adverse events and complications, but little is known about the impact of these events on practitioners and on their work.

- High volume spay neuter clinics typically have low mortality and complication rates. However, due to their high volume of patients, these low rates may still represent a substantial number of adverse events.

- How can the veterinary and humane communities support these practitioners and enhance their retention in the field?

Research Question

What are the experiences, thoughts, and reactions of shelter and spay/neuter veterinarians as they cope with serious adverse patient events (life-threatening complications or death) related to spay/neuter?

Methods

- Online survey (Survey Monkey)
  - Demographics: gender, graduation year, years in spay/neuter
  - 22 essay-type questions relating to their emotions, thoughts, experiences and actions after adverse events (defined as *serious, life-threatening complications or death*)
- Invitations to participate were posted on the HQHVSNvets Yahoo Group and Association of Shelter Veterinarians online forum.
- Only respondents who reached the last page of the survey were included; those exiting prior to the last page were considered to have withdrawn from the study.
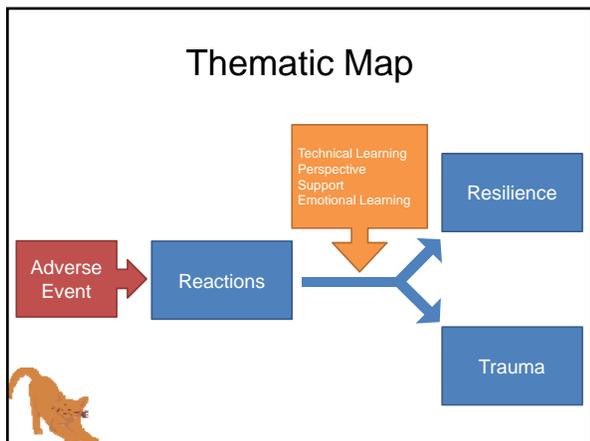- Responses collected between April 11 and May 31, 2016

Methods

- Survey data uploaded into Dedoose qualitative and mixed-methods software
- Inductive coding
  - without pre-existing theoretical framework
- Thematic analysis conducted as described by Braun and Clark (2006)

Results

- 32 completed responses;
  - 30 female, 2 male
- Working in spay/neuter a median of 8 years (range 6 months- 30 years)
- Graduated veterinary school a median of 17 years ago (range 1 year- 37 years)

Thematic Map

Technical Learning
Perspective
Support
Emotional Learning

Resilience

Adverse Event → Reactions

Trauma

Reactions

- The physiological, cognitive, and emotional aftermath of the adverse event.
- Universal, normal, biologically-based responses

Reactions

Fight or flight reactions:

"I immediately felt guilt, remorse, nausea and, in general, like running away. Literally."

"In the moment it is horrible and I am scared for both the animal and for the owner. Feels like hot lava coursing through my body. Generally don't sleep that night, wake up anxious."

Reactions

Many describe being able to manage their reactions and continue to perform at work:

"Right when the event occurs/is noted I feel like I was hit by a truck. But, being the veterinarian, I have to keep it together and move forward in a logical/productive manner. Inside, my stomach is in my throat and I want to flee the situation. I typically go home after these types of experiences and cry/talk to my husband."

Reactions

Some veterinarians noted cognitive effects:

"I am often cloudy-headed for the rest of the day after a major complication. I don't like making important decisions until at least the next day."

"It is definitely on my mind the rest of the day at work - kind of like static in my brain."

Reactions: Empathy

Reactions also include the empathy for other staff and for the pet owners:

"I would say that I feel more profound emotions when there is an owner involved who is emotionally bonded to the animal. I am sensitive to that bond as I can empathize. It makes me feel even worse because instead of feeling bad for the animal alone, I am now feeling bad for the animal's family as well. It doesn't change the "value" of the animal's life to me."

"Wow - the death of an owned animal makes me lose my mind. Having to tell an owner what happened is nearly impossible for me and I am sick for days."

Resilience or Trauma?

Four factors influence the extent to which the adverse event becomes a trauma for the veterinarian:

- Technical learning: Learning from the adverse event
- Perspective and context
- Support and collegiality
- Emotional learning

Technical Learning
Perspective
Support
Emotional Learning

Adverse Event → Reactions → Resilience / Trauma
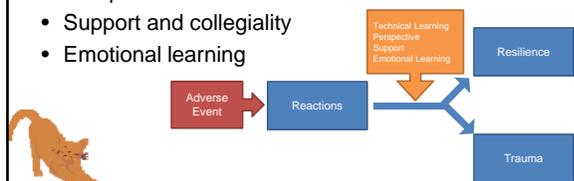
Technical Learning

Nearly every participant mentioned that learning about the technical aspects of patient care is an important part of moving past an adverse event.

"If I can learn why something happened and what to do different next time, then I think I am more confident at dealing with a similar problem the next time."

Technical Learning

"there is always something to learn from these mistakes and that is the most important lesson I walk away with. knowing I am now wiser and will be more cautious in these circumstances helps me deal with any feelings of guilt."

Technical Learning

Failing to learn from the event, or failing to know how to avoid it in the future, is an important source of anxiety for some and may contribute to experiencing the event as traumatic:

"I typically review procedures/protocols after an adverse event and make modifications if one or more areas are identified as possible sources of concern. The most frustrating thing is not knowing what went wrong to be able to make changes."

"Although hearing "yeah, I've had that happen to me" (by another vet e.g.) helps the emotional part it doesn't help with what I really need i.e. what do I do wrong that causes this oozing and how can I prevent it. No one seems to be able to help me with that....although I don't talk about it much either."

Perspective

Veterinarians use a variety of frames of reference to put the loss in some larger context.

In some cases, this is the larger context of the spay neuter program itself:

"I try to remember the thousands of animals who benefited from my serving as their veterinarian, even if only briefly via a spay/neuter program."

Perspective

In some cases they find this perspective through their religion or religious beliefs:

"These [Christian] songs speak to the emotions I feel and give me a renewed sense of hope and peace. They remind me that one day, it's all going to be ok."

Perspective

And in some cases it is the perspective that their life and identity is bigger than their work as a vet:

"My conversations with my best [friend] from vet school are always the most helpful. We understand each other. And the most helpful thing that she offers me is perspective… we remind each other of how much more there is to us and our lives than our being veterinarians. That we are human and we have faults and imperfections like everyone else. And that when push comes to shove we are so much more than what we do for a living. We love what we do but we both remind ourselves that we want our legacies to be more than being veterinarians. Our children, our families and other causes are bigger than any single sad outcome (which usually likely would have happened regardless of our involvement)."

Support and Collegiality

As the previous quote and this one demonstrate, many vets find talking with colleagues to be extremely helpful:

"for me, i think i have to talk with another veterinarian. we are ultimately responsible for these lives; losing an animal is one thing but being the responsible trusted person and losing that animal adds another level. Unless one has that responsibility, they don't really know how bad it is on more than just one level."

Support and Collegiality

Often colleagues are far away but this need not preclude the experiences of support and collegiality:

"I appreciate having the HQHV and shelter vet list serv as I learn so much from other people's experiences and it make me feel less isolated. There are no other shelters or shelter vets close by to commiserate with so I appreciate reading other shelter vets comments. its nice to know I am not alone and the challenges I face are not unique to me!"

Support and Collegiality

Poor support from management and colleagues may stifle communication and learning:

"Very little [support] from management. Moderate from most colleagues. One in particular is very blaming and negative, and she is really hard to be around and be vulnerable. So when she is around, not much sharing/ discussing goes on."

Support and Collegiality

Feelings of shame and guilt may affect willingness to communicate with others, or may shape which aspects of adverse events the vets are willing to discuss:

"Usually [I don't talk about] the technical issues if I feel I was at fault, because then I don't want to think about it or even bring it up - it is too painful."

"I only discuss the technical issues. I always feel the emotional part is my own personal problem for me to deal with myself."

Emotional Learning

With experience, some vets learn how to handle and support themselves through an adverse event

They learn what to expect, what they typically experience, and the timescale for that experience.

"I remember all the adverse events i've ever had, but the painful feelings (repetitive thoughts about the event, visualizations, guilt, sadness) which used to take months to disappear now only last a few days where they are intense."

Emotional Learning and Resilience

Sometimes this emotional learning is a conscious, deliberate skill acquisition process:

"Accepting what is (a skill I have leaned through mindfulness meditation) has helped me tremendously. I am able to keep from wishing the outcome had been different, forgive myself if I made any mistakes, and keep from ruminating on the event. In addition, having a whole set of self-care skills that keep me resilient."

Emotional Learning and Resilience

For some it takes a balance of confidence and humility to face the relentless possibility of not knowing, or of doing harm while trying to do good.

"The harder feeling to deal with is the change to feelings of self-doubt that comes next. To me, that is the hardest thing to deal with in spay neuter, especially if doing a lot of large animals, in-heats, pregnants, debilitated etc, and it never goes away. You just learn to manage it. Because no matter how well you do your job, eventually, something unexpected will happen. And no matter how well you try to be competent, you will eventually face something you've never seen or dealt with before."

Trauma

For some veterinarians, this balance is impossible, and instead of resilience they experience trauma:

"Absolutely [I doubt myself]. Almost every time. It makes me question why I became a veterinarian. It can be really debilitating."

"Whether it's anesthesia related or human error or surgical complication it wears on you and it's been one component that I chose not deal with anymore and have taken myself from surgery and put myself on medical side because the pressure to do good work and fast and all is too great"

Trauma

"Every day after my first patient passed away years ago I have questioned whether this job is for me and have always kept an eye open for other job opportunities….I start looking for other career opportunities because I feel I shouldn't be a vet anymore. I'm doing something wrong and I don't want to have to deal with the guilt anymore….The only thing I've found [that helps] is an alternative means of pursuing my career where I won't be a danger to any more animals."

- This veterinarian estimates she has just one serious complication or mortality per year

Conclusions

- Veterinary staff experience a variety of normal reactions and responses to adverse events
- Factors that affect the extent to which the adverse event becomes a trauma for the veterinarian include ability to learn from the event, perspective, support, and emotional learning

"I don't feel the general public has any idea how deeply an "adverse event" affects us."

What can we do

- Support learning– both in the wake of adverse events and when all is well
- Support veterinarians' connections with colleagues

"I personally would like to have more mentoring from more experienced vets, especially if an adverse event was due to inexperience. That is almost impossible with high volume, at least, given the business model of the clinic where I work. There is simply not enough time, or staff resources, given the very real need to devote time to activities that bring in dollars (i.e. surgery) versus mentoring, meeting etc."

What can we do

- Promote the understanding within our organizations that adverse events are a part of veterinary practice, and that high reliability organizations acknowledge and prepare for these events even as they strive to decrease their occurrence
- Avoid blame and shame; create a supportive environment that values learning
- Study and commend instances of successful recovery from or avoidance of adverse events
- Evaluate cases of complications and mortality and assess areas of concern to find gaps in protocols, training, staffing, or other factors.

Questions?

Contact me:

Sara White, DVM, MSc
sheltervet@mac.com