Job Stress of Veterinary Staff in Small Animal Practice

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As a speaker and educator in veterinary behavior, I was often approached by conference attendees asking how to reduce personal stress after injury when handling patients. As a member of VIN.com (Veterinary Information Network), I participated in a one question quick poll "Do you or your practice have a written or specific training program concerning how to recognize and respond to aggressive dogs?"1 One thousand five hundred sixty-four VIN members responded to this poll. Results from this poll identified that 62.79% of participants relied upon on the job training and experience in handling aggressive dogs; 17.26% indicated nothing was written and had no training to recognize dog aggression; 4.8% did not know if the clinic had a written or official program; 4.41% of responders had a written protocol or training that everyone read and followed; 3.84% are interested in writing up a policy, and 2.49% had a protocol but it was not followed or enforced.1

In my research on bite risk and work related stress, I found few surveys or studies on personal stress due to bite risk. One survey of licensed technicians in Minnesota covered all work-related injuries.² and scratches were reported as the leading cause of injury to technicians. Another survey of Washington State animal care workers included veterinarians, veterinary technicians, and animal caretakers in shelters, pet stores, kennels and groomers. This study reviewed workers' compensation claims of animal care occupations and compared injury rates and types of injuries. The results revealed that "animal-related trauma including bites, kicks and scratches as the most commonly reported injury." Personal stress was not assessed.3 p.241

Because of limited published data and my personal experience hearing histories of bite injury and resulting stress, I was interested in surveying veterinary professionals in practice for job stress related to bite and near bite risk. Near bite is understood to be the act of the handler or examiner moving out of the way to avoid injury, or a tool such as a muzzle is preventing actual injury. The purpose of this was to identify the level of animal behavior-based handling education of the staff, staff stress levels from bite risk, and what reduced staff stress for bite/near bite risk.

Survey Method

A 10-question mixed method survey, where responders would answer multiple choice questions and allowed for open-ended comment was developed using SurveyMonkey®. Responders could select more than one answer to a question or skip questions. A non-probability sampling method was used. Announcements requesting participation were sent to veterinary professional contacts including DVM, veterinary technicians, and non licensed veterinary professionals through my personal newsletter, various Facebook pages for veterinary professionals, newsletter links (NAVTA, AVSAB, ISVMA), resulting in a response rate of 382 completed surveys. Each question allowed for comment by the participant. Some participants however did not respond to every question, so the response rate varies. Any veterinary professional could respond. The survey was not limited to small animal medicine. Any person who worked in a private veterinary clinic, university, specialty clinic, or non-profit shelter that provided veterinary care, was eligible to participate.

Respondents could only answer the survey one time and were not required to give name or identity. The survey was open June 6, 2016 and ended November 13, 2016. There was no corporate or association sponsorship of this survey.

Survey Results

Question 1: What position and length of experience do you have at your practice? (377 answered 5 skipped) 46 comments

The question allowed more than one response to be selected and commenting.

From the responses and commenting, 65.3% of the responders had more than 5 years of work experience in veterinary practice (Fig.1). 20% of responders had 3-5 years of practice experience, and 16.5% had less than 2 years of practice experience. Some of the responders indicated working as a non-degreed professional, then continuing in veterinary practice as a degreed technician or DVM.

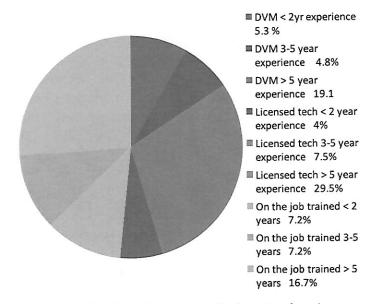


Figure 1. Distribution of responses for length of work experience in veterinary practice. (Please note that this pie chart only presents a portion of the response distribution due to a limitation in the survey builder.)

Question 2 - How did you learn handling and restraint techniques? (378 respondents 4 skipped)

This question allowed more than one answer to be selected and commenting. Through the commenting section 50.26% of the responders identified that they learned handling and restraining techniques during scholastic education. Forty-nine percent of responders identified learning on the job without formal training (Fig.2). In the comment section, 51% of the responders indicated that their knowledge of handling came from more than one source of education or training.

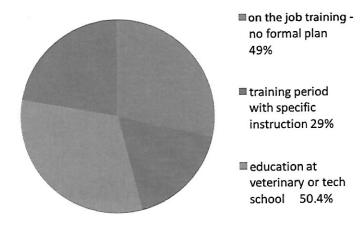


Figure 2: Distribution of responses based upon where participants learned restraining and handling techniques.

Question 3 - Have you ever had a bite/near bite that came without warning? (381 respondents 1 skip) 94 comments.

The question allowed more than one answer and commenting. Approximately 80% of participants identified they have experienced a near bite or near bite incident without warning. One percent were, uncertain if there was never a warning for a bite near bite incident.

There were many comments about bite incidents, including details of breed, species and situation. The most common scenario was positioning an animal for radiographs, lifting for exam or other diagnostic procedures on an ill or moderately painful animal. The next most common scenario were bite or near bite situations involving large breed dogs, German Shepherds and Mastiffs were mentioned frequently, lunging and biting as the staff entered the room or the animal was released after restraint for exam. Respondents commented that there were likely signs of anxiety or building aggression, but they did not understand or recognize those body language signs as a risk for bite. Some indicated a demand from the DVM or staff to continue with a procedure despite the animal's escalating body language of anxiety. Sudden bites from a sedated animal was the fourth most common type of comment. Most of these sedated animals bit on intubation, or transfer to and from the cage while sedate.

Question 4 - If yes to question 3 did this cause any prolonged nervousness or stress when working? (339 respondents 43 skipped) 89 comments

The question allowed more than one answer and commenting. Approximately 42% indicated yes they felt their experience with bite or near bite without warning caused continued stress at work; 26.3% indicated no, and 33.14% identified just for the day stress. The number of responders indicating some level of stress due to a bite/near bite incident was 75.45%.

From the comments, there were cases of significant signs of anxiety. Physical signs of nausea, cold sweats, shaking and needing to leave the premises were reported.⁴ These signs were triggered by breed, species, or similar work scenario of the bite/near bite incident. Other comments reflected staff avoiding handling the breed or species involved in the incident or asking for staff support. Other commenters noted

that using more caution to avoid a bite by requiring protective gear such as muzzles or Elizabethan collars when in a similar handling scenario is beneficial in reducing anxiety.

Question 5 - If you were stressed, how were you able to do your job? (287 responders 95 skipped) 66 comments

The question allowed for more than one answer to be selected and commenting. Approximately 37% avoided fractious patients, the breed or species that caused personal stress. This required other staff to take the case for the stressed individual, which was often done without resistance from staff members. Approximately 57% of stressed staff asked for assistance from co-workers. These responses reflect the need for co-worker support, understanding, and flexibility to help the stressed worker perform their duties. Approximately 58% required the use of muzzles, Elizabethan collars or sedation to avoid potential injury (Fig.4). Several comments identified that increasing education in less stressful handling and behavior improved their skills and empowered them to advocate for sedation and care triage to reduce patient stress.

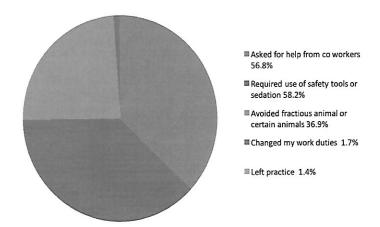


Figure 4. Distribution of responses for how stressed staff were able to perform work duties

Question 6 - What is the prevailing attitude toward staff injury at your practice? (377 responses 5 skipped) 56 comments

The question allowed for more than one answer to be selected and commenting. The prevailing attitude is to avoid bites at all costs with 55.6% responding. Protocols for handling are in place for 38% of responders (Fig.5). This may reflect the network of responders having an interest in behavior, as it exceeds the results from Dr McKnight's poll.

Forty of the 56 comments reflected a mixture of increased education in reading body language, early sedation, and less stressful handling as the response from the practice to bite/near bite risk. Twelve of the comments noted DVM or practice manager pressure to finish the exam despite escalating anxiety. ly, there were comments of practices that ignored requests for safety tools, resulting in staff changing places of employment.

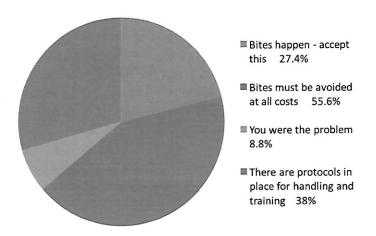


Figure 5. Distribution of responses for prevailing attitude towards staff injury at your practice

Question 7 - What percentage of the bite/near bite incidents has the animal NOT struggled, growled, snarled, howled or stood frozen, ears back or tail pulled down or flicking at the moment of the bite? (376 respondents 6 skipped) 35 comments

The question allowed for one answer and commenting. The question identifies the body language of anxiety escalating to aggression as depicted in 'the ladder of aggression' (Fig.9). Eighty-four percent of responders indicated that there was body language of escalating anxiety leading to aggression (Fig.6). Sixteen comments identified that there were signs of anxiety, yet the impact of body tension was not appreciated for aggression risk. It was also noted in the comments that the staff did not notice the body language of anxiety leading to the bite risk. Eight commenters noted that blunted, absent or conflicting body language signs were experienced at the time of a bite/near bite incident. These commenters noted that they suspected punishment-based training may have been a factor, and fast reactivity in the animal were present. Five commenters indicated advanced knowledge of body language, less stressful handling skills and paying attention to the patient for subtle body language cues that reduced bite risk.

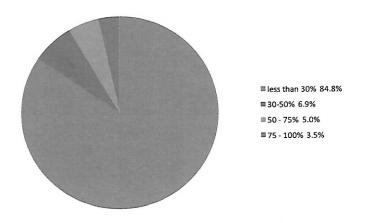


Figure 6. Distribution of responses for percentage of bite risk where body language of anxiety was not present

Question 8 - What was the situation for the injury? (350 Respondents 32 skipped) 73 comments

The guestion allowed for more than one answer and commenting. Non-invasive, non-painful examinations and procedures were identified as having the highest incidences (49.1%) of bite scenarios (Fig.7). Comments about these scenarios indicated large breed dogs lunging up to the face of staff as they entered the room or upon release from examination. Some clients did not inform the staff of known aggressive animals and would comment about aggression after Non-painful examination procethe bite attempt. dures such as cardiac auscultation, palpation of the back, and abdomen on a non-painful animal were the most common bite risk scenarios at 49%. Handling of the feet, blood draw and during injection were the second most common risk scenarios at 40%. Examinations close to the face, and potentially painful or stimulating were 27.4% of the bite near bite incidents. Greeting the animal, including retrieving from a cage after the animal is released from examination was indicated by 23.4% of responders. Transferring a sedated animal post operatively, restraining pre-operatively and upon intubation were the scenarios of the 14% bitten by a dysphoric sedated animal.

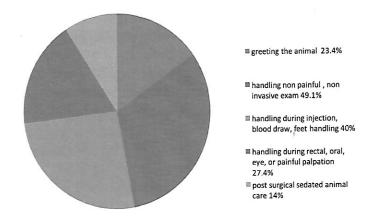


Figure 7. Distribution of responses for situation of bite injury

Question 9 - Have you ever considered leaving due to injury risk? (375 respondents 7 skips) 29 comments

The question allowed for one answer and commenting. However, the data identified that risk of injury is not driving them to consider leaving the profession (87.2%). However, seven participants commented that physical limitations due to a bite injury or anxiety from the bite incident affecting their ability to perform their work duties, were moving them to consider leaving their present workplace. Twelve commenters expressed personal health issues, especially chronic pain in the back and shoulders as a concern for the ability to stay at the present job. The agility to move away from a bite attempt, the physical labor of handling and care were also mentioned in these comments. One commenter mentioned not knowing what other career path to use their degree in, and while they he/ she would like to leave the field, did not know what other work he/she would or could do.

Question 10 - Does your practice review bite/near bite incidents to determine cause and prevent repeated incidents? (378 respondents 4 skips) 29 comments

This question allowed for more than one answer to be selected and commenting. Thirty-one percent of responders indicated that no review of a bite near bite incident occurred at their workplace. Depending on the severity was the most common response at 36.2% (Fig.8).

Ten commenters indicated a review of the bite/near bite incident was provided with an emphasis for all the staff to increase knowledge of behavior, less stressful handling, and improve staff training. Nine commenters indicated a lack of follow through for the bite report, including lack of additional training for reducing bite risk. Some indicated that owners or practice managers were too busy to follow up. Four commenters noted they had not worked at their practice long enough to have experienced a bite incident to know exactly what the after-incident process would be.

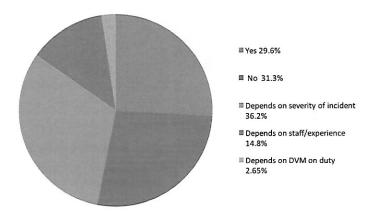


Figure 8. Distribution of responses for practice review of bite incidents

Summary and Conclusion

The survey revealed that bite and near bite risk is common in small animal practice. In discussion forums on VIN.com, AVSAB, and in gathering audience input at my presentations, many practices estimate 1 in 10 patients are aggressive. There has been a trend over the last 10 years for no-kill shelters to adopt out dogs and cats with anxiety and aggression histories. 9, 10 Consequently, in general practice there is an increasing population of animals who are aggressive in care.

A repeated theme from the comments is veterinary professionals are lacking behavior education, especially reading the body language of anxiety and early aggression. Secondly, lack of knowledge of less stressful handling skills, co-operative care techniques, and understanding the need for anxiety reducing medication is common in many general practices. This lack of education resulted in many of the bite and near bite incidents. In short, many responders learned by being bitten. The resulting injuries increased personal stress, affected job performance, and were a motivation for considering leaving the workplace. Approximately 13% of respondents indicated considering leaving their job due to personal stress from bite/near bite injury risk. In question 5, less than 2% of respondents left a practice due to stress from bite injury risk. Licensed veterinary technician turn-over rates in practice range from 15 - 50%11 in the United States. Presently there is

a misdistribution of veterinarians in the United States¹² increasing the need to leverage experienced licensed veterinary technicians. Staff retention through education in behavior and less stressful veterinary care can provide more opportunities for utilizing the technician while reducing bite/ near bite injury risk.

Less stressful veterinary care education was often acquired outside of veterinary or technical colleges. Respondents indicated this knowledge, coupled with DVM support for medication and care triage, were important factors in decreasing bite risk. Education in animal behavior, welfare, and the benefits of anxiety reducing medications, and less stressful handling techniques are not current standards in the veterinary medical college⁶ or veterinary technical college⁷ curriculum. Adding specific handling techniques and education in body language is greatly needed for our students.

Most respondents indicated that a bite came without warning (question 3), yet they indicated that the animal displayed the body language of anxiety in most bite/near bite situations (question 7). This conflicting result, points to the lack of awareness, and accuracy in reading the body language of escalating anxiety leading to aggression.⁵ Reactive dogs and cats, animals with blunted or absent body language of early fear were a risk for the behavior educated handler. More research is needed in pre-bite behavior.

The bite scenarios varied. Non-painful non-invasive examination was the most common scenario at 49.1%. The lowest incident rate of 27.4% for painful or invasive exams likely reflects the use of muzzles, safety tools and more observation of the body language for escalating anxiety to aggression. It is possible that staff are not watching for body language of anxiety during care, or do not suspect escalation to aggression that may happen with a non-painful or invasive exam.

Providing supportive instructional handouts such as the canine ladder of aggression by Kendal Shepherd DVM (Fig.9) would provide a visual reference for canine anxiety building to aggression. A copy of this document posted in all animal care areas would help build awareness of the early signs of anxiety, and possibly reduce bite attempts. Other body language posters are available from publishers such as Cattledog Publishing, IAABC, AAFP, and AVSAB.

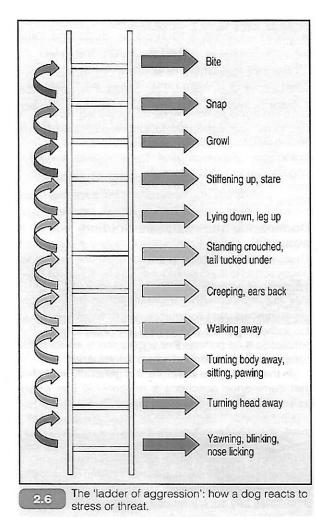


Figure 9. Canine Ladder of Aggression British Small Animal Veterinary Association Canine and Feline Manual of Behavioral Medicine 2002. Permission was also received from Dr. Kendal Shepherd.

In the discussion forums on VIN.com, many members indicated that they do not report bite incidents to their insurance agents. The increased premium costs from a report, resulted in increased expenses. Forum discussion indicated that few clinics had a post-injury reporting process. The survey revealed after-bite incident review is not standard in many practices. The practices that were educated in less stressful care reported more regular incident review and continuous development of safe handling protocols. This irregular reporting creates difficulty in industry assessment the level of injury and near injury rates in veterinary medicine.³ My personal interviews with practice managers, and discussions on veterinary forums reveal with corporate consolidation, practices are required to report internally bite incidents. As more practices are acquired by consolidators, collection of bite incident data may improve.

In summary, the risk of bite in small animal medicine is common. Veterinary forum discussions on VIN, AVSAB, and personal interviews with practices that have invested in education in animal behavior and specific Low Stress Handling® and Cooperative care techniques identify a reduction in bite injury risk and personal stress to staff. Currently this education is obtained and paid for as an addition to a degreed program with current handling and educational standards. Debilitating injury and personal stress occurs from bite and near bite injury including witnessing injury. 13,14 Reducing this injury hazard is imperative from our educational programs at both the veterinary college and technical college level. Since the date of the survey, there has been a growth of education in reducing fear and stress in care through the Fear Free ® and Cat Friendly Practice®. 15,16 Specific training for both the DVM and veterinary technician in reducing fear and stress in all interactions is needed to reduce staff injury and improve patient welfare. Continued investigation into veterinary staff stress levels as a result of reducing patient anxiety leading to aggression would contribute to our workforce wellness programs.

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