

Impact of the Use of Therapy Dogs in the Dental Office: A Review of Interviews

Danielle Ellington, RDH, M.A.

So Ran Kwon, DDS, MS, PhD, MS

Shelly Withers, PhD, MS, RDH

Lauren Ziegele, B.S.; Sophie Dent Krick, B.S.;

Christina Samaniego, B.S.; Blanca Martinez, B.S.;

Vanessa Fox, B.S.

Introduction

Dental anxiety is a concern for a widespread number of patients, and is frequently noted as being a direct barrier to care.¹ This anxiety makes dental treatment time-consuming, costly and demanding for the clinician, all of which have a strong negative impact on treatment outcomes.¹ Research shows that dental anxiety in the general patient population varies from as low as 3% to as high as 58%, depending upon the level of severity being assessed.^{2,3,4,5} Current methodologies commonly utilized to remove this barrier to care include Cognitive Behavioral Therapy, nitrous oxide, conscious sedation, and general anesthesia.⁶ Alternatively, the use of therapy dogs is a novel technique that has demonstrated reduced anxiety in patients with dental phobia.⁷ However, the literature regarding implementation and utilization of therapy dogs in dental offices is still limited.

Therapy dogs were first introduced to society in the 1960s through Dr. Boris Levinson, an American psychologist.⁷ He discovered that his dog had a soothing effect on his mentally impaired patients. Over time, there has been growing momentum to utilize therapy dogs to their full potential, which has recently included the dental office more.

The goal of this research was to integrate existing infor-



Therapy dog, Moose, "on duty" with patient receiving treatment.

mation on the use of therapy animals in the dental workplace, while simultaneously encouraging the development of future research. The objective of this study was to encourage the expansion of further integration, utilization, and research into therapy dogs in the dental setting.

The study aimed to: 1) increase awareness of the benefits of utilizing therapy dogs in the dental office by reviewing current literature to encourage deeper exploration on this topic, and 2) interview of dental professionals who incorporate therapy dogs within their practice, in order to obtain their personal experience and perceived benefits/drawbacks.

This study is particularly timely and significant in provid-

ing options to reduce dental anxiety, while simultaneously allowing the clinician to provide a higher level of dental care.

Materials and Methods

A human subject's determination form was submitted to the Institutional Review Board at Loma Linda University to confirm the study met the requirements for an "informational" study. Institutional Review Board approved the study as a non-human subjects' study (#5220281). The research incorporated a combination of professional interviews and a review of previous research.

The professional interviews were based upon a list of 15 questions which were developed to gain insight into the use of therapy dogs. Three dental professionals working with therapy dogs agreed to be interviewed. Of these three interviews, one was conducted via Zoom and two were completed via telephone. All interviews were recorded and ranged from 15-30 minutes in length. A small thank you gift was distributed to the dental professionals following completion of their interview. The questionnaire provided a personal account of the perceived benefits and positive/negative impact their animals have on patients. The following are the standardized questions that were utilized during all three interviews.

Additionally, the following articles were selected for review: seven original research (randomized controlled trails, clinical study, pilot study)^{7, 9,10,11,12,14}; four informative studies^{15,16,17,18}. The databases used for accessing these articles were Pubmed and Loma Linda Library. Key words entered were dental anxiety, therapy animals, and dental office. Articles were read and summarized, and conclusions were drawn based on patterns that emerged during this process.

Results

Following assessment of all three interview responses, it was determined that all three practices utilized therapy dogs in an effort to decrease patient anxiety while increasing patient comfort. The dental professionals obtained each patients' consent before the use of the therapy dog. Each office reported markedly less anxiety in these patients during treatment. Clinician experiences were overwhelmingly positive, while one interviewee raised concerns of possible liability with having a dog in the office.

Interview Questions

1. What is your profession and where do you practice?
2. How long have you worked with a therapy dog?
3. What was the reason for including a therapy dog in your practice?
4. How old was the therapy dog when starting in the dental office?
5. Is your therapy dog certified and vaccinated?
6. Are there any health and safety precautions you take when implementing a therapy animal into your practice?
7. Did your dog go through any training and, if so, what type?
8. How do you inform patients that there is a dog in the building?
9. Does your therapy dog interact with both children and adults?
10. How many patients per week does your therapy dog interact with?
11. If you have a patient who is allergic or afraid of dogs, what steps do you take to address these concerns?
12. How do you determine your patient wants to interact with a therapy dog?
13. What does the dog do during dental appointments to help patients?
14. What methods did you use to measure the levels of anxiety in patients before and after interacting with a therapy dog?
15. Why do you believe a therapy dog is beneficial in a dental practice?

Table I demonstrates a comparison of the three interviews, summarized to highlight the most critical information obtained from all interviews.

Additionally, 12 articles on therapy dogs were reviewed. Studies showed that the utilization of therapy dogs during dental treatment was highly significant in decreasing dental anxiety in the patient.^{8,9,10,11} Specifically, a significant correlation was reported between use of therapy dogs and reduced blood pressure and heart rate. Potential risks related to patient safety, including zoonotic pathogens, canine allergens and adverse animal behavior, were assessed and found to be present, but minimally impacted therapy dog utilization.¹¹

Summary of Interviews by Selected Questions.

	Interview 1	Interview 2	Interview 3
Your profession and location	DDS, Sumner, WA	DDS, Boulder, Co	RDH Maple V., WA
Experience Working with a therapy dog	5 years	1.5 years	2 years
Age of dog when starting in the office	16 weeks	10-12 weeks	8 weeks
Dog certification & vaccination	Vaccinated & Certified	Vaccinated & Not Certified	Vaccinated & Not Certified
Dog received special training	Yes	Yes	Yes
Advertisement on use of dog	Website	Email & Social Media	Email & Facebook
Benefits of using therapy dogs	Calms patients	Reduces anxiety	Relaxes patients

Discussion

The results of each interview were analyzed and then compared with one another. The reviewed articles were evaluated, and a summative response was developed. Combining the results of both the interviews and articles, it was determined that the use of therapy dogs in the dental office can reduce anxiety in patients presenting for dental treatment with self-identified dental phobia.

Utilizing a therapy dog offers a cost-effective alternative to other anxiety reducing methods currently used, such as nitrous oxide. As such, there is an emerging need to begin educating oral healthcare professionals on the benefits of introducing this novel method into their practice. Expanding the scope of treatment options for patients

presenting with dental anxiety has the potential to reduce barriers to care and increase patient compliance.

The ability to ask a range of questions during the live interviews was a major strength of the study. Having a small number of participants allowed for more time to be spent in discussion with each dental professional, resulting in comprehensive data collection. However, the small sample size was a limitation of this study. Future studies would benefit from an increased number of interviews. It would also be informative to interview dental professionals in more diverse settings.

Further research is encouraged to obtain more detailed information on the perceived benefits of integrating therapy dogs into the dental office to reduce patient anxiety.

Conclusion

Based on the interviews and literature review, therapy dogs could be implemented in a dental office to effectively decrease dental anxiety. Potential benefits include removal of this barrier to care, increased patient compliance, and treatment acceptance.

Due to the contamination that occurs in a dental office, future studies should evaluate ways to reduce cross-contamination between animal and patient, particularly



Therapy dog, Moose, bringing a smile to staff member, Anne Medges, and relaxation to a patient in treatment.



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when considering aerosols. In addition, liability for animal misbehavior will have to be assessed and weighed against potential benefits of having therapy dogs. Consideration will need to be given for the well-being of the dog, specifically the risk for hearing damage caused by high frequency/ultrasonic devices.

This study is clinically relevant due to the perceived benefits therapy dogs provide to the dental team and patients. These results provide a foundation for future clinical trials that may assess the perception of patients exposed to therapy dogs during dental treatment. Since the use of therapy dogs in the office is still a relatively new phenomenon, further exploration of this topic is needed.

About the Authors

Danielle Ellington, RDH, MA, is an assistant professor in the Department of Dental Hygiene at the Loma Linda University School of Dentistry in Loma Linda, California. Experienced in clinical practice, has served as senior clinic advisor and course director in research, preclinic, dental health education, public health, and personal finance. In her free time, she enjoys spending time with her husband, energetic son, and delightful daughter exploring the great outdoors.



So Ran Kwon, DDS, MS, PhD, MS is a Professor at the Division of General Dentistry, and the Program Director of Student Research at Loma Linda University School of Dentistry in Loma Linda California.



Shelly Withers, RDH, MS,

PhD is an Associate Professor at Loma Linda University School of Dentistry (LLUSD). She teaches classes in research and radiology. She obtained a MS in Health Professions Education and a BS in Dental Hygiene from Loma Linda University. She has a PhD in Psychology from Grand Canyon University. Her research interests include student well-being and educational psychology. She is a member of Sigma Phi Alpha National Dental Hygiene Honor Society, ADHA and ADEA. Shelly is also a member of Psi Chi, the International Honor Society in Psychology.



Vanessa Fox, RDH, B.S., RDA is an alumni of Loma Linda University. In her free time, she enjoys spending time with her family, going camping, and outdoor activities.

Lauren Ziegele, RDH, B.S. is an alumni of Loma Linda University.

Christina Samaniego is an alumni of Loma Linda University.

Sophia Dent Krick, RDH, B.S. is an alumni of Loma Linda University.

Blanca Martinez, RDH, B.S. is an alumni of Loma Linda University.

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