

# A Survey of Caregivers of Patients With Special Healthcare Needs

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#### **INTRODUCTION**

According to the U.S Census Bureau, approximately 37.9 million people in the U.S. have a disability. This number of patients with special health care needs (SHCN) is expected to grow due to advancements in medical care. The American Academy of Pediatric Dentistry (AAPD) defines special health care needs as "any physical, developmental, mental, sensory, behavioral, cognitive, or emotional impairment or limiting condition that requires medical management, health care intervention, and/or use of specialized services or programs." Due to a lack of trained providers, oral healthcare for adults with special needs is often difficult to access. This lack of coordination of care frequently leads to inattention to dental services for patients with SHCN. Therefore, it is important to establish a stronger relationship between medical and dental homes.

The issue of manpower when it pertains to serving patients with SHCN can be somewhat alleviated with the training and instruction of SHCN aides. Since many special needs patients communicate in non-traditional ways, caregivers and representatives are often relied on to facilitate communication between dental providers and their patients with SHCN. Educating and informing the aides of special health care needs patients about proper detection and management of orofacial emergency care situations can save people with SHCN from undue pain and discomfort. Furthermore, the establishment of a dental home is a cost-effective measure that reduces financial burden and number of dental treatment procedures<sup>4</sup>. The aim of the proposed study is to assess the oral health knowledge and attitudes of aides serving patients with SHCN with the goal of better utilizing the dental home of SHCN patients and involving caregivers in oral health education.

#### **METHODS**

A questionnaire was filled out by representatives of patients with special healthcare needs who are currently receiving comprehensive dental treatment at the One Brooklyn Health Brookdale Hospital Dental Clinic. The questionnaire was filled out before completion of the patient's visit. The questions consist of multiple choice and true/false questions regarding demographics, basic dental knowledge, emergency dental visits, and attitudes surrounding oral health. The Institutional Review Board of One Brooklyn Health, Brookdale University Hospital Medical Center reviewed the study and approved the conduct of this research. The collected data was analyzed by a statistician according to accepted statistical methodology. Frequencies, descriptive statistics and Chi-Square test for association were used to evaluate the statistical significance of collected data.

## RESULTS

Twenty aides were given the questionnaire to complete. The distribution of years of experience is shown in Figure 1. The experience ranges of aides were: 5% less than two years of experience, 15% two to five years, and 70% more than five years. The distribution of level of training is shown in Figure 2. Of the methods of learning how to recognize oral health problems patients with special needs may face, 47.1% learned on their own, 47.1% learned from a training program, and 5.9% learned from coworkers. The mean percentage of correct answers for the scenario questionnaire for the different ranges of years of experience is illustrated in Figure 3. The average percent of correct answers to the emergency dental scenario questions was 33% for aides with 2-5 years of experience and 71.4% for aides with 5 or more years of experience. The mean percentage of correct answers for the scenario questionnaire for the different learning methods is illustrated in Figure 4. Aides who reported that they learned on their own answered an average of 56.3% of the emergency dental scenarios correctly, whereas aides who reported being trained in a training program answered 75% correctly.

Figure 1: Level of Training

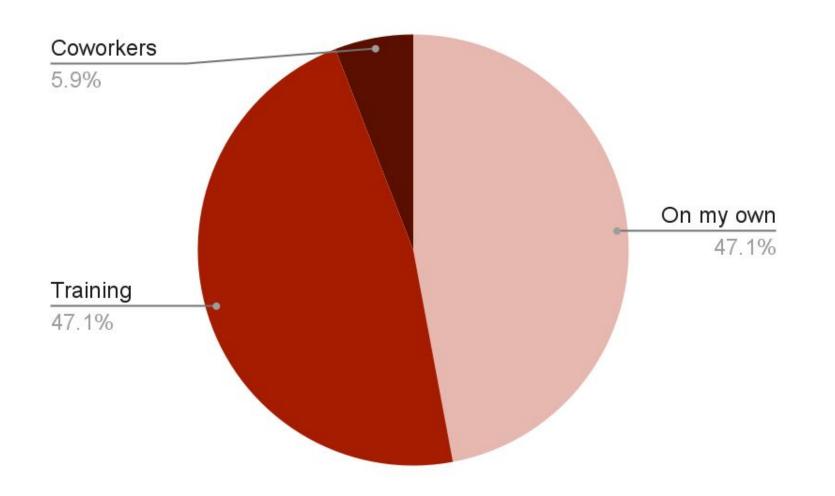


Figure 2: Years of Experience

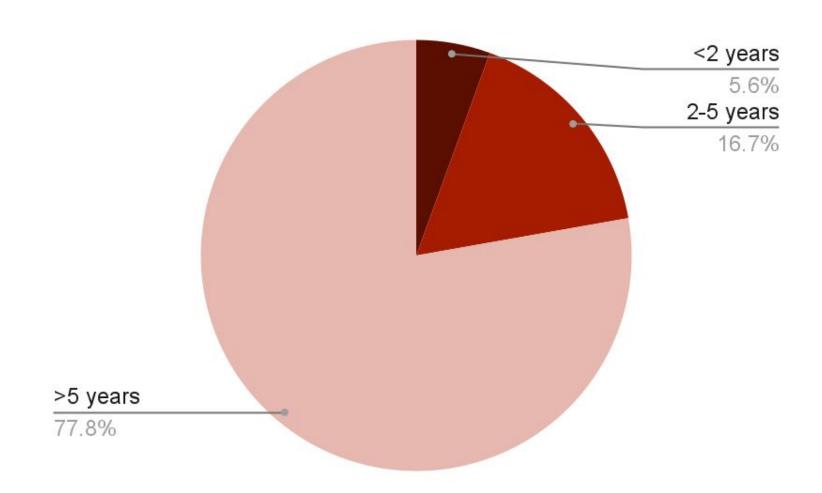


Figure 3: Correct Answers vs Years of Experience

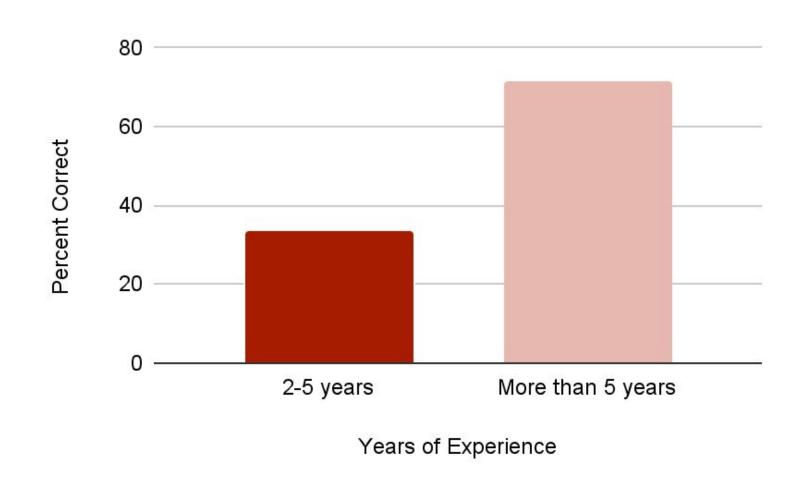


Figure 4: Correct Answers vs. Level of Training



#### **DISCUSSION**

This survey study examined the current baseline knowledge of aides of patients with special healthcare needs. The sample size consisted of 20 aides with a wide range of ages and experience levels. Of the 20 aides, 100% (n=20) believed oral health is related to general health and 78.9% (n=19) believe patients with special healthcare needs are more prone to oral health problems. All surveyed aides (n=20) answered that teeth should be brushed at least twice per day.

The dental emergency scenario questions assessed the knowledge of aides regarding emergency situations that patients with special healthcare needs may face.

#### The scenarios were as follows:

- . Chewing on one side (if teeth are present on both sides)
- 2. Facial swelling with fever
- . Waking up at night with tooth pain
- Expresses occasional tooth pain

### The aides ranked each of these situations as:

- 1. "somewhat urgent (schedule an appointment within the next month)"
- "walk-in emergency dental visit (same day)

The correct answers were determined by expert consensus. The dental emergency scenarios were given to two pediatric dentistry attendings and two general dentistry attendings who independently reached a consensus for the correct answers. Chewing on one side and expressing occasional tooth pain is a "somewhat urgent" emergency situation. Facial swelling with fever and waking up at night with tooth pain is a "walk in emergency dental visit" emergency situation.

The average percent of correct answers to the emergency dental scenario questions was greater for aides with 5 or more years of experience (p value=0.011). Hence, more years of experience is associated with better recognition of emergency dental situations in patients with SHCN. The average percent of correct answers to the emergency dental scenario questions was higher for aides who learned from a training program (p value=0.09). This may point to a correlation of training programs and improved recognition of dental emergencies. However, the result of the chi-test was not statistically significant. When asked if oral health training would be helpful for delivering care, 100% of aides (n=20) answered "yes". Given the small sample size, further study is needed to determine the significance of oral health training in the baseline knowledge of aides to patients with SHCN.

Since more experience and more training are correlated with better recognition of dental problems in patients with SHCN, then oral health education should be better integrated into the onboarding process for aides. Further, a collaborative relationship between dental providers and aides will give patients with SHCN more timely and appropriate dental care.

#### CONCLUSION

Based on the results of this study, the following conclusions can be made:

- 1) Aides with 5 or more years of experience performed better than aides with less experience in identifying emergency dental scenarios.
- 2) Aides of patients with special healthcare needs believe that they would benefit from further education regarding problems related to the oral cavity.

#### **REFERENCES**

- American Academy of Pediatric Dentistry. Management of dental patients with special health care needs.
   The Reference Manual of Pediatric Dentistry. Chicago, Ill.: American Academy of Pediatric Dentistry;
   2020:275-80
- 2. American Academy of Pediatric Dentistry. Symposium on lifetime oral health care for patients with special needs. Pediatr Dent 2007;29(2):92-152
- 3. Lewis C, Robertson AS, Phelps S. Unmet dental care needs among children with special health care needs: Implications for medical home. Pediatrics 2005;116(3): 426-31.
- 4. American Academy of Pediatric Dentistry. Policy on the dental home. The Reference Manual of Pediatric Dentistry. Dentistry. Chicago, Ill.: American Academy of Pediatric Dentistry; 2020:43-4.