Assessment of Knowledge and Curriculum of the LGBTQ Patient Population Amongst Pediatric Dentistry Programs in the United States

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BACKGROUND

In the United States 4.5% of the population report to identify as LGBTQ with some states reporting as many as 5.6% of the population.[1] LGBTQ is an acronym for the population group who identify as lesbian, gay, bisexual, transgender, and queer/questioning. The term "LGBTQ" casts a wide net which includes all sexual and gender minorities including those who identify as LGBTQ, those with same-sex attractions or same-sex behaviors, and those whose sexual orientation, gender identity or expression, and/or reproductive development does not adhere to traditional binary constructs of sexual orientation, gender, and/or sex.[7] Patients who identify as LGBTQ have historically faced challenges when interacting with the health care system. These challenges translate into disparities in quality of care received, and subsequently into possible health disparities.[5] In 2017 the Equality Study was published in which researchers queried emergency room patients. The data revealed that patients who identified as LGBTQ reported poorer health and less access to health insurance and healthcare services when compared to participants who identified as heterosexual.[4]

MATERIALS and METHODS

Approval to conduct the study was granted by UTHSCSA Institutional Review Board, #HSC20210065E. Contact details of pediatric dental residents and faculty was obtained from the Directory of the American Academy of Pediatric Dentistry (AAPD). Between April and June 2021, email invitation with a one-time survey via SurveyMonkey (San Mateo, CA) was sent to 1068 participants including 917 residents and 151 faculty members in pediatric dentistry across the United States. The surveys were developed separately for residents and faculty utilizing previously published surveys with modifications made to target the population of pediatric dentistry residents and faculty.[2,3,4,7] The two surveys created included 16-questionnaire items for resident participants and 16-questionnaire items for faculty participants. Excluding the demographics question, majority of the items in the questionnaire were based on Likert rating 5-point scale (5 = Strongly agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1 = Strongly disagree) in both the resident and the faculty surveys. The questions were designed to measure students and faculties' perception of necessity for LGBTQ focused curriculum, knowledge of LGBTQ health disparities, and assessment of the need for policy update regarding LGBTQ patient care. A descriptive analysis was conducted for each item. An individual analysis of variance was run to evaluate if there were differences between respondent groups. Resident respondents (132) were grouped according to reported gender. Faculty respondents (40) were grouped according to reported yes or no regarding their awareness of the presence of LGBTQ focused curriculum within their respective institution.

Data were summarized with frequencies and percentages. Subjects were grouped by gender (Female, Male) and position (Faculty, Resident). Responses exhibiting ordering, such as those based on a Likert Scale, were considered ordinal and otherwise non-ordinal. The significance of variation in the median of ordinal responses with the group was assessed with exact Wilcoxon rank-sum tests. The significance of variation in the pattern of non-ordinal responses with the group was assessed with Fisher's Exact tests. Exact methods were used to address small sample sizes and empty cells. All statistical testing was 2-sided with a significance level of 5%; SAS Version 9.4 (SAS Institute, Cary, NC) was used throughout.

RESULTS

In total, 132 residents and 40 faculty members responded to the survey. The response rate was 14% for resident participants and 26% of faculty participants. Based on age, 59% of resident responses were less than 30 years old, with 2% reporting older than 40 years old and the majority were female [Female 84 (63.6%), Male 48 (36.4%)].

Males differed significantly from Females on responses to Question 6 ("Learning about LBGTQ issues is relevant to clinical practice" and Question 7 ("Learning about LBGTQ communication is important for your training") with Males more likely to strongly agree or agree [Table 1. Q6 Males 34 (72.3%), Females 74 (89.3%), p=0.01, Q7 Males 34 (75.5%), Females 75 (89.3%), p=0.01], and no significant differences were found for Q8 to Q13 (see Table 1 & 2).

Females differed significantly from Males on responses to Q16 ("In addition to the existing policy on care for vulnerable populations which includes LGBTQ youth, do you agree the AAPD should publish an exclusive policy statement regarding LGBTQ oral health disparities?") with Females more likely to respond "Yes" [Table 5. Yes Males 16 (40%), Females 82 (62.1%), p=0.01]. Faculty and Residents differed significantly on ability to communicate with Q12 for Faculty and Q11 for Residents however [Table 3. Yes, Faculty 13 (32.5%), Residents 75 (56.8%), p=0.01].

Faculty and Residents differed significantly on requiring LGBTQ in the curriculum (Q10) and acquired skills provide equal service to both LGBTQ and non-LGBTQ patients and families (Q8) with Residents more likely to respond in the affirmative [Table 4. Affirmative Faculty 14 (35%), Residents 76 (57.6%), p<0.001].

Q6. Learning about LGBTQ issues is relevant to clinical practice

Response	*Male (%)*	*Female (%)*
Strongly agree	15 (31.9)	43 (51.2)
Agree	19 (40.4)	32 (38.1)
Neutral	8 (17)	5 (6)
Disagree	5 (10.6)	1 (1.2)
Strongly Disagree	0 (0)	3 (3.6)
Total	47	84

TABLE 1: RESIDENT Q6

Q7. Learning about LGBTQ communication is important for your training

Response	*Male (%)*	*Female (%)*
Strongly agree	15 (33.3)	46 (54.8)
Agree	19 (42.2)	29 (34.5)
Neutral	8 (17.8)	5 (6)
Disagree	3 (6.7)	1 (1.2)
Strongly Disagree	0 (0)	3 (3.6)
Total	45	84

TABLE 2: RESIDENT Q7

Faculty (n=40) on Q12[1] vs Residents (n=132) on Q11[2]

Response	*Faculty (%)*	*Resident (%)*	*p-value[3]*
Yes	13 (32.5)	75 (56.8)	0.01
No	27 (67.5)	57 (43.2)	

1. Faculty Q12: Does your institution provide faculty development for teaching curriculum focused on LGBTQ patient population health?
2. Resident Q11: I can discuss issues related to a LGBTQ patient and family with the faculty/program director in a supportive and helpful way.
3. Fisher's Exact Test

TABLE 3: FACULTY VS RESIDENT

Faculty (n=40) on Q10[1,2] vs Residents (n=132) on Q8[3,4]

Response	*Faculty (%)*	*Resident (%)*	*p-value[5]*
A	14 (35)	76 (57.6)	<0.001
B	17 (42.5)	29 (22)	
C	9 (22.5)	27 (20.5)	

1. Faculty Q10: Does your institution have lectures or small group sessions which include LGBTQ-specific content in the required clinical curriculum?
2. A=Yes, B=No, C=Don't know
3. Resident Q8: I have acquired the skills and education to provide LGBTQ patients and families with the same quality service that I provide to all families.
4. A=Agree, B=Neutral, C=Disagree
5. Fisher's Exact Test

TABLE 4: FACULTY VS RESIDENT

Faculty (n=40) on Q16 vs Residents (n=132) on Q16

Response	*Faculty (%)*	*Resident (%)*	*p-value[3]*
Yes	16 (40)	82 (62.1)	0.01
No	4 (10)	13 (9.8)	
Don't know	15 (37.5)	35 (26.5)	
Prefer not to answer	1 (2.5)	0 (0)	
Other	4 (10)	2 (1.5)	

1. Faculty Q16: In addition to the existing policy on care for vulnerable populations which includes LGBTQ youth, do you agree the AAPD should publish an exclusive policy statement regarding LGBTQ oral health disparities?
2. Resident Q16: In addition to the existing policy on care for vulnerable populations which includes the LGBTQ youth, do you agree the AAPD should publish an exclusive policy statement regarding LGBTQ oral health disparities?
3. Fisher's Exact Test

TABLE 5: FACULTY VS RESIDENTS Q16

CONCLUSIONS

1. Pediatric dentistry residents appear to agree that LGBTQ-focused curriculum is relevant to their clinical practice
2. Most faculty agree that LGBTQ focused topics should be included in curriculum
3. Resident respondents appear interested in LGBTQ patient care education
4. Faculty respondents report interest in incorporating LGBTQ focused topics into current curriculum
5. Both Residents and Faculty agree that AAPD should publish a policy statement exclusively for patients who identify as LGBTQ.

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