OPEN ACCESS
Saudi Journal of Oral and Dental Research
Abbreviated Key Title: Saudi J Oral Dent Res
ISSN 2518-1300 (Print) |ISSN 2518-1297 (Online)
Scholars Middle East Publishers, Dubai, United Arab Emirates
Journal homepage: http://scholarsmepub.com/sjodr/

Original Research Article

Students' Perception about Pediatric Dentistry

Dr. Yousef Saleh Alanezi[1], Dr. Abdullah Abdulrahman Alshehri[2], Dr. Nour Faleh Almotairi[2], Dr. Mohmmed Mureabid Alazemi[2], Dr. Sunil Babu Kotha[3]

[1]Master's Degree of Advanced Education in General Dentistry, Dental Department, Ministry Of Health, Ksa-Riyadh.
[2]GP Dentist, Riyadh Colleges of Dentistry and Pharmacy, Riyadh, Saudi Arabia
[3]Department of Preventive Dentistry, Riyadh Elm University, Formerly Riyadh Colleges of Dentistry and Pharmacy (Rcsdp), Riyadh, Kingdom Of Saudi Arabia

DOI:10.21276/sjodr.2019.4.7.8 | **Received:** 08.07.2019 | **Accepted:** 17.07.2019 | **Published:** 27.07.2019

***Corresponding author:** Dr. Yousef saleh alanezi

Abstract

Aims and Objectives: The study aimed to investigate dental undergraduates' studying in Riyadh colleges of Dentistry and Pharmacy, Riyadh, Saudi Arabia to evaluate their self-reported experience and perceived clinical confidence in pediatric dentistry. ***Methodology:*** 236 students from Riyadh colleges of Dentistry and Pharmacy, Riyadh, Saudi Arabia responded to a structured questionnaire to evaluate their experience and their confidence for various treatment procedures in pediatric dentistry during their course. ***Results:*** The results of this study suggest that gender differences existed in the confidence levels in various procedures in pediatric dentistry. Of all the procedures in pediatric dentistry, Preventive procedures (pit and fissure sealants, PRR and topical fluoride application) is ranked the first in the confidence and least is the selection of patient for general anesthesia and conscious sedation. ***Conclusion:*** Undergraduate students have concluded that they have adequate training in both theory and clinics regarding pediatric dentistry. Students are exposed to various clinical procedures and are confident in most of the pediatric clinical procedures. Students universally reported a lack of confidence in patient selection for conscious sedation and general anesthesia and this is the one area that the pediatric dentistry department will now be targeting for enhanced student learning.

Keywords: Dental student, dentist's confidence, pediatric dentistry, clinical confidence.

INTRODUCTION

Students consider dentistry one of the most difficult programs. In addition to its extensive program that requires dedication and financial resources, a number of factors, including clinical experience, constant ranking and comparing of students, teacher/student relationships, patient/student relationships, clinical application of theory, extracurricular opportunities and self-confidence levels, can influence significantly the way students perceive and experience their education.

One specialty that has been forthcoming in highlighting changes in undergraduate clinical experience over the past couple of decades is pediatric dentistry. A number of studies have reported significant reductions in the number of restorative procedures being carried out by students in hospital pediatric dentistry clinics. However, reductions in restorations (notably amalgam) and primary molar pulp therapies have generally been matched by increased experience in preventive regimens such as fissure sealants and fluoride therapies.

Within the field of dentistry, pediatric dentistry is considered the most stressful and challenging requires patience in handling the children.

AIMS AND OBJECTIVES

The study aimed to investigate dental undergraduates' studying in Riyadh colleges of Dentistry and Pharmacy, Riyadh, Saudi Arabia to evaluate their self-reported experience and perceived clinical confidence in pediatric dentistry.

STUDY POPULATION AND METHODS

This study was approved by the Research Review Board at Riyadh Colleges of Dentistry & Pharmacy. Final year and Interns dental students of both the genders were considered suitable for the purpose of the study as they are relatively exposed to theory and clinics in pediatric dentistry during their course.

A data collection form was provided to each student explaining the purpose of the study, that the study was completely confidential, that participation was voluntary. All students who agreed to participate signed an informed consent form.

This data collection form is relevant to their theoretical and clinical training, the procedures they are exposed in their clinics and their confidence levels are estimated.

Questionnaire design

The data collection form were given to the undergraduate students (Final year and interns) to answer the two sets of questions, first one include the scale to estimate the theoretical and clinical training during their undergraduate level and the second set of questions (10 questions), the scale to evaluate the confidence levels in various procedures in pediatric dentistry, which include Examination, diagnosis and treatment planning, Behaviour Management, Rubber dam placement, Preventive procedures (pit and fissure sealants, PRR and topical fluoride application), Local anesthesia, Operative procedures(Composite, Glass Inomer and amalgam restorations etc), Pulp Therapy, Extraction, Patient selection in treatment for conscious sedation and General anesthesia.

RESULTS

Figure-1 shows the total of 236 dental students (Male: 106; Female: 130) participated in the survey in which the final students are 109 students and interns are 127 students , *Figure-2* shows a students participating in the study who are having the number of siblings whose mean is 4.96 and standard deviation of 2.772. *Figure-3* shows that the students participating in the study, their rank of order among their siblings is 2.54 (Mean) and 1.816 (Standard deviation).

Table-1 shows comparison between male and females regarding the adequacy of training in both theory and clinics during their undergraduate course. The males consider that the course is adequate compared to that of females and is statistically significant (<0.001).

Overall confidence in terms of training (theory & clinics) between male and females, the males are more confident compared to females and is statistically significant (<0.001). *Table-2* shows Comparison of overall confidence and in adequacy of training between the married and unmarried students showed no significance. *Table-3* shows the level of study (level 12 & interns) show no significance in terms of adequacy of training and the confidence levels in various procedures in clinics.

Correlation between the confidence and number of siblings (Table 4) and order of birth (Table 5) is statistically not significant. *Table 6 and 7* shows the mean rank for the various procedures and is statistically significant between procedures as measured using the Friedman Test (p<0.001). *Table 8 and 9:* Wilcoxon Signed Ranks Test compared both clinical and theoretical training and found that most of the students consider that the theoretical and the clinical training is equal during their undergraduate course and is not significant.

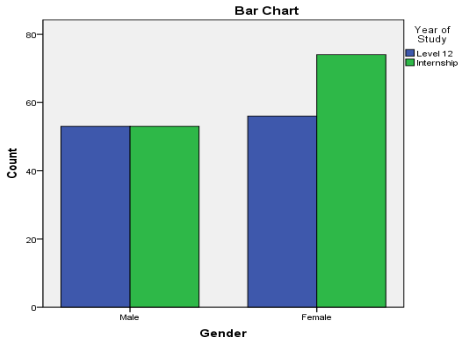

Fig-1: Total number of dental students participated in the study.

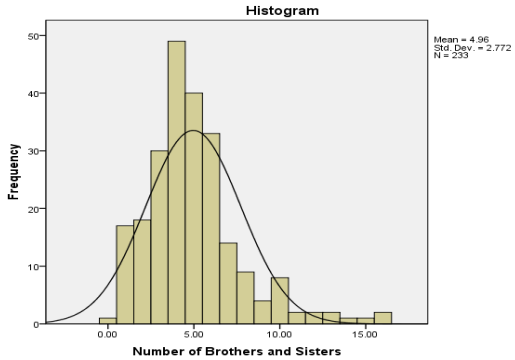

Fig-2: Students participating in the study who are having the number of siblings.

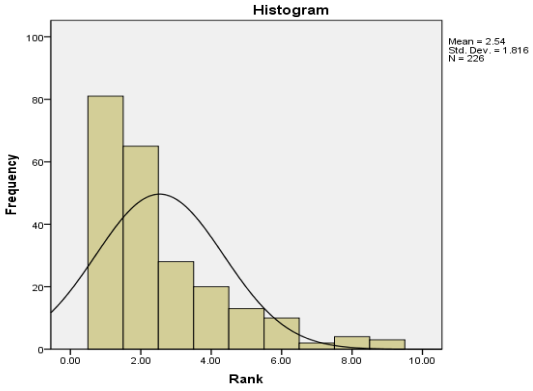

Fig-3: Students participating in the study, their rank of order among their siblings

Table-1: Comparison between male and females regarding the adequacy of training

		Male	Female	F	Sig
Overall Confidence	Mean	41.4528	38.4308	14.206	**.000***
	N	106	130		
	Std. Deviation	5.95400	6.26413		
Adequacy of Training	Mean	9.1038	8.4692	24.755	**.000***
	N	106	130		
	Std. Deviation	.95548	.98978		

***Statistically significant (<0.001)**

Table-2: Comparison of overall confidence and in adequacy of training between the married and unmarried students

		Unmarried	Married	F	Sig
Overall Confidence	Mean	39.3608	40.6538	2.214	.138
	N	158	78		
	Std. Deviation	6.62770	5.50520		
Adequacy of Training	Mean	8.6835	8.8974	2.297	.131
	N	158	78		
	Std. Deviation	1.03498	.98811		

Table-3: Comparision of overall confidence and level of study (level 12 & interns)

		Level 12	Internship	F	Sig
Overall Confidence	Mean	39.7890	39.7874	.000	.998
	N	109	127		
	Std. Deviation	4.21653	7.66214		
Adequacy of Training	Mean	8.6972	8.8031	.628	.429
	N	109	127		
	Std. Deviation	1.03194	1.01606		

Table-4: Correlations between overall confidence and number of siblings

			Overall Confidence	Number of Brothers and Sisters
Spearman's rho	Overall Confidence	Correlation Coefficient	1.000	.013
		Sig. (2-tailed)	.	.840
		N	236	233
	Number of Brothers and Sisters	Correlation Coefficient	.013	1.000
		Sig. (2-tailed)		.840.
		N	233	233

Table-5: Correlation between order of birth and overall confidence

			Overall Confidence	Rank
Spearman's rho	Overall Confidence	Correlation Coefficient	1.000	-.102
		Sig. (2-tailed)	.	.125
		N	236	226
	Rank	Correlation Coefficient	-.102	1.000
		Sig. (2-tailed)	.125	.
		N	226	226

Table-6: Mean confidence of various procedures

Procedures	Mean Rank
Patient Selection for Conscious Sedation	3.91
Patient Selection for General Anesthesia	3.92
Pulp Therapy	4.93
Behaviour Management	5.08
Local Anesthesia	5.35
Extraction	5.45
Rubber Dam	5.64
Operative	6.07
EDTP	7.27
Preventive	7.38

Table-7: Test statistics (Friedman Test)

N	236
Chi-square	492.246
Df	9
Asymp. Sig.	.000*
Highly significant (p<0.001)	

Table-8: Comparison of clinical versus theoretical training

		N	Mean Rank	Sum of Ranks
Clinical Training - Theoretical Training	Negative Ranks	21[a]	37.50	787.50
	Positive Ranks	49[b]	34.64	1697.50
	Ties	166[c]		
	Total	236		
a. Clinical Training < Theoretical Training				
b. Clinical Training > Theoretical Training				
c. Clinical Training = Theoretical Training				

Table-9: Test statistics (Wilcoxon Signed Ranks Test)

	Clinical Training - Theoretical Training
Z	-2.953[a]
Asymp. Sig. (2-tailed)	.003
Based on negative ranks.	

DISCUSSION

Present study provided the basic information about the training (theory and clinical) and the confidence level in the final year students and the interns studying in Riyadh Colleges in Dentistry and Pharmacy, Riyadh.

A similar study by *Hunter et al.* [1] determined the impact of a community dental service outreach programme on the self-reported confidence of their dental students in the management of children. Following a 15-day placement, students were found to more confident across a wide range of pediatric dentistry skills, notably in relation to primary molar pulp therapy and extractions.

Helen D Rodd [2] aimed to compare dental undergraduates' self-reported experience and confidence in paediatric dentistry within three UK dental schools (Liverpool, Manchester and Sheffield) and reported a lack of confidence in dental trauma management which warrants greater emphasis in the undergraduate curriculum.

CONCLUSION

Undergraduate students have concluded that they have adequate training in both theory and clinics regarding pediatric dentistry. Students are exposed to various clinical procedures and are confident in most of the pediatric clinical procedures. Students universally reported a lack of confidence in patient selection for conscious sedation and general anesthesia and this is the one area that the pediatric dentistry department will now be targeting for enhanced student learning.

Acknowledgement

The authors would like to thank Prof. Abdullah Al-Shammary, Prof. Mosadomi. Special thanks to the students who have participated in the study without whom the study would have been a dream. Last but not the least, our gratitude to Dr. Sharat Pani who helped us in data analysis.

REFERENCES

1. Hunter, M. L., Oliver, R., & Lewis, R. (2007). The effect of a community dental service outreach programme on the confidence of undergraduate students to treat children: a pilot study. *European Journal of Dental Education*, *11*(1), 10-13.
2. Rodd, H. D., Farman, M., Albadri, S., & Mackie, I. C. (2010). Undergraduate experience and self-assessed confidence in paediatric dentistry: comparison of three UK dental schools. *British dental journal*, *208*(5), 221.