

DENTAL ANXIETY AND THE ASSOCIATION WITH PSYCHOLOGICAL SYMPTOMS AMONG ADULTS ATTENDING IIUM Kuantan Health Facilities

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INTRODUCTION

- Dental anxiety is a condition in which the patient will have **overwhelming** sense of fear by feeling threatened of any dental treatment. **Klingberg, G. & A. Broberg (2007)**
- Dental anxiety may **worsen the oral health** as people with dental anxiety tend to delay or avoid dental treatment. **Armfield, J., G. Slade, & A. Spencer (2009)**
- There are evidence showing **positive correlation** between general anxiety and dental anxiety. **G.Pekkan 2011**
- Most studies done on dental anxiety in Malaysia focused on ante natal mothers, children and teenagers.

OBJECTIVES

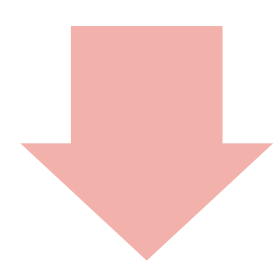
- To describe the prevalence of dental anxiety among selected adult population in Kuantan .
- To determine the associated factors for dental anxiety.
- To determine the association between dental anxiety and dental attendance.
- To determine the association between dental anxiety with depression, anxiety and stress.

MATERIAL AND METHODS

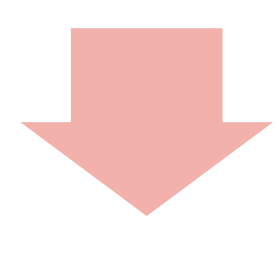
- ❖ **Cross sectional study** conducted among adults attending **Family Health Clinic (FHC)** and **IIUM Medical Center (IIUMMC)** from February 2019 - August 2019
- ❖ **Purposive sampling** ; total sample size for this study is **465 participants**.

INCLUSION CRITERIA	EXCLUSION CRITERIA
All adults attending Family Health Clinic IIUM and IIUM Medical Centre aged 18 years and above during the period of study	<ul style="list-style-type: none">• Illiterate adults• Adults with known mental health problem• Adults with learning disabilities• Dental students and dental staffs

Ethical approval by IIUM Research Ethics Committee (IREC).



All participants who are willing to participate in the study will be asked to fill up **consent** forms prior to conducting the structured questionnaires.



Structured **questionnaire** include :

- Sociodemographic profile
- Modified Dental Anxiety Score **MDAS** (Validated Malay version)
- Depression Anxiety Stress Score **DASS** (Validated Malay version)
- Adult Dental Health Survey (adapted from National Health Service UK)

RESULTS

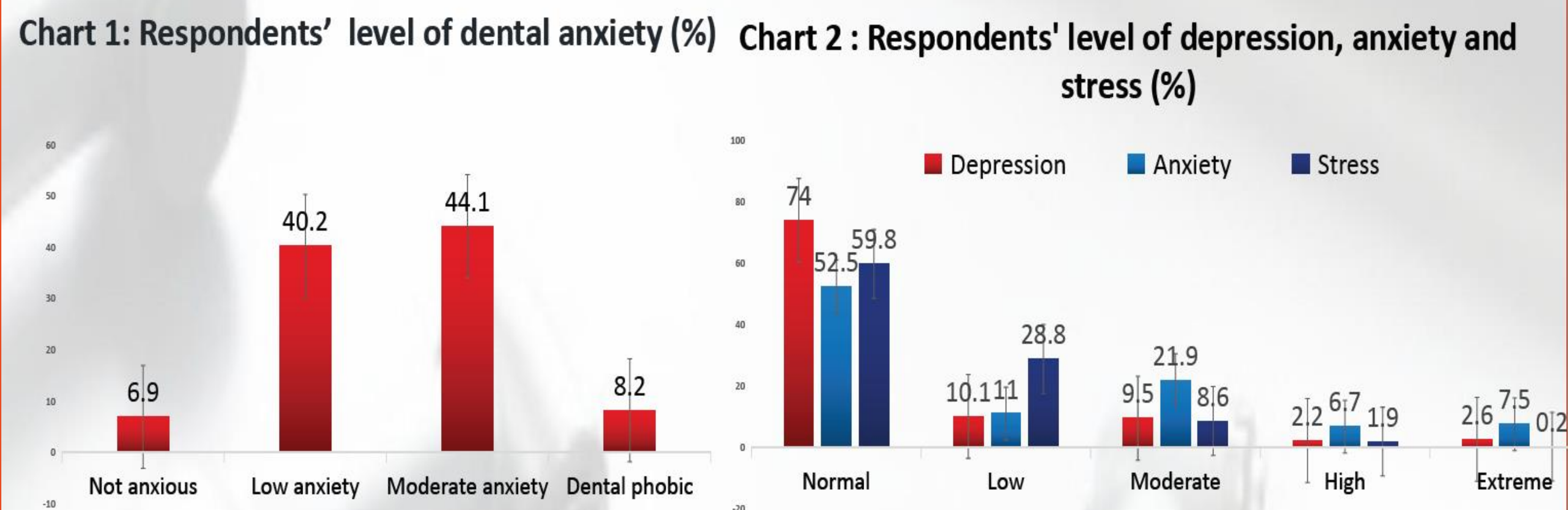


Table 1 : Association between sociodemographic profile and Modified Dental Anxiety Scale(MDAS)

Sociodemographic Profile		MDAS		p-value
		Normal n (%)	Dental anxiety n (%)	
Gender	Male	21(10.6)	178(89.4)	0.008
	Female	11(4.2)	250(95.8)	
Median Age (IQR)		41(19.0)	34(18.0)	0.005
Monthly Income	< RM3000	15 (5.5)	259 (94.5)	0.224
	> RM 3000	15 (8.4)	164 (91.6)	
Education Level	Primary	0 (0.0)	5 (100)	0.078
	Secondary	12 (11.3)	94 (88.7)	
	Tertiary	18 (5.3)	324 (94.7)	

Table 2: Association between Dental Anxiety and Dental Attendance

		MDAS		p-value
		Normal n (%)	Dental anxiety n (%)	
Dental Attendance	Regular	14 (9.2)	139 (90.8)	0.192
	Irregular	18 (5.9)	289 (94.1)	

Table 3 : Association between Dental Anxiety and Depression, Anxiety and Stress Scale

DASS		Dental Anxiety		p-value
		No n (%)	Yes n (%)	
Stress	No	24 (8.7)	252 (91.3)	0.075
	Yes	8 (4.4)	175 (95.6)	
Anxiety	No	19 (7.8)	224 (92.2)	0.442
	Yes	13 (6.0)	204 (94.0)	
Depression	No	27 (7.9)	315 (92.1)	0.218
	Yes	5 (4.5)	107 (95.5)	

Table 4: Multiple logistic regression table on associated factors of Dental Anxiety.

	B	Wald	Exp (B)	95%C.I		p-value
				Lower	Upper	
Gender Male (reference) Female	0.833	4.483	2.301	1.064	4.978	0.034
Age	-0.028	3.930	0.972	0.946	1.000	0.047

DISCUSSIONS

- The prevalence of dental anxiety among general population in Kuantan is **markedly high with 93.1%** of respondents having from low to extremely high dental anxiety which is comparable with previous study [1,2].
- Female has higher percentage (95.8%) of having dental anxiety** compared to male (89.4%). This result is in line with previous studies . This may be due to male have higher tendency to hide their fear due to people perception towards their gender role [3]
- Younger people have higher tendency to get dental anxiety** compared to the older one. This result is in concordance with other studies which observed a significant reduction in dental anxiety as age increases [4].
- There is no significant** association found between depression, anxiety and stress with dental anxiety , which disprove the previous studies.[5]

CONCLUSION

General adult population in Kuantan have **high prevalence of dental anxiety**.

- Female** adults show higher percentage of dental anxiety than male adults.
- Younger age** has higher prevalence of dental anxiety.
- Other contributing factors such as socioeconomic status, educational level and religious practice were shown to have no significant association to dental anxiety.
- No significant correlation** found between depression, anxiety and stress with dental anxiety.

REFERENCES

- Klingberg, G. and A. Broberg, *Dental fear/anxiety and dental behaviour management problems in children and adolescents: A review of prevalence and concomitant psychological factors*. International journal of paediatric dentistry / the British Paedodontic Society [and] the International Association of Dentistry for Children, 2007. **17**: p. 391-406
- Armfield, J., G. Slade, and A. Spencer, *Dental fear and adult oral health in Australia*. Community dentistry and oral epidemiology, 2009. **37**: p. 220-30.
- Anttila, S., et al., *Symptoms of depression and anxiety in relation to dental health behavior and self-perceived dental treatment need*. (0909-8836 (Print)).
- Gunjal, S., D.G.S. Pateel, and S. Parkar, *Dental Anxiety among Medical and Paramedical Undergraduate Students of Malaysia*. International Journal of Dentistry, 2017. **2017**: p. 5.
- Drachev, S.N., T. Brenn, and T.A. Trovik, *Prevalence of and factors associated with dental anxiety among medical and dental students of the Northern State Medical University, Arkhangelsk, North-West Russia*. International journal of circumpolar health, 2018. **77**(1): p. 1454786-1454786.
- Ali, S., et al., *Self-reported anxiety of dental procedures among dental students and its relation to gender and level of education*. Journal of Taibah University Medical Sciences, 2015. **10**(4): p. 449-453.
- Mohammed, R., et al., *Prevalence of dental anxiety and its relation to age and gender in coastal Andhra (Visakhapatnam) population, India*. Journal of natural science, biology, and medicine, 2014. **5**: p. 409-14.