

Sex Difference in Response to Dental Anxiety and Pain

Kiruthika Patturaja,

Student, First Year BDS,

Saveetha Dental College And Hospitals,

Saveetha University, 162, P.H. Road, Chennai-600077.

Kathiravan,

Associate Professor,

Department of Oral and Maxillofacial Surgery,

Saveetha Dental College And Hospitals,

Saveetha University, 162, P.H. Road, Chennai-600077.

Abstract

Aim and objective :

The purpose of this study is to correlate and investigate the relation between gender and past experience to dental pain and anxiety

Background:

Pain is a complex experience which is affected upon various psychosocial and biological factors. Anxiety and frustration were the emotions highly related to pain. Sex correlated difference in pain have been focused on first order in this study.

Materials and method:

A total of 50 patients (25 females and 25 males) are included in this study. Questionnaire was used to assess the level of dental pain and anxiety related to their past dental experience.

Result:

The high level of response to anxiety was seen in females about 40% while low level in males 28%. Males had frightened sensation of pain because of their past negative outburst compared to female.

Conclusion:

Female have high level of dental anxiety while male were suspected to dental fear.

Keywords: dental pain, anxiety, sex, past experience.

INTRODUCTION:

Dental pain and anxiety is one of the most common phobia among the people. Pain is defined as a unpleasant sensation associated with sensory and emotional stimuli. Anxiety is due to emotion aroused by danger or pain because of distress. Tooth ache is one of the major force which drives a patient towards a dentist. Dental pain and anxiety are one of the important thing which prevents the patients from visiting a dentist⁽¹⁾. Pain and anxiety are considered as a negative feeling which may also arise due to unawareness of anaesthesia, needle phobia and use of drills⁽²⁾.

Dental anxiety may also be associated due to previous negative dental experience⁽³⁾. Those with positive attitude towards a dentist were not much prone to dental anxiety⁽⁴⁾. Dental anxiety limits the visit to dentist which in turn worsens the oral health thereby causing various dental problems⁽⁵⁾. There are few ways to treat a patient with dental anxiety they may be use of drugs, distraction and imaginal exposure⁽⁶⁾. Behavioural and psychological implements must be provide to erode the anxiety. Various other reasons for dental pain and anxiety as irregular dental attendance and needles. Assessing and alleviating the dental fear and anxiety is important as it enhances good oral health⁽⁷⁾. Patients associated with dental anxiety are difficult to treat.

This study aims in finding relation between sex and dental anxiety and pain.

MATERIALS AND METHOD:

A questionnaire based survey was conducted among a total of 50 people which consists of 25 male and 25 female as this study was conducted to evaluate the sex difference in response to dental anxiety and pain. The target population of the study was aged above 25 years. This study was conducted in patients who visited a private dental college in Chennai. A questionnaire with 10 predesigned questions with multiple choice answers were given to the patients and requested them to respond to it based upon their past dental experience (appendix 1). This survey was conducted from 10th January to 20th January of 2016.

The questionnaire consists of questions like fainting in dental chair due to pain, taking somebody for company to reduce fear and ambience influence to reduce pain etc. To specifically assess the level of anxiety the patients were asked about the response to anxiety like low, moderate and severe. Descriptive statistics were obtained from the data collected from the patients using Microsoft Excel.

RESULTS:

The respondents successfully completed the questionnaire. The level of anxiousness were assessed from low to severe (graph 1). The severity of anxiety level due to dental pain in male were found to be 28% while that in female was 40%. Moderate anxiety level was seen high in male 60% while that in female was only 52% and low level of anxiety were in male about 12% and in female it was 8%. Various other factors were also considered for dental pain and anxiety. It was found that 68% female take

someone along with them for company to reduce the fear while 44% male take someone for company along with them. It was found that even ambience such as television, music, magazines in clinic play a major role in reducing the pain sensation and anxiety level in 28% male and 48% female

the same pain again when their dentist call them for their next appointment (graph 3). Most of the female patients about 60% preferred female dentist for treatment as they felt comfortable with dentist of same gender while their preference for male dentist was only 20%. In case of male patients 36% preferred female dentist and 40% preferred male dentist.

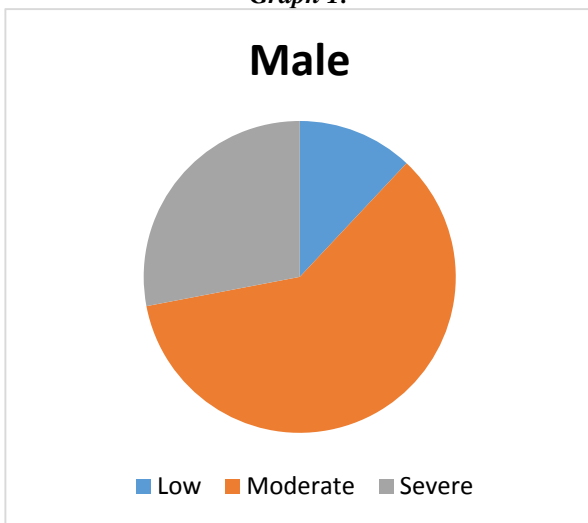
Table 1: The response to dental anxiety among male and female

	Low	Moderate	Severe
Male	12	60	28
Female	8	52	40

Table 2: Factors which may reduce fear:

	Company to reduce fear	Ambience	Prefer new dentist
Male	44	28	44
Female	68	48	56

Graph 1:



Graph 2:

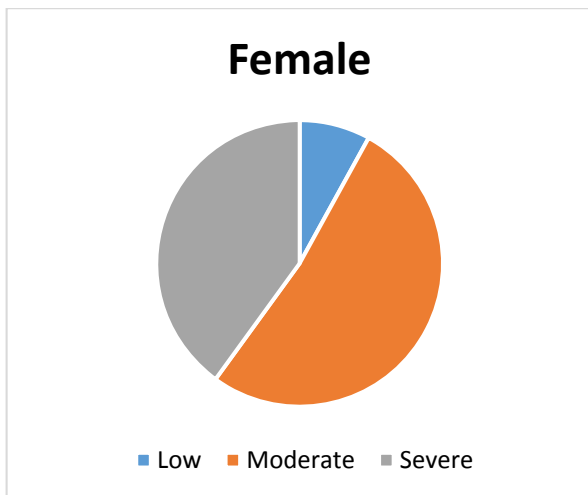
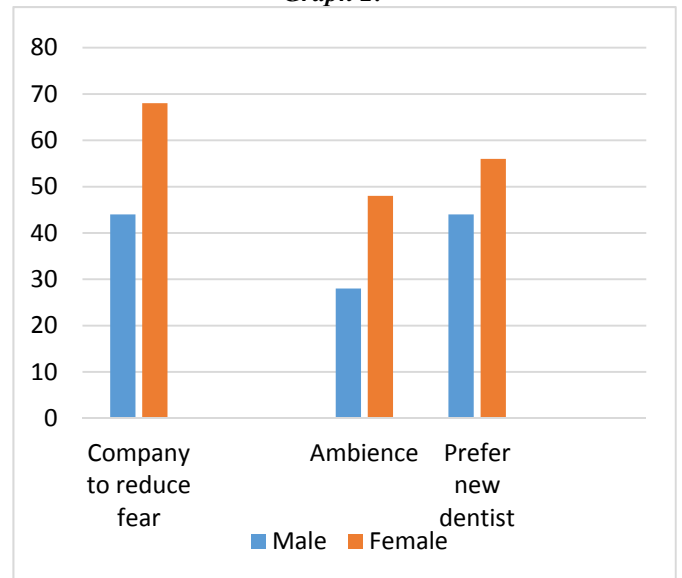
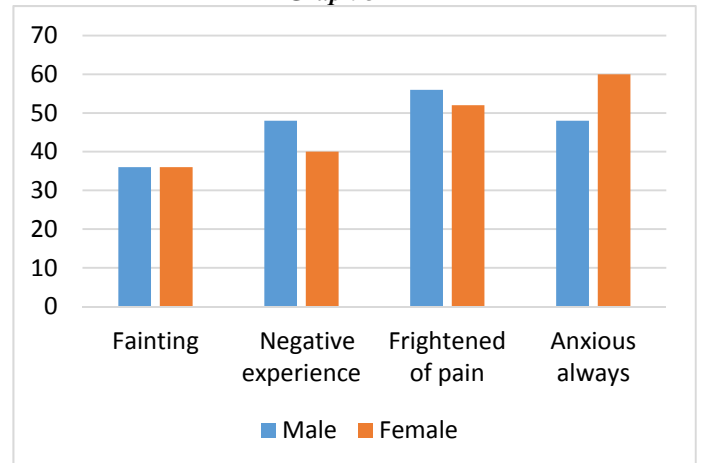


Table 3: Factors associated with increase fear

	Fainting	Negative experience	Frightened of pain	Anxious always
Male	36	48	56	48
Female	36	40	52	60

Graph 3



Due to negative experience of dental pain about 44% male and 56% female preferred to change their dentist next time (graph 2). It was seen that 48% male and 60% of female fear the same anxiety in their next visit which they experienced in the past. Both male and female about 36% fainted in the dental chair due to pain during the procedure. Because of past outburst due to severity of pain about 64% male and 40% female felt embarrassed to visit the dentist next time. It was also found that about 56% male and 52% female were frightened that they will experience

DISCUSSION:

K.M.Milsom et al conducted a study and it was found that dental anxiety is closely associated with a symptomatic of irregular attendance pattern ,history of extraction and having a dentally anxious parent.The most common fear was associated with the use of instruments such as needle and drill which produced vibration and noise of which they experienced discomfort⁽⁹⁾.

Music did not show much distraction of pain and anxiety in paediatric patients ⁽¹⁰⁾.Lack of dental health education might lead to anxiety among patients which in turn results in poor patient compliance and attitude.Studies also suggest that dental anxiety was due to irregular dental attendance⁽¹¹⁾.

Klingberg et al found that dental fear decrease with increase in agealso general fears and maternal dental fear had a impact on dental fear in children ⁽¹²⁾.All patients exaggerated their recall of procedure pain, but only those high in trait dental anxiety exaggerated their recall of anxiety⁽¹³⁾.

Results of our finding suggest that The prevalence of dental anxiety in females were found to be high than male . Incontrast male had a higher percentage of frightened sensation because of their past outburst in dental chair which makes them embarrassed to visit their dentist next time.Ambience such as music and magazines helps in distracting the anxiety in adult patient in the waiting room. The reason of anxiety was mainly because of their past negative dental experience .

CONCLUSION:

Hence it was interesting to note that female patients wish to seek treatment but have a higher level of dental anxiety whereas male patients avoid dental treatment because they are frightened about pain and their negative experience . Therefore further studies must be conducted on how to eliminate dental fear in anxious patientsand awareness about regular dental check up to maintain a good oral hygiene.

REFERENCE:

1. Sheetal sanicop et al :Relationship between dental anxiety and pain perception during scaling .journal of oral science 2011 .Vol. 53 (2011) No. 3 September P 341-348. <http://doi.org/10.2334/josnusd.53.341>
2. LyndsayC.bare et al :strategies for combating dental anxiety .Journal of dental education November 1, 2004 vol. 68 no. 11 1172-1177
3. David locker,David Shapiro,Andree Liddell :Negative dental experiences and their relationship to dental anxiety .Community dental health 1996.
4. V.Colares et al : Dental anxiety and dental pain in 5-12year old children in Recife,Brazil . European academy of paediatric dentistry,February 2013, Volume 14, Issue 1, pp 15-19.
5. Locker D:psychosocial consequences of dental fear and anxiety.Community Dent Oral Epidemiol. Volume 31, Issue 2, pages 144-151, April 2003 DOI: 10.1034/j.1600-0528.2003.00028.x
6. P McGolrick et al : Dental anxiety:Referrals to a secondary care dental clinic for anxious adult patients:implications for treatment .British Dental Journal 22 December 2001 | doi:10.1038/sj.bdj.4801270
7. Coric A, Banozic A, Klaric M, Vukojevic K, Puljak L. Dental fear and anxiety in older children: an association with parental dental anxiety and effective pain coping strategies. Journal of Pain Research. 2014;7:515-521. doi:10.2147/JPR.S67692.
8. KM Milson et al : The relationship between anxiety and dental treatment experience in 5 year old children ; British Dental Journal 503 - 506 (2003).doi:10.1038/sj.bdj.4810070
9. Soraya coelho leal et al : Dental anxiety and pain related to ART ; Journal of applied oral science 2009 vol.17 .<http://dx.doi.org/10.1590/S1678-77572009000700015>
10. Jennifer Creem Aitken et al : The effect of music distraction on pain,anxiety and behaviour in paediatric patients.Pediatric Dentistry - 24:2, 2002
11. WaelMousaAL-omari et al .Dental anxiety among university students and its correlation .J. Appl. Oral Sci. vol.17 no.3 Bauru May/June 2009 <http://dx.doi.org/10.1590/S1678-77572009000300013>
12. Klingberg et al.Dental fear in an urban Swedish child population: prevalence and concomitant factors.Community Dental Health [1994, 11(4):208-214
13. D.W.McNeil et al. Memory of Pain and Anxiety Associated with Tooth Extraction.JDR February 2011 vol. 90 no. 2 220-224.doi: 10.1177/0022034510385689