

Evaluation of Stress Among Postgraduate Clinical Residence in Faculty of Dentistry, Universiti Teknologi MARA (UiTM), Malaysia: A Pilot Study.

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Abstract: To identify the perceived stressor among dental postgraduate clinical residents in Faculty of Dentistry, Universiti Teknologi MARA (UiTM). **Materials and methods:** Thirty-one postgraduate clinical residents (PG) were invited to participate in the study via online survey. Among the 31, only 25 (80.7%) responded to the questionnaires. **Result:** Majority of the respondent (80%) were females and the mean age was 31 (SD=62.64). The result showed that 53.3% of the PG reported they were stressed, with female (87.5%) being more stressed than males but this was statistically non-significant. Main contributor for elevated stress levels were (i) lack of time for relaxation and neglect of personal life (86.7%), (ii) too much workload inadequate time (93.3%), and (iii) stress of academic activities like seminar and case presentation (100%). Hanging out with friends (83.3%) and music (76.7%) were found to be the most preferred option of PG to cope with stress. **Conclusion:** The current study found PG clinical residents in Faculty of Dentistry, UiTM have high level of stress. The findings of this study further support the need to consider re-evaluation and improvement of the curriculum design in order to minimize students' stress level.

1. Introduction

Stress is associated with many professions including dental field and is commonly encountered among undergraduate dental students¹. This phenomena worsens during postgraduate study which takes 3 to 4 years of study before becoming as a specialist¹. Unlike the undergraduate students, postgraduate students were absolutely target of stress. This is due to factors such as physical and mental, family, job, relationship and social sources of stress among the students². A number of stressors such as the amount of assigned work, completing graduation requirement, competition with peers, examination and assessment, fear of failure, lack of time for leisure activities and lack of confidence to be a successful student has been identified as the main factors for the reported stress among students^{3,4}. All these factors collectively contribute to significant amounts of stress for postgraduate students, which put them at additional risk for other negative implication⁵. Thus, the objectives of this study were to identify the perceived sources of stress and coping strategies among postgraduate clinical residents in UiTM.

2. Materials and method

Upon ethics approval, 31 postgraduate clinical residents were invited to participate in the study via online survey through their respected email. The questionnaire consisted of 3 parts which were further divided into 33 items. Data were collected and tabulated in Microsoft Excel. Statistical analysis of the collected data was performed using SPSS version 24 for mean values and standard deviation. The t-test was used for independent samples to compare scores by gender. Analysis of variance (ANOVA) was used to compare the stress level between the courses and years of study. Percentages and mean for each stressor were used to compare between different gender, years of study and type of courses.

3. Results

Out of 31 postgraduate clinical residents from different specialities, only 25 participated in the study (participation rate of 81%). Twenty (80%) were females and 5 (20%) were male students. The age of the participants ranged from 28 to 34 years with a mean age of 31 (SD=62.64). From the total of 25 respondents, 40% (n=10) were from Periodontology, 28% (n=7) from Orthodontics and 32% (n=8) from Prosthodontics (Figure 1). With

the clinical residents of Prosthodontics were found to more stressed than the residents of Periodontology and Orthodontics as shown in Figure 2. The postgraduate clinical residents reported (i) lack of time for relaxation and neglect of personal life (86.7%), (ii) too much workload inadequate time (93.3%), and (iii) stress of academic activities like seminar and case presentation (100%) to be the main contributors to their stress. Most of them (both male and female) chose music as their mechanism of choice in coping with their stress. Other than that, taking a break from their busy schedule and hanging out with friends were another strategies in coping with their stress.

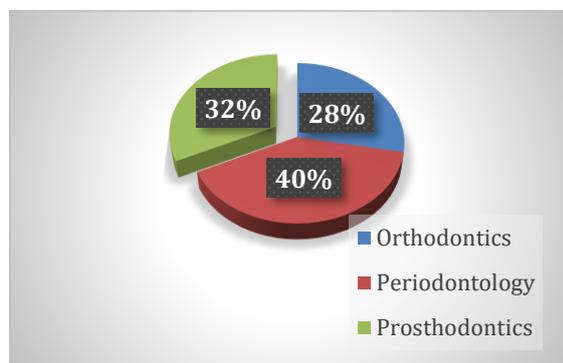


Figure 1 Number (%) of postgraduate clinical residents according to course

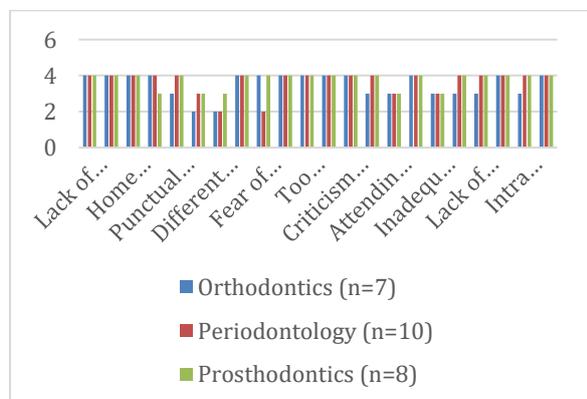


Figure 2 Perceived stressor among the postgraduate clinical residents according to course of study

4. Discussion

The objectives of this study were to identify the perceived sources of stress and coping strategies among postgraduates clinical residents in UiTM, Faculty of Dentistry. The study was conducted to ascertain whether the stressors vary between the different courses of offered. It was aimed to discover if gender, age or marital status would affect the perception of sources of stress. Through

the identification of perceived stressors throughout the programme (course of study), modification of teaching and/or curriculum or environment to be more conducive, and more proactive approach stress management could be applied. Postgraduate clinical residents were reported to have a higher stress level than the undergraduate dental students¹. In this study, postgraduate clinical residents aged more than 31 years old and married were found to be more stressed that students who aged less than 31 years. We can relate that the reason postgraduate clinical residents age above 31 years old and married have higher level of stress might be because of the role of married students in taking care of their families and also study, which can be described as a dual career.

While viewing stress levels in different years of study, final year postgraduate clinical residents was the most stressful followed by second years and third years and the least stress was first year postgraduate clinical residents. It was found that year four postgraduate clinical residents expressed curriculum factors as the greatest stressor, where they have thesis be completed and also facing criticism from staff for academics and clinical work.

In the current study, we found the final year postgraduate clinical residents suffered from greater stress compared to their juniors. This is in agreement with previous study⁶ which suggested the coursework becomes more difficult with each passing year. The postgraduate clinical residents found that the curriculum factors were the main stressor of their increase in stress level which were too much work load and inadequate time, stress of academic activities, criticism from staff for academics and clinical work, coping with faculty mood swings and inadequate library support^{7,8,9}.

Among the 3 programs that were included in this study, the result showed that the most stressful courses from all universities was Prosthodontics and the less stressful was Periodontology. The prosthodontics postgraduate clinical residents conveyed that the factor which was curriculum factors cause them to have high level of stress. Too much work load and inadequate time and stress of academic activities are the most stress items that them to feel stress. Postgraduate clinical residents from Periodontology, Orthodontics and others department also agreed as the curriculum factor was the main factors that increases their stress level^{10,11,12}.

Overall, main contributor for elevated stress levels were found to be lack of time for relaxation and neglect of personal life (86.7%), too much workload inadequate time (93.3%), and stress of academic activities like seminar and case presentation (100%).

5. Conclusion

As a conclusion, the postgraduate clinical residents in Faculty of Dentistry, reported to have high level of stress. The study further concluded that there were various factors that contribute to the condition and also various mechanism for stress coping strategies. The findings of this study further support the need to consider re-evaluation and improvement of the curriculum design in order to minimize students' stress level. Staff and administrators of the dental schools could use the orientation or introduction courses to address these potential stressors. And, through the acknowledgement of potential stressors, it may be helpful and useful to students in their stress management during the education process, and hopefully would prompt them to attempt a less stressful lifestyle.

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