



CHAPTER II

REVIEW OF RELATED LITERATURE

Stress in Dental students

The presence of psychological stressors, when prolonged or untreated, could lead to stress symptoms including anxiety, tension, depression, phobias and various physical complaints such as fatigue, dizziness, tachycardia, sleeplessness and gastrointestinal system distress.(3) Severe stress-producing depression and anxiety with or without physical symptoms can immobilize, making individuals ineffective in coping with demands of the difficult curriculum.(4)

Dental students show higher levels of depression, obsessive-compulsive disorders, and interpersonal sensitivity than matched norms.(14) Indeed, similar levels of depression, anxiety, and anger-hostility have been reported to those who observed in psychiatric outpatients.(15) Exceptionally high levels of emotional exhaustion were found in a large sample of first-year undergraduate dental students in Europe. (16)

Furthermore, there is evidence that high stress levels impair immune system function.(3) In addition to health deficits, a negative association has been reported between stress and the academic performance of dental

students.(17) Altogether, these findings suggest that stress in dental students is detrimental to health, and is associated with cognitive impairment.
(4)

Many students find themselves in a continuous conflict between the necessity to study and the necessity to relax, or to do something irrelevant to dentistry.(18) Faced with this dilemma, students may show much frustration, which is often pointed towards the faculty and administration (who are blamed for causing the problems).

In the study of stress in Chiang Mai University dental students show no significant difference in the mean stress index between 2 tests performed in different time (before mid-year examination and before final examination). However, statistically difference was found among different classes. The second and the third year students have higher stress index than the first year students. The stress-related factors were personal physical health, medication, learning problems, residential problems and lack of exercise.(19)

The study in a group of Chulalongkorn University dental students(13) shows no significant difference in stress index between preclinical, clinical, and graduated students. However, forty percents of preclinical students have higher stress index that the total mean stress index. The students with stress potential tend to smoke and lived in uncomfortable environment.(13) The stress-related factors were time factors in dental subjects, preparation and time schedules.(13) The relationship between dental students and nurses was also affected.(13)

Garbee reported that academics was the most stressful area of all students, especially freshman; juniors were more concerned about completing graduation requirements than other class; women found learning manual skills more difficult than men.(20)

Irrespective to gender, residency status, and class year, students ranked examinations and grades as the single most stress-inducing concern. (21) Overall, stress intensity tends to escalate overtime, peaking in the last year of training. It is suggested that dental students may be unhealthy perfectionism, placing them at risk for the harmful consequences of chronically elevated stress levels.(21)

In male-female comparisons, many significant differences are indicated. Example are lack of patients' co-operation in their home care, lack of confidence to be a successful dental student, lack of time for relaxation, etc. (22) The stress items for each class was different, the first two classes year perceive amount of assigned class-work, difficulty of class-work, and examinations and grades as more stressful than the last two classes year, which endorse completing graduation requirements as more stressful.(22)

The study in a black dental school that emphasizes the importance of non-academic stressors shows that the most stressful by all classes was inadequate time for social activities.(11)

Comparison between American and South East Asean (Singapore) dental school across their entire curricula (D1-D4 years) show that the greatest stressors for Singapore students were completing graduation

requirements. American students were most stressed by examinations and grades. The overall perception of stress by Singapore students was higher than for their American counterparts.(23)

No studies have identified the potential stressors for Thai dental schools. Moreover, the study pattern of Thai dental school differs from dental schools in the west, or even in other SEA countries such as Singapore in that it is a 6-year-curriculum, while others are 4-year-curricula. Different culture is another reason why the developed questionnaire cannot be used.

Curriculum of the Faculty of Dentistry, Chulalongkorn University

The structure of the present curriculum of the Faculty of Dentistry, Chulalongkorn University was grouped as “one-two-three”. The general subjects were studied in the first year. The general subjects consisted of the social sciences, humanities, languages, basic sciences and mathematics.

In the second and the third year, the students have to study the faculty’s core courses and some of the professional areas of concentration. The faculty core courses consists of lecture and laboratory practice in Anatomy, Histology, Neuro-anatomy, Microbiology, Pathology, dental material, biochemistry, oral research methodology. The professional areas of concentration that was studied in the second and the third year is lecture and laboratory practice in basic for clinical practice such as complete denture, basic operative dentistry, etc. In “complete denture”, the students must learn the theory in making the denture for the patients, including how to make a denture in every step from the beginning to the end. In “basic operative

dentistry”, the students must learn the theory in preparation the cavity for different kind of restoration.

The fourth to sixth year dental students have to study and practice in clinical subjects. They spend most of the time in clinical practices. The clinical practices require knowledge in theory, manual skill in practice, management skill, communication skill and interpersonal relationships. The students in each year will face different situations so the stress that may occur might be different. The details of curriculum are shown in Appendix A.