

The Level of Quality of Life of Preclinic Students of Dental Medicine

Nawwal Jaddiyya Farha¹, Ranti Sita Rahmawati¹, Galang Ramadhan¹, Rizky Brilliant SM¹, Ingrid Theresia Panjaitan¹, Keyona Laila Olivia¹, Aulia Ramadhani²

¹ Undergraduate of Dental Medicine, Faculty of Dental Medicine, Universitas Airlangga, Indonesia

² Department of Dental Public Health, Faculty of Dental Medicine, Universitas Airlangga, Indonesia

Corresponding author: Aulia Ramadhani, Department of Dental Public Health, Faculty of Dental Medicine, Universitas Airlangga, Indonesia, address: Jl. Prof. Dr. Moestopo No. 47, phone numbers: (+6231) 5030255, 5020256, facsimile numbers: (+6231) 5020256, email: ramadhani.rara94@gmail.com

ABSTRACT

Background: Quality of life (quality of life) is an individual's perception of his position in life and is related to goals, expectations, standards, and attention in life. Some research abroad has proven that students majoring in health have an interest in perfectionism and have high expectations of the intended achievements for improving the quality of life.

Method: This research was a descriptive study with a sample of preclinical students of Universitas Airlangga. This research instrument consisted of a WHO-QoL questionnaire of 14 questions. The final results would be collected in the form of tables and percentages.

Results: In this study obtained 78 respondents (66 women, 12 men) from 4 preclinical forces (2016: 5 people, 2017: 24 people, 2018: 16 people, and 2019: 33 people). Of both groups, 79.5% of students had a good quality of life and 20.5% of them were poor. Where 64.5% of respondents with good quality of life were in the younger generation, and 35.5% of them were older generation. Poor quality of life was found in 7 students from the older generation (43.8%) and 9 young people (56.3%).

Conclusion: The quality of life of preclinical students of the Dental Medicine Faculty of Universitas Airlangga was quite good, and no significant differences were found in the duration of the study with quality of life.

Keywords: Quality of life, dental students, WHO-QoL bref

Correspondence:

Aulia Ramadhani

Department of Dental Public Health, Faculty of Dental Medicine, Universitas Airlangga, Indonesia, address: Jl. Prof. Dr. Moestopo No. 47, phone numbers: (+6231) 5030255, 5020256, facsimile numbers: (+6231) 5020256, email: ramadhani.rara94@gmail.com

INTRODUCTION

According to WHO, Quality of Life (QoL) is defined as an individual's perception of his position in life in the context of culture and value systems and their relationship to goals, expectations, standards, and concerns in life¹⁻³. In several countries research has been conducted on the quality of life of students in the health department⁴. Henning and Murphy research shows that severe perfectionism is one of the most common characteristics in students majoring health^{5,6}. The inclination of the nature of perfectionism coupled with high expectations of the intended achievement is a factor influencing the QoL of students majoring in health. In several systematic reviews, dental faculty students have high levels of stress and are more prone to anxiety, fatigue, and depression than the general population⁷⁻⁹.

Based on research, stress levels in students were high. Some of the causal factors found include the demands of the curriculum and the lack of spare time. This stress and fatigue can adversely affect the quality of life of students and cause significant difficulties in academic activities¹⁰. Therefore, without good stress management, these stressors can more easily worsen academic performance^{11,12} and even the Quality of Life and also give a negative effect on these students because there will be more challenges in the future¹³.

In this case, a comprehensive understanding of the correlation between stressors and the effects caused to minimize the stressors that might occur and also to improve the Quality of Life for dentistry students. The research method was done using information from the perspective of dental medicine faculty students about the importance of physical health, psychological health, and improvement of Quality of Life. The purpose of this study

was to assess the level of life quality of preclinic students in faculty of dental medicine Universitas Airlangga.

MATERIAL AND METHODS

This study used a descriptive research design to determine the quality of life of the Dental Medicine Faculty of Universitas Airlangga preclinical students. Data were obtained from surveys using the WHOQOL-BREF questionnaire^{14,15}. The population in this study was Faculty of Dental Medicine Pre-Clinical Students Universitas Airlangga with a sample of 78 students consisting of the semester I, III, V, and VII students. This research was conducted at the Faculty of Dental Medicine of Universitas Airlangga in October to November 2019.

The research instrument was using a questionnaire regarding the quality of life by WHO. Questions on the questionnaire contained 14 questions in which these questions included several variables in the form of questions about physical health, psychology, social relations¹⁶, and the environment. Questions about physical health included daily activities, levels of fatigue, work capacity or activities. Questions about psychological health were about negative feelings, self-confidence, thinking, learning, and concentration as well as the satisfaction of their belonging and questions about personal relationships representing questions about social relations. Data collection was done by distributing questionnaires to be filled out online via Google form. The results obtained were then processed and the final results were presented in the form of a table containing the percentage of the quality of life of the students of the Faculty of Dental Medicine, Universitas Airlangga.

RESULT

The Level of Quality of Life of Preclinic Students of Dental Medicine

Based on this study, on the quality of life of pre-clinical students at the Faculty of Dental Medicine, Universitas Airlangga, the results of the questionnaire that had been distributed before were filled by 78 respondents. The respondents were 66 female students and 12 male students from the 2016-2019 academic year. The following step was grouping them into two groups consisting first group (2019: 33 respondents and 2018:

16 respondents) and the second group (2017: 24 respondents and 2016:5 respondents.)

The questionnaire that we distributed contained questions regarding the quality of life of the students by linking the factors that affect the quality of life. The following are the results of the calculation of the data which categorizes the group into 2 groups: good and bad:

Table 1. Percentage of results per question component

No	Questions Amount	Percentage			
		Bad	Good	Bad	Good
1.	What do you think of the quality of your life?	4	74	94.9%	5.1%
2.	How often is your physical pain preventing you from doing activities according to your needs?	19	59	24.2%	75.6%
3.	How often do you need medical therapy in your daily life?	9	69	11.5%	88.5%
4.	How often is when you be able to concentrate?	12	66	15.4%	84.6%
5.	In general, do you feel comfortable and calm in your daily life?	10	68	12.8%	87.2%
6.	How healthy is the environment you live in (regarding the facilities and infrastructure)?	6	72	7.7%	92.3%
7.	Are you passionate enough to do daily activities	12	66	15.4%	84.6%
8.	Do you have enough money to afford your needs?	8	70	10.3%	89.7%
9.	How often do you have opportunity to have fun / recreation?	23	55	29.5%	70.5%
10	How good is your ability in socializing	10	68	12.8%	87.2%
11	How satisfied are you with your resting time?	29	49	37.2%	62.8%
12	How satisfied are you with your ability to run the activities of your daily life?	16	62	20.5%	79,5%
13	How satisfied are you with your personal/social relationship?	11	67	14.1%	85.9%
14	How often do you have negative feelings like 'feeling blue' (lonely), hopeless, anxious and depression?	44	34	56.4%	43.6%

Table 2. Cross-tabulation of force groups and quality of life categories

Group of Academic Year		Category of the Quality of Life		Total
		Bad	Good	
2019-2018	Total	9	40	49
	% per group of the academic year	18.4%	81.6%	100.0%
	% per category	56.3%	64.5%	62.8%
2017-2016	Total	7	22	29
	%per group of the academic year	24.1%	75.9%	100.0%
	%per category	43.8%	35.5%	37.2%
Total	Total	16	62	78
	%per group of the academic year	20.5%	79.5%	100.0%
	%per category	100.0%	100.0%	100.0%

To determine whether the respondent had a good quality of life or not, the score was summed up from the respondent's questions. If the results score was 14-42, the quality of life of the respondent was classified as poor and if the respondent scored 43-70 then the quality of life was classified as good. The following are the results of the calculation of respondents' scores:

DISCUSSION

This research was conducted to evaluate the level of quality of life in preclinical students of the Faculty of Dental Medicine, Universitas Airlangga. From the results of the study, it was found that the list of questions in WHOQOL-BREF related to the assessment of the level of

quality of life among the dental medicine preclinical students. Dental Medicine preclinical students at the Faculty of Dental Medicine of Universitas Airlangga responded to the questionnaire about the overall quality of their lives and their satisfaction with their health. A study showed that there was a decrease in the quality of life of medical students in Rio de Janeiro¹⁷. But the result of this study did not show a high percentage of poor quality of life in preclinical students at the Faculty of Dental Medicine, Universitas Airlangga.

Based on the data from this study, the highest percentage of the answers from the good group was found in the questions about the respondents' opinions on their quality of life. In this question obtained a good answer

group from 74 people (94.9%) of a total of 78 respondents. The state of quality of life and welfare of students was related to their perception of the educational environment and the existence of a supportive community that would improve the quality of life of the students and prevents them from experiencing fatigue (burnout) during their education¹⁸.

Whereas the highest percentage of bad group answers was found on the question of how often respondents had negative feelings such as 'feeling blue' (loneliness), despair, anxiety, and depression. From these questions, it was found that as many as 44 answers (56.4%) out of a total of 78 respondents were classified as poor. People would feel sad because of events that had befallen their lives now and in the past, but that sadness feeling would be at ease in the sense of reducing the level of sadness if someone told their sadness to their closest trustworthy person¹⁹.

According to research conducted by Dasman and Yanism, new students in the health sector had higher stress levels, related to academic and non-academic factors²⁰. However, from the results of this study, when viewed from a group according to the academic year, it could be seen that the percentage of poor quality of life categories was higher in the old generation (2017-2016), which was 24.1%. In this old generation group, there were 7 respondents out of 29 respondents who had poor quality of life, while in the new generation it was found that out of 49 respondents only 9 respondents (18.4%) had a poor quality of life category. Thus, the quality of life in the good category was found to be higher in the new generation category (2019-2018) because they were still undergoing the initial stages of lectures and had not experienced more pressure experienced by the old generation (2017-2016). Therefore, it differentiated them from the old generation (2017-2016). According to Jacob and Sanjaya, several factors that could affect the quality of life were physical factors on quality of life, psychological factors on quality of life, social factors on quality of life, and environmental factors on quality of life. Several factors that had been mentioned here could affect the quality of life of the preclinical students²¹.

Physical factors on the quality of life here could be illustrated by the available facilities on the campus where those students are studying. If the facilities and facilities are obtained by students were good and able to help to facilitate their daily work, then they will feel a better quality of life. Psychological factors were factors influencing the thinking of students where if they were having excessive stress, then it will reduce the quality of their lives and created a burden for doing the following college tasks. Social factors were factors that were very influential in students, determining whether these students could establish social interaction towards their surroundings or not if students could not establish good social relations with their surroundings, then they would not be able to make connections with students as it should be. Moreover, the next influencing factor was the environmental factor, here the environment could also play an important role in the ongoing quality of life of students, imposing that if the student was in a bad environment, then the quality of life of the student could be bad, if the student was in a good environment, then the quality of life of these students could improve and improve²¹.

CONCLUSION

From the results of the study, it could be concluded that the description of the quality of life of FK Airlangga pre-clinical students was quite good. There was no significant difference related to the length of the study period with the level of quality of life of the Dental Medicine Student, Universitas Airlangga. This research would have better results if the number of respondents studied is greater.

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REFERENCE

1. Harahap AW, Nasution MS. Comparison quality of life patients treated with insulin and oral hypoglycemic drugs. *IOP Conf Ser Earth Environ Sci.* 2018;125(1).
2. Molek, Abidin T, Bachtiar A, Pintauly S, Marsaulina I, Rahardjo A. Determining validity and reliability of oral health-related quality of life instrument for clinical consequences of untreated dental caries in children. *Vol. 9, Asian Journal of Epidemiology.* 2016. p. 10–7.
3. Brama K, Trelia B, Menik P, Hanna B. The relationship between oral health condition and systemic disease in healthy Indonesian population. *J Int Dent Med Res.* 2017; 10:465–9.
4. Andre A, Pierre G, Mcandrew M. Quality of Life Among Dental Students: A Survey Study. *J Dent Educ.* 2016;81(10):1164–1170.
5. Henning K, Ey S, Shaw D. Perfectionism, the impostor phenomenon and psychological adjustment in medical, dental, nursing and pharmacy students. 1998. 456–464 p.
6. Murphy R, Gray S, Sterling G, Reeves K, Ducette J. A Comparative Study of Professional Student Stress. *J Dent Educ.* 2008;73(3):328–337.
7. Elani H, Allison P, Kumar R, Mancini L, Lambrou A, Bedos C. A Systematic Review of Stress in Dental Students. *J Dent Educ.* 2013;78(2):5–7.
8. Susilawati S, Monica G, Fadilah RPN, Bramantoro T, Setijanto D, Wening GRS, et al. Building team agreement on large population surveys through inter-rater reliability among oral health survey examiners. *Dent J (Majalah Kedokt Gigi).* 2018;51(1):42–6.
9. Alzahem A, Molen H, Van D, Alaujan A, Schmidt H, Zamakhshary M. Stress amongst dental students: a systematic review. *Eur J Dent Educ.* 2011; 15:8–18.
10. Galán F, Polo J, Rios-carrasco B, Bullón P. Bournot, Depression and suicidal ideation in dental students. *Med Oral Patol Oral Cir Bucal.* 2014;19(3):1–6.
11. Pratiwi R, Akbar FH, Abdullah A, Maretta YA. Knowledge and self perception about preventive dentistry among Indonesian dental students. *Pesqui Bras Odontopediatria Clin Integr [Internet].* 2018;18(1):1–6.
12. Palutturi S, Rutherford S, Davey P, Chu C. Professional challenges to strengthen partnerships in the implementation of healthy cities in Indonesia: A case study of Makassar. *Res J Med Sci [Internet].* 2014;8(4):126–32.
13. Hidayatullah T, Agustiani H, Setiawan AS. Behavior management-based applied behaviour analysis within dental examination of children with autism spectrum disorder. 2018;71(32):71–5.

14. Malibary H, Zagzoog MM, Banjari MA, Bamashmous RO, Omer AR. Quality of Life (QoL) among medical students in Saudi Arabia: A study using the WHOQOL-BREF instrument. *BMC Med Educ.* 2019 Sep 9;19(1).
15. Shareef MA, Alamodi AA, Al-Khateeb AA, Abudan Z, Alkhani MA, Zebian SI, et al. The interplay between academic performance and quality of life among preclinical students. *BMC Med Educ.* 2015.
16. Setijanto RD, Bramantoro T, Palupi R, Hanani A. The role of attitude, subjective norm, and perceived behavioral control (PBC) of mothers on teaching toothbrushing to preschool children - Based on the Theory of Planned Behavior: A cross-sectional study. *Fam Med Prim Care Rev.* 2019;21(1):53-7.
17. Chazan A, Campos M, Portugal F. Quality of life of medical students at the State University of Rio de Janeiro (UERJ), measured using Whoqol-bref: a multivariate analysis. *Cien Saude Colet.* 2015; 20:547-556.
18. Tackett S, Wright S, Lubin R, Li J, Pan H. International study of medical school learning environments and their relationship with student well-being and empathy. *Med Educ.* 2016;1-10.
19. Lucassen P, Reeve J, Postma S, Hartman T, Ravesteijn H V, Linssen M, et al. Life & Times Feeling blue, sad, or depressed: how to manage these patients *Life & Times.* *Br J Gen Pr.* 2018;330-331.
20. Dasman H, Yanis A. An Assessment of The Stress Levels of Students Entering Medical School in Indonesia. *Indian J Public Heal Dev.* 2017;8(4):127-131.
21. Jacob D, Sandjaya. *JURNAL NASIONAL ILMU KESEHATAN (JNIK).* 2018. 1-16 p.