

**THE OUTCOME AND QUALITY OF WORK LIFE AMONG
PAEDIATRIC GRADUATE OF UNIVERSITI SAINS
MALAYSIA**

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**DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENT FOR THE DEGREE OF MASTER
IN MEDICINE (PAEDIATRICS)**



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CHAPTER I:

THE PRELIMINARIES

ACKNOWLEDGEMENT

First and foremost, all praises be to Allah SWT, the Lord of the universe who has bestowed upon me the strength, health and patience needed for me to complete this research. The completion of this study would not have been possible without the participation and assistance of so many people whose names may not all be enumerated. Their contributions are sincerely appreciated and gratefully acknowledged. I would like to express deep appreciation particularly to the following:

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LIST OF ABBREVIATIONS AND NOMENCLATURE

Hospital USM	Hospital Universiti Sains Malaysia
QWL	Quality of worklife
MMed	Master of Medicine
SLR	Simple Logistic Regression
MLR	Multiple Logistic Regression

ABSTRACT

Introduction: There are few factors that contribute to the good quality of work life (QWL) among the qualified Paediatricians in Malaysia. This study aims to determine the factors that influence its outcome.

Methods: A cross-sectional study was carried out throughout June to December 2021. Invitation was distributed through online platform to the cohort of Master of Medicine (MMed) in Paediatrics, graduated from Universiti Sains Malaysia (USM). The list of participants was obtained from the Postgraduate Office, and the current workplace were tracked using Malaysian Medical Council address and from the alumni social group. The QWL questionnaire was built onto Google sheet platform. The tool has a Cronbach alpha of 0.95.

Results: A total of 123 paediatricians participated in the study. Majority of the respondents were Malays (87.8%), Muslims (90%) and married (78%). 53.6% has good QWL. Factors that associated with good QWL were married status ($p=0.02$) and higher salary ($p=0.012$) using MLR test.

Conclusion: More than half of paediatricians graduated from USM have good QWL.

Key words: QWL, Paediatricians, Mmed, USM, MLR

ABSTRAK

Pengenalan: Terdapat beberapa faktor yang menyumbang kepada kualiti kehidupan kerja [KKK] yang baik di kalangan pakar pediatrik yang berkecuali di Malaysia. Kajian ini bertujuan untuk menganggarkan perbandingan antara KKK yang baik dan yang lemah dan menentukan faktor-faktor yang mempengaruhinya.

Kaedah: Kajian rentas telah dijalankan secara dalam talian sepanjang bulan Jun hingga Disember 2021. Soal selidik telah diedarkan kepada siswazah-siswazah Master of Medicine (MMed) Paediatrics lulusan Universiti Sains Malaysia (USM). Senarai siswazah-siswazah diperolehi dari Pejabat Pasca Siswazah, dan tempat kerja semasa dijejak menggunakan alamat yang diperolehi dari Majlis Perubatan Malaysia dan persatuan siswazah. Borang soal selidik tersebut dibina menggunakan Google Form dan Google Sheets. Jemputan peribadi telah dibuat melalui mesej. Penyelidikan primer telah dijalankan untuk menguji kebolehpercayaan dan kesahihan soal selidik, menghasilkan nilai kebolehpercayaan (Alpha Cronbach) sebanyak 0.95.

Keputusan: Sebanyak 123 pakar pediatrik telah menyertai kajian ini. Majoriti responden ialah Melayu (87.8%), Islam (90%) dan berkahwin (78%). 53.6% mempunyai KKK yang baik. Faktor yang menyebabkan KKK yang baik adalah status perkahwinan ($p=0.02$) dan gaji yang lebih tinggi ($p=0.012$) menggunakan teknik MLR.

Kesimpulan: Lebih separuh daripada pakar pediatrik lulusan USM mempunyai KKK yang baik.

Kata kunci: Kualiti kehidupan kerja, Pakar pediatrik, MMed, USM, MLR

CHAPTER II:

THE TEXT

Section A:

Introduction

INTRODUCTION

Upon reaching the third decade of the twenty-first century, and human resource management in enterprises continues to provide significant issues. The human component is widely acknowledged as the most significant organizational resource for determining an organization's growth and survival⁽¹⁾. Quality of work life (QWL) has always been considered a constant concern for human beings. From a global perspective, people have a different view of life and work, which makes them compare cultures and creativity at work, as well as the flow of ideas and values ⁽²⁾.

Despite the term QWL first emerged in scientific journals and the press in the United States in the 1970s, no universally agreed definition exists ⁽³⁾. The QWL means the extent to which employees are able to balance work and their personal needs. According to Garg et al. ⁽⁴⁾, the QWL covers a person's feelings about every aspect of work including economic rewards, benefits, security internal and external equity, working conditions, career opportunities, decision authority, and organizational and interpersonal relationships, all of which are very meaningful in a person's life. The QWL can also have different meanings for different professional groups. Doctors have a different pattern of working life – they work at any time of the day, often more than normal, and they consider the health and life of their patients more than their own personal needs.

The interest in the subject of job dissatisfaction of medical doctors has increased because it has a direct impact on healthcare ^(5,6). The quality of treatment can be significantly reduced in the case of a low level of satisfaction and high stress among doctors, and thus the reason for QWL research was undertaken among our population to ensure better service and work-life among the doctors in Malaysia.

From previous study, certain factors influence QWL, which are presented through models developed more than three decades ago, such as Walton's (1973) model, the Westley's (1979) model, and the Hackman and Oldham's (1975) model. These models are considered relevant to assess QWL studies⁽⁷⁾. However, for this research, Walton's (1973) model was selected because it combines the dimensions of QWL to be applied in different sociocultural contexts and because of its validity in terms of applicability in different types of research ⁽⁸⁾.

As with all healthcare professionals, the QWL of doctors indirectly affects quality of patient care and associated health outcomes. As such, identifying areas of poor QWL among paediatricians can help in the development of initiatives to improve their professional satisfaction, thereby enhancing job performance and employee retention.

This study aims to explore the QWL among USM's MMed Paediatric graduates since the commencement of the programme and determine the factors that influence good QWL among them.

2.1 SECTION B

STUDY PROTOCOL

2.2.1 Documents

submitted for

ethical approval

Dissertation proposal



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**THE OUTCOME AND QUALITY OF WORKLIFE AMONG
USM PAEDIATRIC GRADUATE**

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1.INTRODUCTION

1.1 BACKGROUND

Quality of work life (QWL) is relatively new concept which is defined as the overall quality of individual's working life. During 1970's, the idea of QWL was evolved, according to Walton, as a broader concept than the earlier developments, and something that includes the values, human needs and aspirations⁽¹⁾.

In this era of globalization, maintaining the quality of human inputs rises from maintaining the quality of work life perfectly. Rise in the quality of work life would help employees' well-being there by the well-being of the whole organization⁽²⁾.

QWL is a person's life. It covers a person's feelings about every dimension of work including economic rewards and benefits, security, working condition, Organizational and interpersonal relations and its intrinsic meaning in person's life. Therefore, we can simply say QWL is a concern not only to improve life at work, but also life outside work⁽³⁾.

1.2 JUSTIFICATION TO CONDUCT THE STUDY

Problem statement/rationale:

- a. This research intended to provide more reliable data regarding outcome of Mmed Paediatrics programme
- b. The relevant factors that have contributed to good QWL will be focused more
- c. More information on QWL among medical personnel.
- d. By analysing the result, these findings may help to get a more resourceful guide for us to improve our QWL.

2. RESEARCH HYPOTHESIS

Age, religion, race, status, current work place, subspeciality, working hours, tenure of service, income are the factors that contribute to the good QWL among Mmed USM Paediatric graduate.

3. OBJECTIVE OF STUDY

3.1 GENERAL:

3.1.1 To explore quality of life among USM's MMed Paediatric graduate since the commencement of the programme.

3.2 SPECIFIC

3.2.1 To describe the demographic characteristics of MMed Paediatric graduates.

3.2.2 To estimate the proportion of MMed Paediatric graduates with good and poor Quality of Worklife.

3.2.3 To determine the factors that influence good Quality of Worklife among the MMed Paediatric (compared to poor QWL)

4. LITERATURE REVIEW

N Chaiear, W Soonthornvinit and S Boonjaraspinyo conducted a study regarding Quality of work life among doctors in the University hospitals in health area 7 of Thailand⁽⁴⁾. They conducted studies among all 910 doctors in the university hospitals in health area 7 by using a web-based Thai Work-Related Quality of Life Scale-2 (Thai WRQLS-2). Out of the 910, 61.0% of them rated their QoWL as moderate scale. The eight sub-factors were rated as moderate to high for control at work, homework interface, and working conditions; moderate and high for general wellbeing; high down to moderate for employee engagement, job and career satisfaction, and moderate down to low for stress at work.

Soonthornvinit W conducted another study regarding Working Hours Related to Good Quality of Work Life (QoWL) among Doctors Working in Public Hospitals in Northeastern Thailand⁽⁵⁾. He recruited a total of 634 doctors for the study using the Thai Work-related Quality of Life Scale questionnaire. 206 or 32.5% of the 634 shows good QoWL while the remaining 428 or 67.5% having not good QoWL. Working 50 hours a week was most strongly associated with good QoWL; thus, to improve the QoWL among doctors working hours should be limited.

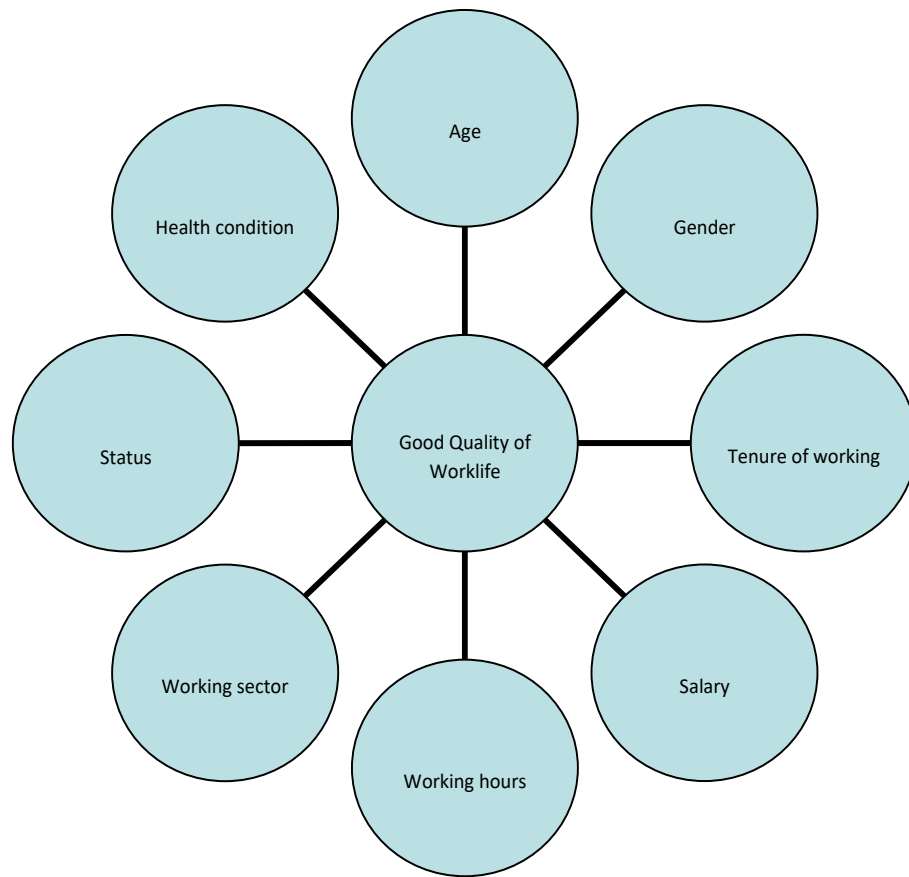
Another study regarding QWL was done by P Swarupa and was published in International Journal of Research in Economics and Social Sciences (IJRESS)⁽⁶⁾. The study conducted was regarding QWL of doctors in public and private hospitals – A comparative study. He collected a sample of 516 doctors working in public and privates in Twin cities of Telangana. All the factors of QWL (work environment, working conditions, compensation and comfort, support personnel, professional growth and hospital image) are showing significant difference in influencing QWL of doctors working in public and private hospitals.

One more study done by S Kaur et al regarding A Study of Job Satisfaction and Work Environment Perception among Doctors in a Tertiary Hospital in Delhi. Data collection was done among 250 doctors on tenure-based job, selected by stratified random sampling, in a teaching hospital in Delhi, by using a self-administered questionnaire. The outcome shows 49.6% of the doctors were dissatisfied with the average number of work-hours per day. 45.6% of the doctors considered their salary as 'bad' and more than half (55.2%) of the doctors were dissatisfied with their choice of profession, i.e., being a doctor, as compared to other professions⁽⁷⁾.

Another study from R Mayakkannan Purakala was done regarding Impact on quality of work life of Doctors with special to Chennai District⁽⁸⁾. 250 Doctors working across different hospitals streams in different colleges in a separate administrative and organisational set up in Chennai district were recruited for the study. There were 3 significant dimensions of QWL, namely work background, organisational philosophy, and situation, and prosperity factors that influence on the Quality of work life of doctors in college/universities and hospitals.

5. CONCEPTUAL FRAMEWORK

Quality of Work Life (QWL) is a philosophy, a set of principles, which holds that people are the most important resource in the organization as they are trustworthy, responsible and capable of making valuable contribution and they should be treated with dignity and respect. The elements that are relevant to an individual's quality of work life include the task, the physical work environment, social environment within the organization, administrative system and relationship between life on and off the job⁽⁹⁾.



6. RESEARCH DESIGN

6.1 STUDY DESIGN

The study design used is Cross-Sectional Study using validated questionnaire.

7. STUDY AREA

Study will be done at Hospital USM and all hospitals over the country including both government and private hospitals in Malaysia

8. STUDY POPULATION

8.1 Reference Population

All MMed Paediatric graduated from Malaysia

8.2 Target population

All MMed Paediatric graduated from USM

8.3 Source population

All MMed graduated from USM between 1992 and 2020

8.4 Sampling frame

All MMed graduated from USM since 1992 until 2020 who fulfilled eligibility criteria as listed in the subject criteria below.

8.5 Sampling Method

List from MMED Paediatric postgraduate students will be obtained from the Post Graduate Office, School of Medical Sciences. It is estimated that around 150 MMED Postgraduates graduated between 1992 and 2020, we will not apply any sampling method. All eligible postgraduates will be contacted and invited to participate in this study.

9. SUBJECT CRITERIA

9.1 Inclusion Criteria

- All MMed Paediatric graduated from USM between 1992-2020

9.2 Exclusion criteria

- Non Malaysian

10. SAMPLE SIZE ESTIMATION

Formula used to estimate the level of Quality of Worklife among MMed Paediatric graduates :

$$n = \frac{Z^2 p(1 - p)}{d^2}$$

n = min. required sample

Z = value of standard normal distribution = 1.96

d = precision = 5%

p = 32% (good quality of worklife among doctors from previous study) ⁽⁵⁾

n = 149

Considering 10% non-response, minimum required sample is 149 + 10 = 159

To determine the sample size for factors that influence good Quality of Worklife among the MMed Paediatric, PS Power calculator was used:

Variables	P ⁰	P ¹	m	n1	n2	ntotal
Gender	0.30	0.50	0.5	142	71	213
Status	0.26	0.46	2	136	68	204
Working hours	0.54	0.74	3	60	180	240
Tenure service	0.21	0.41	3	53	159	212

Salary						
Subspeciality	0.21	0.41	3	159	53	212
Working sectors	0.26	0.46	3	58	174	232

*W Soonthornvinit. Working Hours Related to Good Quality of Work Life (QoWL)
among Doctors Working in Public Hospitals in Northeastern Thailand*

11. RESEARCH TOOL

11.1 **Socio-demographic proforma:** Including Age, Religion, Race, Status, Year of enrolment and complete study, Current work place, Subspecialty, Working hours, Tenure of service, Income, Current position.

Sociodemographic and proforma

Participant code:

Age:

Year of Enrolment as MMed Student:

Year of completed MMed:

Race

☐ Malay ☐ Chinese ☐ Indian ☐ Sabah/Sarawak 'bumiputra'

☐ Others (Please state):

Citizen:

☐ Malaysian ☐ Non-Malaysian

Religion:

☐ Islam ☐ Christian ☐ Buddha ☐ Hindu ☐ Sikh

☐ Others (Please state):

Status:

☐ Single ☐ Married ☐ Widow/widower ☐ Divorced

Qualification:

☐ MD/ MBBS ☐ MRCPCH

☐ Master of Paediatric ☐ Others

Current Work Place

☐ Government ☐ University

☐ Private ☐ Army

☐ Overseas ☐ Others

Subspecialty

Finished ☐ Ongoing ☐ Not Started ☐

Salary (Per month):

(fill in the blank)

Tenure of service

☐ <5years ☐ 5-10 years ☐ 11-15 years ☐ > 15years

Working hours (Daily)

Working hours per week

☐ ≤ 8 hours ☐ > 8hours

Health hazard

☐ Yes ☐ No

Position in Government:

Position in NGO:

Position in MOH/ Hospital:

11.2 Quality of work life questionnaire

Walton's Quality of Work life questionnaire, included 35 five choice answers from completely dissatisfied (=1) to completely satisfied (=5)

Evaluated the quality of 8 domains work life including:

- a. Adequate and fair compensation
- b. Work and total life space
- c. Opportunity for continuous growth and job security
- d. Opportunity to develop human capacities
- e. Safe and healthy working environment
- f. Flexible work schedule and job assignment

- g. Attention to job design
- h. Employee relations

The QWL will be categorized base on total score as below:

Total score	QWL
35- 80	Poor
81-130	Moderate
131-175	Good

The content validity of the tools was confirmed by study done to staff nurses in Iran used nominal method to evaluate the justifiability of the questionnaire. Another method was used to determine the questionnaire perpetuity and its correlation coefficient was calculated as 0.9. A primary study to determine the justifiability and perpetuity of the questionnaire was performed, which resulted in a Cronbach alpha of 0.95. The questionnaire's reliability also has been examined by several previous studies and the reliability coefficient was reported to be between 0.86 and 0.95.

EVALUATION OF QUALITY OF WORK LIFE ACCORDING THE WALTON'S QWL MODEL

QUALITY OF WORK LIFE EVALUATION SCALE

Instructions

This questionnaire is to understand how you feel towards your Quality of Work Life. Please, answer all the questions. If you are not sure about the answer, please, choose between the options that seem more appropriated. We are asking how satisfied you are, regarding several aspects of your job in the past two weeks. Choose between the options and draw a circle around the number that best represents your opinion.

Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
1	2	3	4	5

1. Regarding a fair and appropriate salary (compensation):

1.1 How satisfied are you with your salary?

1	2	3	4	5
---	---	---	---	---

1.2 How satisfied are you with your salary, if you compare it to your colleagues' salary?

1	2	3	4	5
---	---	---	---	---

1.3 How satisfied are you with the recompenses and the participation in results that you receive from the government/ company?

1	2	3	4	5
---	---	---	---	---

1.4 How satisfied are you with the extra benefits (extra allowance, claims, , facilities, etc.) that government/ company offers to you?

1	2	3	4	5
---	---	---	---	---

2. Regarding your working conditions:

2.1 How satisfied are you with your weekly work journey (quantity of worked hours)?

1	2	3	4	5
---	---	---	---	---

2.2 According to your workload (quantity of work), how do you feel?

1	2	3	4	5
---	---	---	---	---

2.3 According to the use of technology in your tasks, how do you feel?

1	2	3	4	5
---	---	---	---	---

2.4 How satisfied are you with the salubrity level (work conditions) in your workplace?

1	2	3	4	5
---	---	---	---	---

2.5 How satisfied are you with the security equipments, individual and collective protection provided by government/ company?

1	2	3	4	5
---	---	---	---	---

2.6 Regarding tiredness that your work cause to you, how do you feel?

1	2	3	4	5
---	---	---	---	---

3. Regarding the use of your capacities at the work:

3.1 Are you satisfied with the autonomy (opportunity to make decisions) that you have at your work?

1	2	3	4	5
---	---	---	---	---

3.2 Are you satisfied with the importance of the task/work/activity that you do?

1	2	3	4	5
---	---	---	---	---

3.3 Regarding the polyvalence (possibility to performance several tasks and works) at work, how do you feel?

1	2	3	4	5
---	---	---	---	---

3.4 How satisfied are you with your performance evaluation (awareness of how good or bad have been your performance at work)?

1	2	3	4	5
---	---	---	---	---

3.5 Regarding possibilities conferred (work responsibility given to you), how do you feel?

1	2	3	4	5
---	---	---	---	---

4. Regarding opportunities that you have at your work

4.1 How satisfied are you with your opportunity of professional growth?

1	2	3	4	5
---	---	---	---	---

4.2 How satisfied are you with the trainings you participate?

1	2	3	4	5
---	---	---	---	---

4.3 Regarding the situations and the frequency that occur the resigning at your work, how do you feel?

1	2	3	4	5
---	---	---	---	---

4.4 Regarding the incentive that your government/ company gives you to study, how do you feel?

1	2	3	4	5
---	---	---	---	---

5. Regarding the social integration at your work:

5.1 Regarding the discrimination (social, racial, religious, sexual, etc.) in your work, how do you feel?

1	2	3	4	5
---	---	---	---	---

5.2 Regarding your relationship with your colleagues and bosses at work, how do you feel?

1	2	3	4	5
---	---	---	---	---

5.3 Regarding your team's and colleagues' commitment to work, how do you feel?

1	2	3	4	5
---	---	---	---	---

5.4 How satisfied are you with the valorization of your ideas and initiative at work?

1	2	3	4	5
---	---	---	---	---

6. Regarding the constitutionalism (respect to the laws) at your work?

6.1 How satisfied are you with the government / company for respecting the workers' rights?

1	2	3	4	5
---	---	---	---	---

6.2 How satisfied are you with your freedom of expression (opportunity to give opinions) at work?

1	2	3	4	5
---	---	---	---	---

6.3 How satisfied are you with the norms and rules at your work?

1	2	3	4	5
---	---	---	---	---

6.4 Regarding the respect to your individuality (individual characteristics and particularities) at work, how do you feel?

1	2	3	4	5
---	---	---	---	---

7.Regarding the space that the work occupies in your life:

7.1 How satisfied are you with the work influence on your family life/routine?

1	2	3	4	5
---	---	---	---	---

7.2 How satisfied are you with the work influence on your possibilities of leisure?

1	2	3	4	5
---	---	---	---	---

7.3 How satisfied are you with your schedule of work and rest?

1	2	3	4	5
---	---	---	---	---

8.Regarding the social relevance and importance of your work:

8.1 Regarding the proud of performing your work, how do you feel?

1	2	3	4	5
---	---	---	---	---

8.2 Are you satisfied with the image government / this company have to society?

1	2	3	4	5
---	---	---	---	---