RESEARCH ARTICLE

Work-life balance amongst residents in surgical and non-surgical specialties in a tertiary care hospital in Karachi

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Abstract

Objective: To assess work-life balance among medical residents at a tertiary hospital.

Methods: The cross-sectional study was conducted from September to December 2016 at a private-sector tertiary care hospital in Karachi, and comprised medical residents working at the facility. A standardised, self-administered questionnaire was developed on the basis of Canadian Mental Health quiz and a study in literature. The questions aimed at assessing satisfaction with work as well as emotional and personal life of residents in various medical and surgical specialties. SPSS 20 was used for data analysis.

Results: Of the 275 residents, 129(46.9%) were males and 146(53.1%) were females. The overall mean age was 28.19±2.194 years. Of the total, 13(4.7%) participants thought they had work-life balance; 165(60%) felt their job had negatively affected their private lives; 118(42.9%) felt worn out; 109(39.6%) expressed moderate dissatisfaction with work-related factors; 119(43.3%) were dissatisfied with life outside work; and 93(33.8%) were dissatisfied their health.

Conclusion: There was minimal work-life balance among the residents.

Keywords: Work-life balance, Residents, Developing country. (JPMA 70: 252; 2020) **https://doi.org/10.5455/JPMA.285942**

Introduction

Work-life balance (WLB) can be defined as the management of the actual and desired proportion of one's work and private life activities.[1] This refers to the time actually spent on work and private life compared to the time one hopes to spend on such activities.[1]

The outcome of work-life imbalance and its effects on health and satisfaction are well-known.[2,3] Work-life imbalance and long working hours are associated with significant burnout.[4] Studies in various parts of the world have demonstrated a link between a poor WLB and healthcare issues, such as hypertension, depression, stress, anxiety and substance abuse.[2,3,5]

A national survey of medical students, residents, and physicians in practice for less than 5 years in the United States (USA) revealed statistically higher rates of burnout and depression when compared to peers in the general population.[6] This coincides with literature revealing poor WLB amongst nurses and doctors.[1,6-9] A further cause of concern is the association between burnout and an increase in errors by healthcare professionals.[10,11]

Residency years represent a time of stress due to an ever-increasing workload which must be balanced with the attainment of new skills in a specific specialty. This makes WLB an important issue amongst residents. Current literature reveals an alarming incidence of burnout and work-life conflict amongst residents in surgical as well as non-surgical specialties.[12-14]

The current study was planned to assess WLB among residents at a private-sector tertiary hospital.

Subjects and Methods

The cross-sectional study was conducted from September to December 2016 at a private-sector tertiary care teaching hospital in Karachi, and comprised medical residents working at the facility. All the residents were approached for participation and those who furnished informed consent were enrolled. The questionnaire was a modified version of what was used by a study to assess WLB amongst surgeons in Hong Kong.[15] The Canadian Mental Health Association's quizon WLB was also utilised in designing the questionnaire.[16] The final questionnaire involved elements from both sources. The questionnaire and the study protocol were approved by the ethics review committee of Aga Khan University (AKU), Karachi. The questionnaire (Appendix) contained 4 sections. The first section had questions on socio-demographic factors, such as age, gender, marital status, medical school and year of graduation. Participants were also asked if they had ever heard of WLB and to assess whether their life had WLB.

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APPENDIX: QUESTIONNAIRE

A Work Life Balance amongst Residents: An Important but Overlooked Aspect in a Tertiary Care Hospital from a Developing Country.

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QUESTIONNAIRE

A. Demographic Data

1. Age: _____
2. Specialty: A. Surgical B. Non-surgical
3. Name of your Department / Section: _____
4. Status of Duty Today: A. Post-call B. On-call C. On-leave D. Not Applicable E. Other _____
5. Year of Graduation: _____
6. Medical College: A. Private B. Public
7. Year of residency: _____
8. Accommodation: A. Hostelite B. Outside Karachi _____ C. Karachi
9. Work hours/weekly (Average): _____
10. In a week, how many hours do you spend on the academic activities: _____
11. Marital status: A. Married B. Unmarried C. Divorced D. Widowed
12. Any children: A. Yes B. No
13. Number of children, if any ( ): _____
14. Are you satisfied with your pay scale? A. Yes B. No
15. Have you heard of Work Life Balance? A. Yes B. No
16. Do you think your life has a Work Life Balance? A. Yes B. No
17. Please Rate the following in the order of Preferences:

A. Work
B. Family
C. Hobby /Sports / Amusements
D. Friends
E. Time to Rest
F. Others _____

18. Gender: A. Male B. Female.

B. Please select one of the following options:

	Very Satisfied	Moderately Satisfied	Neutral	Moderately Dissatisfied	Very Dissatisfied
Satisfaction level at work					
Satisfaction level outside work					
In general are you satisfied with your health					

C. Please select one of the following options:

	Always	Often	Sometimes	Seldom	Never
Do you get behind with your work?					
Do you have enough time for your work tasks					
Is it necessary to keep on working on high pace?					
Do you work at high pace throughout the day?					
Does your work put you in emotionally disturbing situation?					
Do you have to relate to other people's personal problems as part of your work?					
Can you manage the amount of work assigned to you?					
Do you have a possibility of learning new things through your patient care?					
Does your work require you to take initiative?					
Do you feel that your place of work is of great importance to you?					
Would you recommend a good friend to apply for a position at your workplace?					
At your workplace, are you informed well in advance concerning for example important decisions, changes, or plans for the future?					
Do you receive all the information you need in order to do your work well?					

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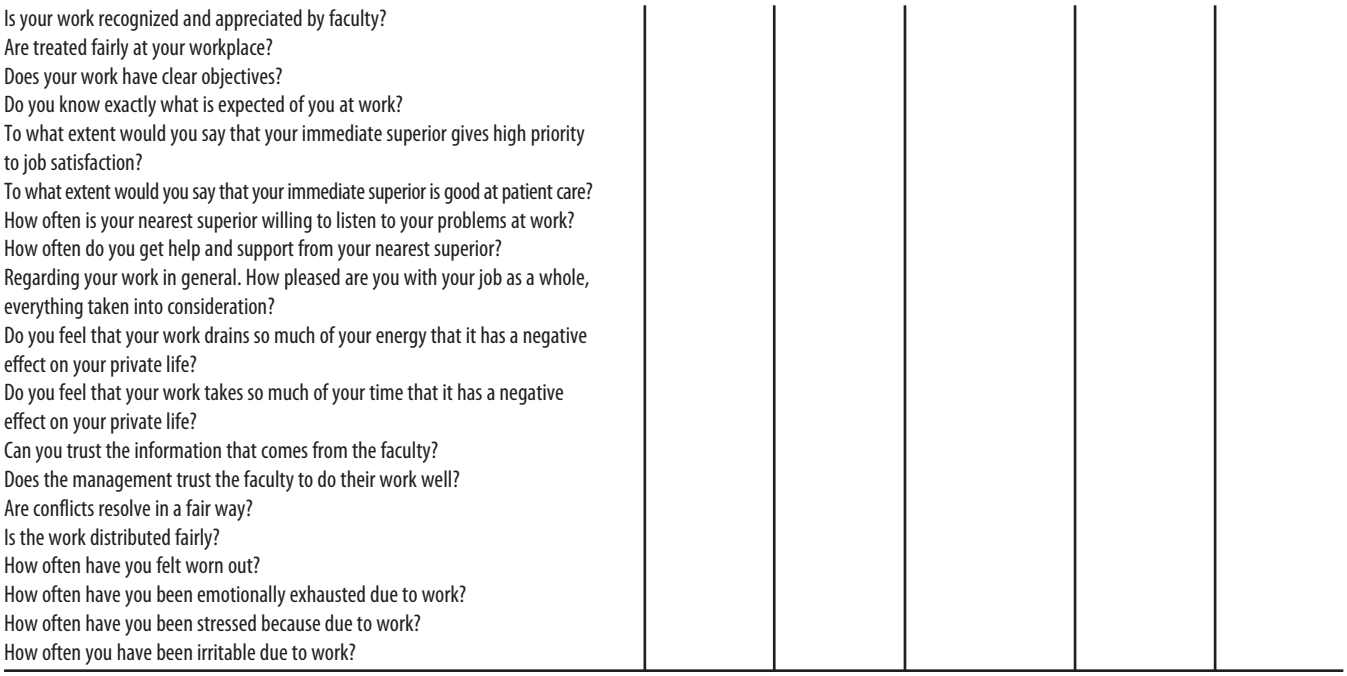


Suggestions to improve Work Life Balance:

1. Reduce work hours
2. Night floater system
3. Monitoring of Work Life Balance by PGME
4. Less stress from faculty
5. Better pay scale
6. Other

The second section assessed satisfaction levels of the respondents. This included satisfaction related to work, outside work, and with their general health condition.

The third section included questions on various aspects of work life, including the ability of the respondents to cope with the amount of work they were dealing with on a daily basis and overall attitudes related to their workplace, their satisfaction with the faculty and questions related to the emotional status of the respondents. Finally, the respondents were asked to give suggestions for improvement in WLB.

Data was coded and analysed using SPSS 20. Mean and standard deviation (SD) were calculated for continuous variables. The questionnaire also asked the respondents if they felt their life had WLB. This was considered a discrete parameter and reflected levels of WLB amongst the respondents. Hence, correlations between this parameter and other discrete parameters, such as marital status, were analysed using Chi-squared test. $P<0.05$ was considered significant. Correlations were calculated using Pearson's correlation.

Results

Of the 480 residents approached, 275(57.29%) responded; 129(46.9%) males and 146 (53.1%). The overall mean age was 28.19±2.194 years. Of the total, 193(70.2%) respondents were unmarried; 110(40%) were from Surgery; 108(39.8%) were from Medicine; 198(71.3%) were in their first three years of training; and 179(65.1%) had studied at public-sector medical colleges (Table-1).

The subjects worked a mean of 83.20±22.3 hours per week and 6.42±3.3hours per week were spent on academic activities. Besides, 257(93.5%) respondents expressed dissatisfaction with their salaries. Only 13(4.7%) respondents believed they had WLB; 109(39.6%) expressed moderate dissatisfaction with work-related factors; 119(43.3%) were dissatisfied with life outside work; and 102(37.1%) were dissatisfied with their health (Table2).

Overall, 146(53.1%) subjects said they seldom had the opportunity of learning new things via patient care, and 89(32.4%)felt their work was sometimes appreciated. In emotional aspects, 165(60%) residents felt their job had negatively affected their private lives, and 118(42.9%) felt

Table-1: Characteristics of the participants.

Variable	Frequency	%/Mean ± SD
Age	275	28.19±2.19
Gender		
Male	129	46.9
Female	146	53.1
Total	275	100
Specialty		
Surgery	110	40
Medicine	108	39.3
Others	57	20.7
Total	275	100
Post-graduate year (PGY)		
1	55	20
2	73	26.5
3	68	24.7
4	57	20.7
5	16	5.8
6	6	2.2
Total	275	100
Marital Status		
Married	82	29.8
Single	193	70.2
Total	275	100
Children		
Yes	45	16.4
No	230	83.6
Total	275	100
Number of Children		
1	31	68.9
2	6	13.3
3	6	13.3
4	2	4.4
Total	45	100%
Medical School		
Public	94	34.2
Private	179	65.1
Other	2	0.7
Total	275	100
Accommodation		
On-campus	56	20.4
Off-campus	219	79.6
Total		100

SD: Standard deviation.

worn out. Also, 36(13.1%) residents felt the faculty never considered their problems, and 117(42.5%) said work was unfairly distributed among the residents by the faculty.

The most commonly suggested measure for WLB improvement was a hike in pay scale which was mentioned by 238(86.5%) respondents; 229(83.3%) suggested reduction in work hours; 179(61.8%) felt WLB monitoring by the Department of Postgraduate Medical Education (PGME) would be helpful; and 169(61.5%)

Table-2: Resident's response to questions on work hours and satisfaction.

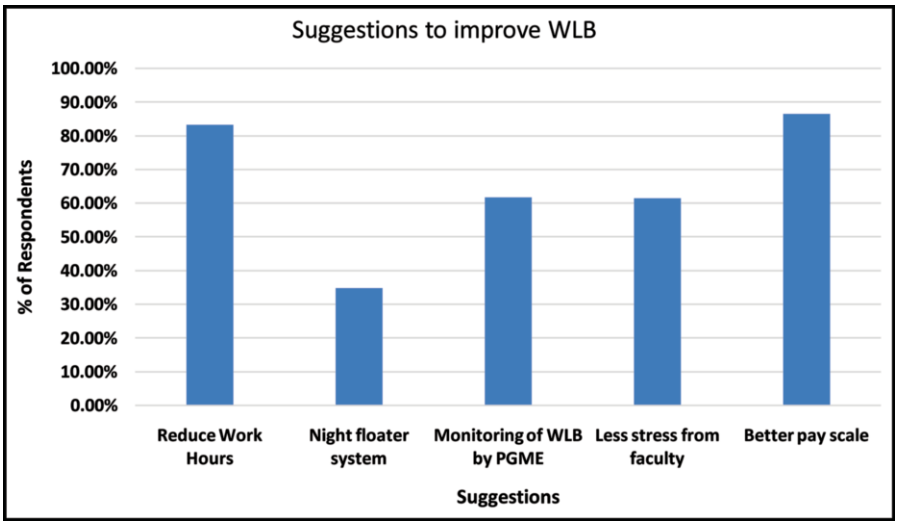
Variable	Frequency	%/Mean ± SD
Hours spent at work (Hrs.)	275	83.2±22.3
Hours spent on academic activities	275	6.42±3.3
Heard of WLB		
Yes	184	66.9
No	91	33.1
Total	275	100
Do you think your life has WLB?		
Yes	13	4.7
No	262	95.3
Total	275	100
Satisfied with your pay scale?		
Yes	18	6.5
No	257	93.5
Total	275	100
Satisfaction level at work		
Very satisfied	13	4.7
Moderately satisfied	45	16.4
Neutral	97	35.3
Moderately dissatisfied	109	39.6
Very dissatisfied	11	4
Total	275	100
Satisfaction level outside work		
Very satisfied	7	2.5
Moderately satisfied	29	10.5
Neutral	81	29.5
Moderately dissatisfied	119	43.3
Very dissatisfied	39	14.2
Total	275	100
Satisfaction with health		
Very satisfied	22	8
Moderately satisfied	58	21.1
Neutral	92	33.5
Moderately dissatisfied	93	33.8
Very dissatisfied	9	3.3
Total	274	99.6

WLB: Work-life balance
SD: Standard deviation.

Table-3: Factors associated with work-life balance (WLB).

Variables	P-value
Gender	0.232*
Specialty (Medicine, surgery, others)	0.620*
Post-graduate year (PGY) level	0.034*
Year of graduation from medical school	0.913
Medical school (private or public)	0.642*
Accommodation	0.620*
Hours worked weekly	0.212
Hours spent on academic activities	0.393
Marital status	0.939*
Presence of children	0.503*
Satisfaction with pay-scale	0.000*

* Chi-square test, other values measured using correlation.



WLB: Work-life balance

Figure: Suggestion given by resident for improvement in WLB.

stressed the need for a friendly faculty (Figure).

The satisfaction with WLB did not differ between genders, specialties, or any other element (Table-3). The only elements significantly associated with WLB were pay scale ($p<0.001$) and the level of postgraduate training ($p=0.034$).

Discussion

Work-life balance is important for keeping an individual productive. There is an increasing realisation of the importance of WLB in various professions. Most studies on WLB initially came from the corporate sector.[17-19] Realisation of the importance of WLB in medicine came much later. Work-hour reforms in 2002 can be considered a realisation of the impact of burnout and work-life imbalance.

Most of the work on physician burnout and WLB has been done in the West, particularly the United States. Physicians in developing countries tend to carry more stress as physician-to-patient ratio is amongst the lowest in the world.[20] Physicians in developing countries are also frequently underpaid. Trainee physicians or residents are therefore highly vulnerable to burnout and exhaustion. Despite its significance, WLB has not been studied adequately in developing countries.

The current study presents the views of a large group of residents from different specialties and showed that 95.3% of them were dissatisfied with their WLB. This figure is much higher compared to 42% in a similar study from Canada[21] and 32% in Switzerland.[22] Post-graduate level of training was significantly associated with WLB. Residents in second and third years of training were more dissatisfied with their WLB. Of the 141 residents in year II and III, only 1 was satisfied with his WLB. Most residents were dissatisfied with the pay scale, and suggested an increase in pay to improve WLB. While an improvement in the pay scale would not change the amount of time spent on social activities, it may lead to a greater appreciation of their work and quality of time. Several other studies support these findings.[12,21,22]

This is further illustrated in a study comprising obstetrics and gynaecology residents in Canada. It was clearly seen that a desire for an improvement in WLB amongst residents had a key influence on future decisions related to their profession.[23]

A study on Swiss residents showed no impact of gender or choice of specialty on WLB, which is consistent with the observations of our study.[22] However, various studies have listed down gender as an important factor. Men who are married tend to look forward to and are happier at work compared to women.[24,25] Moreover, women are more likely to be unmarried and have fewer children overall compared to men.[24] Spousal support is thought to be a protective factor against burnout.[12] Hence, this may explain why women are more likely to experience burnout compared to men.[12] Female residents are also at a higher risk for emotional exhaustion compared to their male peers.[12,24,25]

Most residents suggested a reduction in work hours and increment in salary. Long work hours are a major cause of burnout and higher grades of burnout are negatively related to WLB as seen in a study on otolaryngology residents in the US.[12]

Another study focusing on the impact of the Accreditation Council for Graduate Medical Education (ACGME)'s duty hour restrictions on general surgery interns in the US reveals a different perspective.[26] Some residents reported dissatisfaction with aspects of their work life. In particular, it was believed that the rules had

negatively affected continuity of care and time spent in the operation room (OR).[26] Moreover, less than half the respondents believed that there had been a reduction in their fatigue levels after the new duty hour restrictions.[26] Besides, 32% still reported "very poor" or "not great" WLB.[26] One in seven respondents also expressed a desire to give up their career in surgery on "at least a weekly basis."[26] Similar results were also seen in a review of the pros and cons of duty hour restrictions.[27] These restrictions appear to have resulted in an increase in emotional exhaustion and stress amongst residents.[27] This shows that a simple reduction in work hours may not be enough to improve satisfaction with work life and WLB in general.

Improving WLB would require a combination of measures, such as a reduction in work hours, greater mentorship and support from respective departments as well as their faculty. Clarity of assignment and learning outlines are also relevant issues as seen from our results. Mentorship is necessary for professional growth, especially in developing countries with less-than-ideal training facilities and growth opportunities.[28,29]

There are several limitations to the current study. Despite the large sample size, the response rate to the questionnaire was 57.29%. One reason could be the length of the questionnaire. Some of them said that filling such a questionnaire won't change anything. The other limitation is that the data relates to a single centre which may not be generalisable. The sample size was also not pre-calculated as we wanted to reach out to the maximum number of residents in different specialties. Yet, we believe that our study has raised an important and relevant issue that we intend to take forward.

WLB is a serious problem in developing countries that needs the will and the motivation of physicians, mentors, hospital administrations and policy-makers.

Conclusion

There was a lack of WLB in most of the responding residents. This imbalance appeared multifactorial and would need increased efforts from physicians, mentors and hospital administrations.

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Conflict of Interest: None.

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