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Original Article

Role of Stress and Socio-Demographics on Career satisfaction and Professional Quality of life

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Abstract

Objective: The objective of the present study was to identify the predictive role of perceived stress and socio-demographic variables such as monthly income, leisure time, and IMM exams in career satisfaction and professional quality of life among residents in the training of Obstetrics and Gynecology (Obs and Gynae).
Study type, settings & duration: This cross-sectional study with correlational design was conducted at PAF, PIMS, Holy Family, and Poly Clinic hospitals at Rawalpindi and Islamabad Lahore Medical & Dental College, Lahore, Pakistan from September to November 2022.
Methodology: We recruited a total of 205 residents from first, second, third, and fourth year of training in Obs and Gynae. Participants were selected with the help of purposive convenient and snowball sampling techniques. The scales used in the study include perceived stress scale, team support scale, professional quality of life scale, and career satisfaction scale.
Results: Findings indicate that monthly income, Intermediate Module Exams (IMM), leisure time, and stress significantly predict compassion fatigue, a component of professional quality of life, with all showing a positive association (p <.05). Additionally, team support emerges as a significant positive predictor of career satisfaction (p <.01), highlighting its crucial role in professional well-being.
Conclusion: The results indicate that team support significantly enhances career satisfaction and reduces stress for young resident trainees, while also mitigating the risk of compassion fatigue. To improve the quality of life for residents, health organizations should promote a healthy work-life balance, provide mental health support, ensure fair compensation, and simplify tasks. Encouraging mentorship and implementing wellness programs, along with conducting regular assessments, will help reduce burnout and foster career satisfaction.
Key words: Perceived stress, career satisfaction, professional quality of life, compassion fatigue, residents in training.

Introduction

Residency programs provide hands-on medical training under specialist supervision, lasting 3-7 years based on specialty. In the U.S., first-year residents are interns, while junior and senior residents mark different training stages. In Pakistan, Obs and Gynae residents undergo rigorous training, including IMM exams after two years to assess competence.[1] They face long duty hours, limited leisure time, and low income in some hospitals, leading to burnout, stress, and anxiety.[2-4]

Compassion fatigue and compassion satisfaction are key aspects of professional quality of life.[5] Healthcare providers, especially Obs and Gynae residents, face high-stakes decisions, emergencies, and emotional strain, which can lead to compassion fatigue reduced empathy due to prolonged exposure to distressing cases. Conversely, compassion satisfaction reflects fulfillment and accomplishment in one's work, acting as a buffer against job stress.[6]

A meta-analysis of 21 studies found high rates of compassion fatigue (52.6%), compassion satisfaction (47.6%), and burnout (52%) among nurses.[7] Healthcare professionals face increased risk due to trauma exposure and emotional strain. In Spain, compassion fatigue (94%) and burnout (84%) were reported at high levels.[8] Physicians experience higher compassion fatigue, while nurses report greater satisfaction. This fatigue can lead to

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medical errors, affecting patient care. In Pakistan, limited research explores compassion fatigue among Obs and Gynae residents, particularly regarding IMM exams, team support, and stress. Strong teamwork and collaborative decision-making are crucial in this high-pressure field to reduce burnout and enhance career satisfaction.

Team support plays a crucial yet underexplored role in reducing stress and compassion fatigue in healthcare. In Obs and Gynae, teamwork and collaborative decision-making enhance career satisfaction. Factors like pay, work hours, leisure time, and team cohesion influence satisfaction. This study is the first in Pakistan to examine these predictors among Obs and Gynae residents.

In Pakistan, Obstetrics and Gynecology is predominantly chosen by women due to socio-cultural norms, as female patients prefer treatment from female doctors. Men often avoid the field due to societal taboos. Female doctors face gender discrimination, offensive remarks, and workplace challenges from colleagues and staff. The combined pressure from supervisors, work demands, and discrimination contributes to stress and fatigue, potentially leading to compassion fatigue among residents.[2]

Despite long hours, stress, and limited leisure, residents face significant work and psychological challenges. This study addresses gaps in research by examining professional quality of life and career satisfaction among Obs and Gynae trainees. Using multiple regression, it explores perceived stress, leisure time, pay, and IMM exams, a novel factor in career satisfaction.

Methodology

The study is cross-sectional correlational design and participants included a total of 205 residents in the training of obstetrics and gynecology in tertiary care hospitals of Islamabad and Rawalpindi particularly PAF Hospital E-9 (Unit I and II), Pakistan Institute of Medical Sciences (PIMS) (Unit I and II), Polyclinic, and Holy Family Hospital. The study was conducted from September to November 2022.

G*Power analysis estimated a sample size of 148, but a larger sample was collected from three hospitals for better reliability and generalizability. Using purposive convenience sampling, Obs and Gynae residents preparing for IMM exams were recruited. Permissions were obtained, and informed consent was secured. This approach ensured relevant insights into compassion fatigue, team support, and career satisfaction while maintaining ethical standards.

Obs and Gynae residents who completed MBBS (5 years), a one-year house job, passed FCPS-I, and are in a four-year residency were included. Whereas, MBBS students, house officers, or those from other departments were excluded.

We used the short version of Pro QOL developed by Galiana et al[9]. The scale has a total of nine items, where items 2, 6, 7, 1, 4, and 8 measure compassion fatigue, and items no. 3, 5, and 9 measure compassion satisfaction. Compassion satisfaction is the pleasure derived from helping others. Compassion fatigue is the frightening and intrusive thoughts regarding patients who suffer in an emergency. We have taken compassion fatigue in our study to investigate its predictors within our settings.

We measured career satisfaction by means of the CSS.[10] The scale reliabilities were established in a longitudinal study[11] and reported good internal consistency at all times of measurement (Cronbach alpha = .84 at time 1; Cronbach alpha = .83 at time 2, and Cronbach alpha = .85 at time 3).

This scale has been developed by Cohen, Kamarck, and Mermelstein[12] to assess the degree of self-appraised stressful events in one's life. It measures the extent to which one's life has experienced overloaded, uncontrollable, and unpredictable situations[12]. The value of Cronbach's alpha surpassed the standard .70 threshold ranging between 0.74-0.91.

The team support scale has been developed by Batorowicz and Shepherd[13]. It has a total of five items. The internal consistency of the questionnaire shows internal consistency (between 0.83-0.91). The scale is rated on a seven-point Likert scale from "Not at All" (1) to "To a vast extent."[14]

Before conduction of the study the Head of the Department of Obs and Gynae in each teaching hospital was approached to take permission for data collection. Afterward, participants were approached in the Obs and Gynae department. Oral/written consent was taken and was given the right to withdraw if they didn't feel comfortable. Participants were briefed about the purpose of the study and were given a booklet consisting of demographics-related information and some qualitative questions at the start and detailed questionnaires at the end.

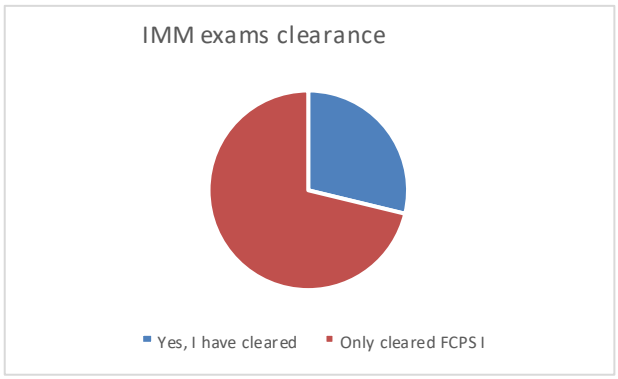
The ethical approval was obtained from the Research Ethics Committee of National University of Science and Technology, Islamabad vide letter no. 0988/Ethic/01/S3H/070/DBS.

Results

The current research work aimed to conduct the quantitative approach to assess the role of IMM exams, leisure time, and monthly income among residents in the training of Obs and Gynae. Further, the same variables were also assessed as predictive factors in the professional quality of life and career satisfaction. Frequencies were calculated in the form of graphs while SPSS version 20 was used to determine the predictive role of quantitative variables.

In the demographic information sheet, we asked four forced-choice questions from participants. The respective questions are also used to assess their role in career satisfaction and professional quality of life.

(i) Have you cleared IMM exams?
(ii) Do you find leisure time?



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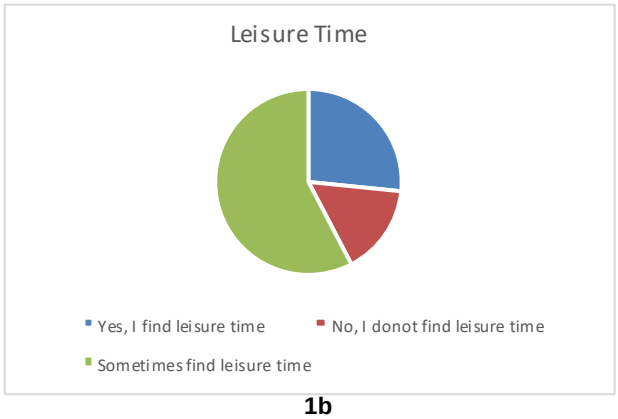

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Figure 1 a&b: Frequency of trainees responding on leisure time and IMM exams.

The Figure-1 a&b shows the frequency of participants who responded on leisure time and IMM exams, providing insight into how these factors relate to their overall well-being and career satisfaction. A total of 59 participants had cleared IMM exams while 146 replied "We have just cleared FCPS I and are trainees of first year". Furthermore, 54 revealed that they "do find leisure time". Participants further elaborated that leisure time helps while 32 said, they "do not find any leisure time out of hectic long duty hours in residency". The remaining 117 participants showed that "sometimes" they find leisure time. Two cases were missing responses.

Table 1: Demographics of the participants.

Variables		*Frequency (%)*
Age		
	24-28	134 (65.36)
	29-33	71 (34.63)
Year of residency		
	First and second year	110 (54.45)
	Third and fourth year	92 (45.54)
Marital status		
	Married	93 (45.4)
	Unmarried	111 (54.1)
	Missing	1 (0.5)
Monthly Pay		
	Up to 50,000 PKR	94 (45.9)
	Greater than 50,000	93 (45.4)
	Unpaid	13 (6.3)
	Missing	5 (2.4)

Table-1 shows participants' socio-demographics. Many more women were part of the study as Gynae is chosen by females more than males in Pakistani culture (detail of reasoning given in introduction part). Residents from all years of training (first, second, third, and fourth) were included. The monthly pay package ranged from 50,000 or greater while few participants also revealed zero pay package in training. Participants belonged to the government, private as well as semi-government hospitals, and the majority of them declared as married in marital status.

Table-2 shows the descriptive information of the study scales. It shows the alpha reliability of the scales, mean values, standard deviations, and normalcy values in terms of skewness and kurtosis. All scales have adequate reliability showing internal consistency for the chosen participants. The values of skewness and kurtosis lie within a range of (±0 to ±3) which also shows the normal distribution of the study sample.

Table-3 shows the values concerning the multiple linear regression model, with the professional quality of life and career satisfaction as the outcome variables. "Perceived stress is the

Table 2: Descriptive of study sample.

Variables	*Alpha α*	*Mean (Standard Deviation)*	*Range Actual*	*Potential*	*Skewness*	*Kurtosis*
Career Satisfaction	.87	16.44 (4.43)	5-25	5-25	-.22	-.31
Perceived stress	.67	24.29 (4.75)	12-40	10-40	.23	.74
Compassion Fatigue	.75	18.23 (4.61)	6-29	6-30	-.31	-.32
Compassion satisfaction	.77	11.80 (2.49)	3-15	3-15	-.64	.53
Team decision making	.93	58.53 (15.06)	13-84	12-84	-.41	-.23
Team learning	.90	19.03 (5.723)	4-28	4-28	-.41	-.56

Table 3: Regression coefficients for the professional quality of life subscales as outcomes using univariate simple and multiple linear regressions.

Variables	*Compassion fatigue β [95% CI]*
Perceived stress	.35 [.18; .50] ***
Leisure time	.33 [.87; 2.60] ***
Monthly pay	.16 [.03; 2.70] **
IMM	-.16 [-3.09; -.02] **
R^2	.236
F	8.786***
Variables	*Career Satisfaction β [95% CI]*
Team DM support	.87 [.09; .42] **
Team learning	-.53 [-.83; -.01] *
R^2	.329
F	18.99***

strongest predictor of compassion fatigue (β = .35, p <.05) indicating that the highest contribution in compassion fatigue is of stress followed by "leisure time" (β = .33, p <.05), "monthly pay" (β = .16, p <.05), and "IMM exams" (β = -.16, p <.05) as they significantly predict the variance in the dependent variable, compassion fatigue. The change in variance on the dependent variable is shown by R^2 while F reveals the significance level. Residents' trainees with more stress show more compassion fatigue as compared to the ones who have less stress. Moreover, the variables "team decision making" as well as "team learning" also contributes a significant variation in career satisfaction showing their protective influence. Residents with greater team support and learning showed more career satisfaction as compared to those who have less team support and team learning.

Discussion

The study assessed professional quality of life and career satisfaction among Obs and Gynae residents. All scales showed adequate reliability (α >.70) except perceived stress (α =.67), which may improve with a larger sample. As a preliminary study, it examines psychometric properties and variable direction. Young graduates face high-pressure emergency cases early in their careers. They work thirty-six hours long duty and face various social and environmental pressures that intensify their risk of compassion fatigue. Hence, it is likely that they experience stress on a daily basis. The predictive role of perceived stress, along with qualitative variables such as monthly pay, leisure time, and IMM exams, was evident in the current study (Table-3). Similar to past research[15-17] our findings highlight that increased working hours, reduced leisure time, and lower financial compensation contribute significantly to elevated levels of stress, anxiety, and fatigue among residents.

Residency programs demand extensive task involvement, dedication, and commitment, which few individuals can sustain due to the high-pressure environment of emergency professional occupations. The lack of leisure time restricts opportunities for residents to engage in restorative activities, exacerbating mental health issues such as emotional exhaustion and burnout, thereby increasing the risk of compassion fatigue. In contrast, financial stress arising from comparatively lower pay during the training phase adds another dimension to their psychological strain, as it creates insecurities about financial stability and professional growth, further diminishing career satisfaction.

Moreover, the IMM exams introduce academic pressures that not only heighten stress but also demand significant time and cognitive resources, leaving little room for personal well-being. Collectively, these factors, perceived stress, limited leisure time, financial constraints, and academic pressures, merge as significant predictors of compassion fatigue, highlighting the multifaceted challenges residents face in maintaining their mental health and career satisfaction.

The predictive role of team decision-making support and team learning brings significant variability in career satisfaction (Table-3). The positive role of teamwork and team decision-making as protective factors in career satisfaction has also been found by past studies[18,19] validating the findings of our study. These results can be interpreted in a way that to learn and gain experience in the field of Obs and Gynae, it is necessary to have protective factors like teamwork, team support, supervisor support, and team support in decision-making so that patients can be managed effectively, and individuals career satisfaction may increase.

Overall, this study examined professional quality of life and career satisfaction among Obs and Gynae residents, identifying stress, IMM exams, pay, and leisure time as predictors of compassion fatigue, while team decision-making and learning influenced career satisfaction. Findings highlight the need for interventions such as reduced shift lengths, financial support, and wellness programs to lower stress, minimize compassion fatigue, and enhance well-being, ultimately improving patient care. Despite its valuable insights, this study has limitations. The small sample size may limit generalizability and focusing on a single specialty may restrict applicability to other medical fields. Future research with larger, more diverse samples across specialties is recommended. This study is the first to examine the impact of stress, financial constraints, lack of leisure, and academic pressure on compassion fatigue among Obs and Gynae residents. Unlike broader research on healthcare professionals, it highlights unique residency challenges, including high patient loads, emergencies, and intensive training. Findings offer insights for targeted interventions, such as team-based decision-making and mentorship programs, to enhance peer support, reduce stress, and improve well-being in high-stress medical environments.

Conflict of interest: None declared.

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