Original Article

Factors Responsible for Post Graduate Resident Satisfaction Working in

PGR Working Satisfaction in **Medical Students**

Medicine, Surgery and their Allied Departments in Bahawal Victoria Hospital, Bahawalpur, Nishtar Hospital Multan and Jinnah Hospital Lahore

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ABSTRACT

Objectives: The objective of the study was to evaluate the factors responsible for Post Graduate Resident satisfaction working in medicine, surgery and allied departments in BVH, NHM, and JHL.

Study Design: Observational / Descriptive / Cross sectional study.

Place and Duration of Study: This study was conducted in medicine, surgery and allied departments of BVH, NHM, and JHL from April to June 2016.

Materials and Methods: A total of 210 participants took part in the study; there were 70 participants from each of the three hospitals. The sample was taken by Stratified proportionate sampling technique. The Post-Graduate Residents were given performed questionnaires to fill out. The data was analyzed by SPSS 13 and all results were presented in the form of frequencies, percentages, and tables.

Results: All of the Post-Graduate Residents who were handed out the questionnaires responded, and therefore, the response rate was 100%. 77.2% of the Post-Graduate Residents were found to be neutral, while 22.8% were satisfied.

Conclusions: Most of the Post-Graduate Residents were found to have a neutral response towards their professional satisfaction. The Post-Graduate Residents in BVH were more inclined towards a response of being professionally satisfied. The most popularly agreed upon workplace related factor was good working relations with colleagues. **Key Words:** Postgraduate residents; satisfaction; Medicine and allied departments; Surgery and allied departments.

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INTRODUCTION

This study aimed to evaluate the level of professional satisfaction of Post-Graduate Residents and to characterize factors that influence Post-Graduate Residents' professional satisfaction. The evaluated the perception of Post-Graduate Residents towards availability of certain such factors and sought out to identify high-priority determinants of the satisfaction and dissatisfaction of Post-Graduate Residents with their jobs. 1 The data was collected for demographic, as well as workplace related variables, but this study focused on evaluating the workplacerelated factors. The respondents were queried about the availability of fair income, working hours, sanitary conditions at the workplace, relations with colleagues,

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Received: August 17, 2016; Accepted: September 29, 2016 facility of accommodation, support from seniors, adequate collegiality, the standard of medical and surgical training, security, appreciation of work, and availability of time for family.²

The respondents for this study were selected from the medicine and surgery departments of three different hospitals: BVH, NHM, and JHL. These participants were selected to achieve diversity on specialty (medicine and surgery), and working set up (BVH, NHM, JHL). Although not designed to be nationally representative, this sampling strategy allowed inclusion of PRGs working in a variety of work settings.3

Residents are vital to the clinical workforce and they provide much of the daily patient care. Therefore, substantial improvements in their professional satisfaction are needed to enhance health care quality as well as to decrease the incidence of healthcare errors.⁴ This study also provides an important baseline to examine the impact of future health care reforms and other policy changes on the job satisfaction of doctors.

MATERIALS AND METHODS

The study was conducted in medicine, surgery and allied departments in three different hospitals in different cities, namely, Bahawal Victoria Hospital,

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Bahawalpur; Nishtar Hospital Multan; and Jinnah Hospital Lahore from April to June 2016.

A total of 210 participants took part in the study; there were 70 participants from each of the three hospitals. The sample was taken by Stratified proportionate sampling technique.

Post-Graduate Residents from all four years of residency were included while house officers, medical Officers, unpaid post-graduate residents and post-graduate residents hesitant to fill out certain details in the questionnaire were excluded from this study.

A pre-formed questionnaire was handed out to the Post-Graduate Residents, and they were requested to fill it out after introducing them to the study being conducted and acquiring their consent for participation.

The data was analyzed by SPSS 13 and all results were presented in the form of frequencies, percentages, and tables.

RESULTS

All of the Post-Graduate Residents who were handed out the questionnaires responded, and therefore, the response rate was 100%.

In M&A, BVH, 75% of Post-Graduate Residents showed a neutral response to professional satisfaction, while 25% were satisfied. 53.3% of Post-Graduate Residents in S&A, BVEI were found to be neutral, while 46.7% were satisfied. In NHM, 90% of Post-Graduate Residents in M&A showed a neutral response, while 10% were satisfied, and 60% of Post-Graduate Residents in S&A were neutral, while 40% were satisfied. 95% of the Post-Graduate Residents in M&A, JHL were neutral, while 5% were satisfied. In S&A, JHL, 90% of the Post-Graduate Residents were neutral, and 10% were satisfied. Cumulatively, 77.2% of the

Post-Graduate Residents were found to be neutral, while 22.8% were satisfied in their workplace. (No Post-Graduate Residents from any hospital were found to be not satisfied) Table 1.

In this study, certain demographic variables of the Post-Graduate Residents were evaluated. The mean age of the Post-Graduate Residents was 27.5 years (Table 2). 47.1% of the Post-Graduate Residents were males, while 52.9% were females. 65.6% of the Post-Graduate Residents were unmarried, while 34.4% were married. Most of the Post-Graduate Residents were in their 1st year of residency (Table 3).

The Post-Graduate Residents responded as disagree, neutral or agree to each of the work-related variables they were queried about. 83.3% of the Post-Graduate Residents disagreed, 13.3% were neutral, and 2.9% agreed that their stipend is satisfactory in proportion to workload. 52.4% of the Post-Graduate Residents disagreed, 27 % were neutral, and 20.5% agreed upon working hours being satisfactory. 73.3% of the Post-Graduate Residents disagreed, 22.9% were neutral, and 3.8% agreed that there is a sanitary working environment. Regarding good working relations with colleagues, 6.7% of the Post-Graduate Residents disagreed, 35.2% were neutral, and 58% agreed. About comfortable facility of accommodation, 52.4% of Post-Graduate Residents disagreed, 33.3% were neutral, and 14.3% agreed. 14.3% Post-Graduate Residents disagreed, 44.8% were neutral, and 41% agreed to have supportive seniors. 15.2% Post-Graduate Residents disagreed, 43.3% were neutral, and 41.4% agreed that they had1 adequate independence regarding sharing of work-related knowledge. 42.9% Post-Graduate Residents disagreed, 32.9% were neutral, and 24.3% agreed to the availability of standardized training.

Table No.1: Overall Result

	BVH	BVH	BVH NHM		JHL	JHL	Mean	
	Medicine	Surgery	Medicine	Surgery	Medicine	Surgery	Mean	
Unsatisfied	0%	0%	0%	0%	0%	0%	0%	
Neutral	75%	53.3%	90%	60%	95%	90%	77.2%	
Satisfied	25%	46.7%	10%	40%	5%	10%	22.8%	

Table No.2: Age Distribution among Respondents

9	BVH Medicine	BVH Surgery	NHM Medicine	NHM Surgery	JHL Medicine	JHL Surgery	The mean of the Av. Ages
Average age(years)	26.6	27.1	28.0	27.7	27.7	28.7	27.5
Standard Deviation	± 1.375	±2.677	±3.930	± 2.702	±1.833	±2.041	

Table No.3: Year of Residency of Respondents

Year of Residency	BVH		BVH		NHM		NHM		JHL		JHL		Total	
	Medicine		Surgery		Medicine		Surgery		Medicine		Surgery			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
1 st	14	35	22	73.3	12	40	16	40	13	32.5	10	33.3	87	41.43
2 nd	20	50	5	16.7	10	33.3	10	25	17	42.5	7	23.3	69	32.86
3 rd	4	10	1	3.3	6	20	10	25	8	20	7	23.3	36	17.14
4 th	2	5	2	6.7	2	6.6	4	10	2	5	6	20	18	8.57
Total	40	100	30	100	30	100	40	100	40	100	30	100	210	100

Table No.4: Response to Individual Variables

Sr	Variable	Disagree		Neutral		Aş	Total	
#.	variable	N	%	N	%	N	%	Total
1	Proportionate Stipend	176	83.3	28	13.3	6	2.9	210
2	Satisfactory Working Hours	110	52.4	57	27.1	43	20.5	210
3	Working Environment	154	73.4	48	29.2	8	3.8	210
4	Relations with Colleagues	14	6.7	74	35.3	122	58.0	210
5	Facility of Accommodation	110	52.4	70	33.3	30	14.3	210
6	Support From Seniors	30	14.3	94	44.7	86	41.0	210
7	Can Share Knowledge	32	15.2	91	43.3	87	41.4	210
8	Standard of Training	90	42.9	69	32.9	51	24.2	210
9	Security at Workplace	139	66.2	43	20.5	28	13.3	210
10	Appreciation of Work	77	36.7	92	43.8	41	19.5	210
11	Time for Family	143	68.1	53	25.2	14	6.8	210

There are multiple responses

Regarding sufficient security at the workplace, 66.2% of Post-Graduate Residents disagreed, 20.5% were neutral, and 13.3% agreed to it. Regarding appreciation of good work, 36.7% Post-Graduate Residents disagreed, 43.8% were neutral, and 19.5% agreed. 68.1% disagreed, 25.2% were neutral, and 6.7% agreed that they had sufficient family time. (Table 4)

DISCUSSION

This study was conducted to evaluate factors that are responsible for the professional satisfaction of Post-Graduate Residents and to assess the level of the professional satisfaction of the Post-Graduate Residents and determine the major factors it can be ascribed to.⁵ Diverse work settings were assessed in the study, as the 210 participants were selected from three different hospitals in different cities of Pakistan. Both, demographic as well as workplace-related factors were assessed, but the study selectively focused on the latter. The results of the study conclude that most of the Post-Graduate Residents had a neutral response towards their professional satisfaction. Quantitatively, 77.2% of the Post-Graduate Residents had a neutral response, while 22.8% were found to be satisfied, and none of the Post-Graduate Residents responded as being dissatisfied, as per the study grading.⁶ Previously conducted similar studies have shown different results in response to professional satisfaction of Post-Graduate Residents; published studies have indicated that overall physician satisfaction is relatively high. Results from a research conducted in the USA to determine factors affecting physician professional satisfaction show that most of the Post-Graduate Residents were professionally satisfied (Friedberg et al., 2013).1 Similarly, a research conducted on Australian doctors' satisfaction with their work reported that 85.7% of the doctors were moderately or very satisfied with their jobs (Joyce et al., 2011).3 It is further highlighted by the results of a research conducted in private sector teaching hospitals by Karachi. Pakistan that professional satisfaction among Post-Graduate Residents is high; 75.6%

residents reported being satisfied with their jobs (Sameer- urRehman et al., 2012).⁴ Similar results have been reported in other researches carried out to assess professional satisfaction of Post-Graduate Residents, the percentage of Post-Graduate Residents found to be satisfied being 80.1% (Ugwa et al., 2012),² 64% (Behmann et al., 2012)⁵, 72% (Plee et al., 2013)⁶, and 79-84% (Chen et al., 2012; Frank et al., 1999; Landon et al., 2002).^{7,8,9}

An important work related variable assessed in the study was the income of Post-Graduate Residents and the perception of Post-Graduate Residents about their income being proportionate to work. The Post-Graduate Residents overwhelmingly disagreed over availability of fair stipend; 83.8% of Post-Graduate Residents responded as being in disagreement. This result was reflected in other similar studies. a local study carried out in BVH to assess job satisfaction among doctors reported that overall 56.5% doctors were not satisfied with the level of their income (Shakir S et al., 2007)¹⁰. In a similar national study conducted at PIMS shows that only 37% of the Post-Graduate Residents found their stipend satisfactory (Saadig and Khaleeq- uz- Zaman, 2010).11 A comparable study in Delhi, India reported that about half (45.6%) of the participating doctors perceived their salary as less than fair (Kaur et al., 2009)¹². These results compellingly indicate towards a need for devising better reforms for doctors, so that they are fairly paid and made to feel properly appreciated for the very honorable job they do every day.

The number of working hours perceived as fair by the Post-Graduate Residents was another variable assessed in the study. The results show that majority of the Post-Graduate Residents, i.e. 52.4%, disagreed over the availability of satisfactory working hours. Due to excessive working hours, the Post-Graduate Residents felt that they do not get to spend sufficient time with their families. This factor was separately assessed, and the Post-Graduate Residents showed an overwhelming response of 68.1% of them being in disagreement over

having sufficient family time. The result that the Post-Graduate Residents found the working hours to be excessive is in concordance with results from similar studies. The results of a local study conducted in BVH, Bahawalpur show that 52% of respondents were unsatisfied with their working hours. According to them, they were having more working hours as compared to international standard working time, i.e. no more than 80 hours per week or more than 24 consecutive hours, standard set by the Accreditation Council on Graduate Medical Education of the United States. In another similar study conducted in India, the mean number of working hours was considered dissatisfactory by 49.6% of the doctors (Kaur et al., 2009). 12

A very high percentage of Post-Graduate Residents, i.e. 73.3%, disagreed to having a sanitary working environment in accordance with sanitary working conditions at the workplace. It is ironic, as hospitals are the one place where sanitary conditions cannot be compromised. This result was found to be in contradiction with results from a study conducted on job satisfaction among primary care physicians, where satisfaction level was 87%, and other similar studies conducted at PIMS, Karachi (Sadiq M and Khaleeq- uz-Zaman, 2010), and in six states of USA (Friedberg MW et al., 2013). [11,1]

The results indicate that a majority of Post-Graduate Residents perceived the security at workplace to be lax; 66.2% disagreed that there was sufficient security at work. No other similar studies could be found to compare these results with. This indicates that security is required to ensure the safety of the hospital and the patients.

The work-related factor which can be most significantly attributed to the professional satisfaction of Post-Graduate Residents is good working relations with colleagues. In this study. 58% of the Post-Graduate Residents agreed that they have good professional relations with colleagues. Similar findings were reported in studies utilizing data from a study of physicians in Texas (Lewis et al.,1993a)¹³, a study of family physicians (Karsh, Beasley and Brown, 2010)¹⁴, and a study of training of medical residents in Greece (Msaovel et al., 2010).¹⁵

A majority of Post-Graduate Residents, i.e. 41.4%, agreed to having adequate independence regarding sharing of knowledge related to work. A similar result was highlighted in an international study conducted on factors affecting physician professional satisfaction and their implications for patient care (Friedberg MW et al., 2013).¹

Another important variable evaluated in the study was Post-Graduate Residents' perception of the support from their seniors. The majority of the Post-Graduate Residents, i.e. 44.7%, had a neutral response, and a large number, i.e. 41%, agreed that they have

supportive seniors. This result is similar to studies conducted on training satisfaction of medical students in Greece (Msaovel P et al., 2010)¹⁵ and predictors of surgery residents' satisfaction.

We are hopeful that this study will be helpful in providing insight into major work-related factors that influence the level of professional satisfaction of Post-Graduate Residents. A limitation of the study was a small sample size, and therefore, a lack of national representativeness. Similar studies, when conducted at national level, may also provide important baseline for devising policies and health delivery systems that seek to improve the physicians' professional satisfaction.

CONCLUSION

Most of the Post-Graduate Residents from all three hospitals, i.e., BVH, NHM, and JHL, had a neutral response (77.2%) regarding their satisfaction with work. The rest of the Post-Graduate Residents (22.8%) were satisfied in their workplace.

A Greater percentage of Post-Graduate Residents working in BVH responded as being satisfied, as compared to Post-Graduate Residents in NHM and JHL. Cumulatively, the Post-Graduate Residents most significantly agreed over the availability of the following factors, responsible for their satisfaction at their workplace:

- 1. Good working relations with colleagues (58%).
- 2. Adequate independence regarding sharing of knowledge related to working (41.4%).
- 3. Supportive seniors for developing skills according to the specialty (41%).
- 4. The Post-Graduate Residents majorly disagreed over the availability of the following factors:
- 5. Proportionate stipend (83.8%).
- 6. Sanitary working environment (73.3%).
- 7. Sufficient family time (68%).
- 8. Sufficient workplace security (66.2%).

Recommendations:

- The Post-Graduate Residents should be paid in proportion to their workload, as being underpaid gives the notion of being under-appreciated.
 Whereas the perception of being fairly paid leads to job satisfaction, and therefore, better work performance.
- The sanitary conditions at a health care facility should be no less than optimum.
- The number of working hours per day for the Post-Graduate Residents should be standardized, and the standards are implemented as to encourage more efficient working of the Post-Graduate Residents.
- There should be strict and proper security at the workplace for which highly trained security personnel should be appointed.
- The Post-Graduate Residents should be provided with a comfortable facility of accommodation.

- Training given to Post Graduate Residents should be in accordance with the standard set by CPSP.
- Post-Graduate Residents should be adequately appreciated for their work.
- There should be no political influence at the workplace, and the residents are allowed independence in performing their job.
- Co-operation between seniors and juniors need further improvements to enhance working efficiency at workplace.
- Every practicing Post Graduate Resident should receive an equal chance to share his/her ideas and knowledge. It provides them with independence within their own domains.
- The gradual limitation of working hours will be a short-term measure. Therefore, it should be supplemented by concurrent long-term reforms of residency training in combination with novel patterns of care management, stress reduction programs, and other systemic interventions.

Conflict of Interest: The study has no conflict of interest to declare by any author.

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