ORIGINAL ARTICLE ASSESSMENT OF THE WORK ENVIRONMENT OF FACULTY OF A MEDICAL COLLEGE IN PAKISTAN

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Background: Extensive research is done on nursing work environments but less is known about the job conditions and environments of other health professionals. This study was aimed to fill this information gap by highlighting the factors affecting the work environment and stressors causing turnover of staff. **Methods:** A cross sectional study was conducted in Bolan Medical College Quetta for the assessment of working environment of the faculty from 22nd April to 22nd July 2012. All permanent teaching staff was included. A structured questionnaire was adopted from health sciences association of Alberta (HSSA), 2006 work Environment Survey. An observational check list for assessment of the physical environment /infrastructure and other general physical stuff was used. **Results**: The faculty members were not satisfied with the security and safety of their work place but were satisfied with salaries, employer, and management. Work teams and relationship between employees and employers were respectful with good communication. Majority found their work times stressful and opportunities for on job trainings and professional development, adequate tools, equipment and conditions were mostly lacking. **Conclusions:** The overall working environment is not that good and few areas need serious attention like: professional development, trainings, adequate equipment, and security.

Keywords: Cross Sectional Study, Working Environment, Faculty J Ayub Med Coll Abbottabad 2014;26(4):577-81

INTRODUCTION

A work environment is the setting that supports excellence and decent work. Such environments "attempt to guarantee the health, safety and personal well-being of staff, support quality performance; and improve the motivation, performance and productivity of individuals and organizations".¹ A good or a positive work environment motivates the workers to work hard with devotion, honesty, motivation, without harm, and contributes to the organization in which they are working. An ideal working environment has work-related wellbeing, security, and wellness policies that deal with dangers at workplace, favoritism, physical and mental torture and risks related to individual security and occupational pressure. It also provides equal opportunities to grow professionally, job safety and security, attractive pays and open communication and transparency.²

WHO has acknowledged a positive work environment as, "one major factor among the four responsible for strengthening the management and leadership of health systems delivery".³ A positive work environment puts an advantageous effect on an organization and its workers. It always causes an enormous rate of retention among workers.⁴ In the United Kingdom, the distinctiveness of "high performing organizations" were to "give more importance to quality rather quantity, and focusing on the long-standing outcome; set up an atmosphere of strong inter employee understanding, cooperation, mutual understanding, respect and strong interpersonal relations.⁵ If the employees are provided with certain liberty of work, they think that they are considerate and respected members of their organization.⁶ Physicians acquire great satisfaction

with their work if they have a good working environment.⁷ Likewise an efficient teamwork is compulsory for work in every organization for improving the standards and quality of work and the mechanisms of service delivery as well.⁸ Unwholesome environments influence the professionals' physical and mental health by imparting stress through heavy workloads, long working hours, complicated relationships at workplace, and workplace dangers. A study conducted at Finnish hospitals reported, that the harassment of employees at workplace is associated with absenteeism and turnover.⁹ It was highlighted that poor teamwork is also a major prerequisite of this absenteeism.¹⁰

A research on pharmacists in South Africa identified some major factors which were giving them work related stress, including unavailability of drugs, interruptions in performing their tasks, elevated workload, and unsatisfactory salary.¹¹ Another extensive study was conducted on job satisfaction among nurses in the United States, Germany, Scotland, Canada and England which showed that there is a strong relationship among workplace pressure and self-esteem of nurses, job satisfaction, obligation to the organization and intent to give up the job.¹² A survey on physiotherapy internees' in Nigeria reported that rates of dissatisfaction were 91% for salary, 79% for availability of apparatus and 58% for workplace environment.¹³ Another study reported high turnover as an indicator of poor work environment.14

This cross sectional study was conducted at Bolan Medical College (BMC) Quetta in the province of Balochistan Pakistan to assess working environment of the faculty. It is the first ever study of its type conducted in the country. This study would serve to identify the stressors amongst the faculty members which are resulting in increased turnover of the staff. This would also help the policy makers to plan and implement interventions to improve the workplace environment and job satisfaction among faculty members in medical colleges.

MATERIAL AND METHODS

This study was conducted over a period of three months (April to July 2012) at BMC Quetta, which is the only medical college in Balochistan. All permanent teaching staff were included in this study except those on contract basis, on leave, and visiting faculty. A structured questionnaire with close ended questions (mostly Likert's Scale) was used. This questionnaire was adopted from the Health Sciences Association of Alberta (HSSA) 2006 Work Environment Survey. Additionally an observational check list was used for assessment of the physical environment and infrastructure. Ethical approval was obtained from the Ethical committee of Health Services Academy Islamabad. Permission from Principal BMC and written informed consents were taken from the respondents before each interview. Data analysis was done using SPSS-16. Mean and standard deviation was calculated for continuous variables and percentages were calculated for categorical variables. Chi-square test was used to determine association between factors at $p \le 0.05$.

RESULTS

A total of 196 faculty members were interviewed out of 250 with a response rate of 78.4%. There were 135 (69%) male and 61 (31%) were females. The age of the participants was normally distributed, with a mean age of 42.31 years (range=27–75). Respondents were asked about how easy or difficult it was for them to take off from their jobs. Data is given in table-1. Data regarding job resources and satisfaction is given in table-2. Table-3 shows data regarding training and professional development, work, teams, relationships and processes. Regarding relations with supervisor and management data is depicted in table-4. Figures regarding work stress, job satisfaction, motivation etc. is shown in table-5.

A significant association was found between gender and job resources and conditions (p=0.01), gender and chances of getting trainings (p=0.01), gender and trust on employer (p=0.03) and between gender and overall satisfaction (p=0.04). This indicates that gender plays an important role in job satisfaction and working environment, as shown in table-6.

The physical environment was assessed using an observational checklist .It was good overall with some drawbacks like there was no separate canteen for the faculty members and no separate offices for the faculty members. This is shown in the figure-1.

Refrigerator in departments Watercooler in office Enough furniture for students and staff Is the temperature comfprtable Are they well ventilated and airy Do they have proper lighting system Are the classrooms having enough space? Is the keyboard, monitor and worker front on Are the shoulders relaxed and forearms... is document holder provided is the monitor adjusted to correct height Is the computer provided Is the chair fully adjustable(seat & back) Is there adequate furniture in the office Is the office set up correctly Separate canteen for faculty Cleaning of area is adequate Lockers are available for staff Water available in washroom all the time Washroom are provided with towel & tissue... Washroom facilities are adequate & hyegenic Ventilation is adequate Noise level is acceptable Area is free from odour The lighting system is proper Is the temperature comfortable Enough space in the room Floor coverings in good condition



Figure-1: Checklist Results (%) of the Physical Environment Assessment

Table-1: Work Environment Factors Assessed			
During the Study			

Variable	Frequency	%
How difficult or easy was it for you to		
get time off when you needed:		
Somewhat easy	76	39
Very easy	27	14
Neither easy nor difficult	39	20
Somewhat difficult	39	20
Very difficult	15	7
In past 12 months did you		
Get All the Statutory Vacations during	68	36
Last 12 Months		
Get the preferred vacations as scheduled	57	29
Took all the vacations	71	36

Table-2: Job Resources and Conditions		
Variable	Frequency	(%)
Job Resources and Conditions		
Lacked tools, equipments, resources needed to do the job	34	66.3
Had difficulty keeping up with the workload	67	34
Lacked Introduction of new technologies and methods	108	55
Their job provides them opportunities for career developments	110	56.1
Their job develop their skills and abilities	99	50
Their allow working freely and gives them a feeling of accomplishment	94	48
Find their job hectic	64	33

Table-3: Training and Professional Development/ Work Teams and Relationships/ **Relationships/ Processes**

Variables	Frequency	%
Training and Professional Development		
Never get any trainings and workshops for	62	31.6
capacity building	02	31.0
Get chances to develop and grow	60	30.6
professionally	00	
Feeling of contributing their skills knowledge	83	42.3
and abilities in their workplace	65	42.3
Work Teams and Relationships/		
Relationships/ Processes		
My co-workers are friendly and helpful	105	53.6
I have a good relationship with my supervisor	105	54
Communication is good among the people I	104	53.1
work with	104	55.1
My work environment is not safe	58	29.6
There is a high level of interdisciplinary	74	37.8
collaboration	74	57.8
There is adequate opportunity to discuss	87	44.4
professional practice issues	87	
My supervisor treats me with respect	118	60.2
Other health care professionals in my	100	51.2
organization treat me with respect	100	31.2
Students and clients treat me with respect	121	61.7
My co-workers treat me with respect	133	68
Work is not assigned fairly and equitably	87	44.6
The hiring and competition process is not fair	78	39.8
Rules and policies make no sense	62	31.7
Rules and policies are not fairly applied	63	32.1
Rules and policies are not consistently applied	70	35.7

Table-4: Supervisors and Management/ Workplace and Employee Health

workplace and Employee Health			
Variables	Frequency	(%)	
Supervisors and Management			
Sharing information & take you in decision making	92	46.9	
Creating a work environment free of harassment and discrimination	91	46.4	
Encouraging teamwork	85	43.4	
Listening to and acting upon your suggestions and ideas	80	40.8	
Encouraging you to be innovative in how you do your job	101	51.5	
Supporting your career development	94	48	
Helping you achieve work-life balance	97	49.5	
Feedback on job performance	107	54.6	
Workplace and Employee Health			
My work environment is healthy	82	41.8	
My work environment is not safe	58	30	
I trust my employer	106	54.1	
I am overall satisfied and committed to my employer	108	55.1	
My job a allows me to balance work and family/personal life	88	44.9	
There is a balance between my work and family/personal life	92	46.9	
In general my overall health is perfect	100		

Table-5: Work Stress /Job Satisfaction/ Motivation Commitment And Pride:

Motivation, Commitment And Pride:			
Variables	Frequency	(%)	
Work Stress:			
In the past 12 months, would you say that			
most days at work were?			
Extremely Stressful	13	7	
Quite A Bit Stressful	67	34	
A Bit stressful	59	30	
Not Very Stressful	45	23	
Not At All Stressful	12	6	
Job satisfaction			
Overall satisfaction with job	106	54	
Satisfaction with salary	90	45	
Satisfaction with safety and security of Job	11	5.6	
Motivation, Commitment and Pride, How			
often do you look forward to going to work?			
Often	25	13	
Always	121	62	
Never	2	1	
Rarely	20	10	
Sometimes	28	14	

Table-6: Cross tabulation to show association between different variables

Variables	Males (%)	Females (%)	р
Overall Satisfaction			
Satisfaction	86	65	0.04
Not satisfied	13	23	
Trust on Employer			
Agreed	87	28	0.03
Disagreed	13	31	
Get trainings and			
workshops for capacity			
building			0.01
Agreed	54	31	
Disagreed	47	69	
Lets me develop my skills			
& abilities			0.01
Agreed	46	53	0.01
Disagreed	18	46	
Provides opportunities for			
Career advancement			0.01
Agreed	76	54	0.01
Disagreed	24	47	

DISCUSSION

Health work force is the back bone of any organization, and for the motivation, retention and sustainability of the health work force a healthy and positive work environment is required. In our study, majority of the respondents found it easy to get time off needed for family or personal reasons and majority of them got all the statutory vacations during last 12 months. This positive finding shows that the employees easily get their holidays. It is evident that the organizations which take care of their employees by providing them with life balance facilities generally have a greater numbers of satisfied employees".¹⁵

Majority of faculty members lacked tools, equipment and resources needed to do their job; and sometimes had difficulty keeping up with the workload. They also agreed that their job provided them opportunities for career development, developing skills and abilities, allowed them to work freely and gave them a feeling of accomplishment. A recent study conducted in Tanzania also stated that poor job resources and conditions resulted in discouraging working environments and weak communication in the staff.¹⁶ A survey done on Swiss doctors' shows that almost one third were suffering from severe exhaustion which was related with jobrelated stressors.¹⁷ The majority of respondents mentioned that they did not get any training or workshops on regular basis for their capacity building. This is a very important issue.

Regarding performance appraisals the respondents found it very effective in accurately assessing job performance. They also agreed that it provided feedback on how to improve their job performance. It also provided recognition for employee's contribution. "Human resources are main assets of an organization. To attract, train, deploy and retain the right person at the right place at right time is important for the success of an organizations, especially the service oriented ones".¹⁸ Respondents mainly agreed that their supervisors, coworkers, and students treated them with respect and honor. This is a very positive finding and is an essential component of a positive working environment. However a big proportion of respondents stated that the work was not assigned fairly and equitably. They also strongly disagreed on fair application, and constant application of the rules and policies. These issues need serious consideration as they could act as major demotivating factors for the faculty.

Respondents showed satisfaction with the management and supervisors in terms of sharing information about decision making, encouraging teamwork, creating a work environment free of harassment and discrimination, helping to achieve work life balance, listening to and acting upon the suggestions and feedback on performance. These provide evidence of a good working environment. Work life balance means that "when the employees feel

that they are freely able to use flexible working hours programs to balance their work and other commitments like, family, hobbies, art, traveling, studies and so forth, instead of only focusing on work^{*}.¹⁹

On the question of management's consultation with employees regarding "work place safety, ways to improve delivery services and ways to improve the quality of work life" majority replied in the negative. Studies in Sweden concluded that there is a strong association between levels of performance organizational factors in public health and professionals.²⁰ Management concern for employees extensively increase employees' job satisfaction and affective organizational commitment and indirectly reduces their turnover intentions.²¹ In this study, majority of the employees were satisfied with their health, they trusted their employer and thought that there was balance between their work and family life. In short, the satisfaction and productivity may be subjective by a number of factors that's why it is said that a happy worker is more productive. The personality of the head of the institution may have some influence on the performance of subordinates.²²

Regarding security, most individuals were not satisfied with safety and security of that place. They were, however, satisfied with their salary. "Job satisfaction explains how much employees are happy to come to work and how they get enforced to perform their jobs. The things that make an employee happy while doing work and not to leave the job are the factors responsible for job satisfaction of employees. Other researchers narrate job satisfaction as being the outcome of the worker's appraisal of extent to which the work environment fulfills their needs".²³ It is significant to note that job satisfaction has a tenuous correlation to the performance of a person.²⁴ Furthermore, it evident that the satisfaction and performance of an individual depends on the nature of job, which is multifaceted. Job dissatisfaction also has relationship with the desire to quit from the workplace and is also an indicator of the satisfaction of an individual from the job.²⁵ Another study proved that "the desire to leave the duty place can be related to the performance".²⁶ Other influencing factors on satisfaction are style, culture, involvement and empowerment of employees and autonomy in work. One of the researchers who examined the impact of rewards and recognition on job satisfaction and motivation in a sample of Pakistani employees defines employee work satisfaction (job satisfaction) as a pleasurable positive emotional state as a result of work appraisal from one's job experiences.22

A positive environment also plays a major role in motivating the employees to work with devotion and give a great output. The majority of the faculty members seem to be motivated to go to their work in our study. A study suggested that the work environment always motivates the employees to give good performance and show commitment to their organization, enhancing work conditions to support the organization's mission and thus ultimately also results in retention, sustainability and satisfaction with job.²⁸ Majority of faculty felt committed and proud to be working for their employer and to the kind of work they perform. Research shows that job can be an important factor to how the employees think and react to their jobs and thus it affects their performance and job motivation.²⁹ The extent of their job satisfaction reflects the quality and quantity of their inputs.³⁰

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Authors' contribution: Dr. Abid Saeed conceived and designed the study and collected the data, analyzed the data and analyzed the results. Dr. Zahid Ahmad Butt supervised all the research process and also helped in preparing, editing and finalizing the manuscript for publication.

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REFERENCES

- Rondeau KV, Francescutti LH: Emergency department overcrowding: The Impact of Resource Scarcity on Physician Job Satisfaction. J Healthc Manag 2005;50(5):327-40
- Andrea Baumann: Positive Practice Environments: Quality Workplaces = Quality Patient Care. Information and Action Tool Kit. ICN. Geneva, Switzerland: International Council of Nurses International Council of Nurse 2007; http://www.icn.ch/indkit2007.pdf (accessed August 2012). Management for health services delivery. http://www.who.int/management/en/ (accessed August 2012).
- 3. Lowe G. High-Quality healthcare workplaces: A vision and action plan 49-56, Quarterly ed ; Summer 2002.
- Work Foundation, London 2007. Cracking the Performance Code: How Firms Succeed. Executive Summary. http://www.whpa.org/ppe_fact_health_pro.pdf (accessed July 2012).
- Irvine and Evans, Shields and Ward. The Global Shortage of Registered Nurses: An Overview of Issues and Actions. International Council of Nurses 1995 & 2001; : p34.
- International Council of Nurses. 7. Consensus Research Group, Inc and APCO Worldwide, Inc, research on 1200 physicians and 1000 nurses in 10 countries (USA, Canada, Europe) from 2004-7. International Council of Nurses, International Hospital Federation, International Pharmaceutical Federation, World Confederation for Physical Therapy, World Dental Federation, World Medical Association. . Report number: 1, 2008.
- Wheelan SA, Burchill CN, Tilin F. The Link between Teamwork and Patients' Outcomes in Intensive Care Units. Am J Crit Care 2003;12:527–40
- Kivimäki M, Elovainio M, Vahtera J. Workplace Bullying and sickness absence in hospital staff. Occup Environ Med 2000;57:656–60
- Kivimäki M, Sutinen R, Elovainio M, Vahtera J, Räsänen K, Töyry S et al. Sickness absence in hospital physicians: 2 year follow up study on determinants. Occup Environ Med 2001;58:361–6

- Rothmann, S; Malan M. Occupational stress of hospital pharmacists in South Africa. Int J Pharmacy Pract. 2007;15:235-242
- Aiken Linda. Nursing Matters: Nurse: Patient Ratios. http://www.wpro.who.int/topics/nursing/ichrn_fact_sheet.pdf (accessed July 2012).
- Onigbinde AT. The Impact Of Internship Programme And Its Effects On The Physiotherapy Practice In Nigeria. Nigerian J Med Rehab. 2006;11:86–91.
- ICHRN -International Center for Human Resources in Nursing. Nursing Matters: Nurses and Overtime. . ICN -International Council of Nurses, Geneva (Switzerland). Report number: 1, 2007.
- Saleem R, Mahmood A, & Mahmood A. Effect of Work Motivation on Job Satisfaction in Mobile Telecommunication Service Organizations of Pakistan. International Journal of Business and Management 2010; 5(11): .
- Leshabari MT, Muhondwa EP, Mwangu MA, Mbembati NA. Motivation of health care workers in Tanzania: A case study of Muhimbili National Hospital. East Afr J Public Health 2008,5(1):32–7
- Goehringa C, Gallacchib M, Künzic B, Bovierd P. Psychosocial and professional characteristics of burnout in Swiss primary care practitioners: a cross-sectional survey. Swiss Med Wkly 2005;135:101–8.
- Mc Crarey S. Motivating the workforce with a positive culture: recognition that works. Franchis World 2005,37(3):54–7
- Frame P, Hartog M. From Rhetoric to Reality. Into The Swamp Of Ethical\Practice: Implementing Work-Life Balance. Bus Ethics Eur Rev 2003;12(4):358–67.
- Korac V, Vasic M, Krstic M, Markovic R. Job satisfaction among health care workers in Serbia. Cah social Demogr Med 2010;50(3):319-43
- Alexandrov A, Babakus E, Yavas U. The Effects of Perceived Management Concern for Frontline Employees and Customers on Turnover Intentions: Moderating Role of Employment Status. J Serv Res 2007;9:356–71.
- Bowling NA. Is the job satisfaction–Job performance. Relationship spurious. A Meta – Analytic examination. J Vocat Behav 2007;71:167–85.
- Morris D, Yaacob A, Wood G. Attitudes towards Pay and Promotion in the Malaysian Higher Educational Sector. Employee Relations 2004; 26(2): 137–50. http://dx.doi.org/10.1108/01425450410511052 (accessed July 2012).
- Judge TA, Thoresen CJ, Bono JE, Patton GK. The Job satisfaction – Job performance relationship. A qualitative and quantitative review. Physchol Bull 2001;127:376–407.
- Wada K, Arimalsu M, Higashi T, Yoshikawa, T., Ods, S, Taniguchi H *et al.* Physician Job satisfaction and Warlay Condiats in Japan. J Occup Health 2009;51:261–6.
- Krishnan SK, Singh. M. Outcomes of Insertion to quit of Indian IT professionals. Human Resource Manag 2010;49:419–35.
- Danish RQ, Usman A. Impact of Reward and Recognition on Job Satisfaction and Motivation: An Empirical Study from Pakistan. International J Bus Manag 2010;5(2):159–67.
- 27. Ayers K. Creating a Responsible Workplace. Human Resources magazine 2005; 5(2):. http://engagementisnotenough.com/pdfs/HR_Magazine_RBW .pdf (accessed August 2012).
- Dawis R & Lofquist L. A Psychological Theory of Work Adjustment., Quarterly ed. Minneapolis, MN: University of Minnesota Press; 1984.
 Dawis R & Lofquist L. A Psychological Theory of Work Adjustment., Quarterly ed. Minneapolis, MN:
- 29. 29Nel PS, van Dyk PS, Haasbroek GD, Schultz HB, Sono TJ, Werner A. Human Resources Management, Quarterly ed. Cape Town: Oxford; 2004.

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