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Emotional Intelligence And Psychological Adjustment Among Doctors And Nurses In A Tertiary Care Hospital In Rawalpindi-Pakistan: A Cross-Sectional Study

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Abstract

Objective: This study aimed to determine the relationship between EI and the quality of nursing care from the viewpoint of nurses and patients.

Methods: This cross-sectional study was conducted at a public sector tertiary care hospital in Rawalpindi, Pakistan, over 6 months from November 2019 to April 2020. The convenience sampling technique was employed. The study groups were qualified practising doctors and nurses including nursing assistants and paramedics. Study groups were provided with a self-administered questionnaire that was filled out after getting consent from the study participants. Data analysis was done by entering it into SPSS version 22. The relationship between emotional intelligence and psychological adjustments among the two groups was assessed by applying an independent T-test.

Results: The current study explored that doctors were emotionally intelligent and psychologically well-adjusted as compared to nurses. Females were more emotionally intelligent than males; however, males were better adjusted psychologically. Years of experience had no significant results between both groups, while there was a positive correlation between the department of practice and psychological well-being.

Conclusions: It shows that harmonious work environments and friendly interpersonal relationships positively affect the well-being of HCWs and patients. What this indicates is a need to bring about changes within work environments to produce friendly interpersonal relationships and a positive impact on the well-being of HCWs and patients.

Keywords: Emotional intelligence, Psychological adjustments, Nursing staff.

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1. Introduction

For professional and personal success, emotional intelligence, or EI is assumed to be a critical ability that is characterized by self-management, social awareness, self-awareness, and relationship management.[1] It means that this mental skill improves an individual's working capacity in different areas, including time management, accountability, communication management, presentation skills, decision-making ability etc.[2] The patient's care and treatment are mainly dependent on the communication skills of the healthcare workers. Therefore, recognition and enhancement of emotional intelligence play a crucial role in the promotion of health.[3] In numerous disciplines of health sciences, particularly nursing care, the attainment of emotional skills and their clinical application are needed.[4] However, most of the nursing staff remain unaware of different aspects of emotional intelligence, yet they are practically able to apply these aspects in their clinical setting based on their professional experience.[5] The quality of care can be augmented when communication skills, time management, stress tolerance and decision-making abilities are finally tuned up.[6, 7]

By adjustment, we mean skills through which the patient's needs are satisfied through safe care, proper communication, good behaviour, and empathy.[7,8] To ensure optimal performance of the health care workers, psychological adjustment and emotional intelligence are interlinked with one another to get their patients satisfied. In a study's findings, it was assessed that the emotional learning and maturation process is central to a person's growth and development.[9,10] Training sessions can enhance the skills of healthcare workers in achieving their professional objectives. Depersonalization occurs when HCWs express emotional detachment from patients, show a lack of empathy, and change their attitude towards their co-workers, place of work, and profession. The absence of a sense of personal achievement is characterised by the individual's indifference towards responsibilities and the profession.[11,12] Poor psychological adjustment to the environment leads to an inability to manage stress in

life and is thereby a prerequisite to psychological maladjustment disorders such as burnout.

The stress experienced by healthcare professionals (HCWs) significantly impacts patient care and the well-being of medical staff, resulting in increased medical errors and poorer patient outcomes. Studies examining the relationship between Burnout Syndrome and Emotional Intelligence (EI) in HCWs consistently reveal a positive association, where higher EI acts as a protective factor against burnout syndrome, ultimately reducing its prevalence. In particular, greater Emotional Intelligence correlates with lower rates of Burnout Syndrome.[13]

Another study conducted in Turkey found that emotional intelligence was significantly and positively related to job satisfaction and organizational commitment.[14] EI is considered to be a more malleable construct or competency than IQ, which is thought to be relatively stable and fixed.[15] The links between EI, patient satisfaction, HCW burnout, and HCW job satisfaction are still unclear in the literature. Therefore, the current study was designed to examine the factors associated with emotional intelligence and general well-being using a health-based model.

2. Materials & Methods

This cross-sectional study was conducted at a public sector tertiary care hospital, in Rawalpindi, Pakistan to assess the EI and PA between two groups of doctors and nursing staff. Ethical approval was obtained from Punjab Employees Social Security Hospital's (PESSI), Islamabad ethical review board. The sample size was set at 250 using the Raosoft calculator. A convenient sampling method was used in this study. The data was collected using a structured and validated questionnaire: Wong and Long's Emotional Intelligence Scale (WLEIS) and the Psychological General Well-Being Index. A questionnaire was distributed among the study groups. Respondents consensually filled them out following an explanation regarding the method and purpose of the study. The respondents were given the option to maintain anonymity, and their responses were collected. Cronbach's alpha internal consistency coefficient of 0.710 confirmed the validity of the questionnaire.

The questionnaire was composed of 45 questions. 16 emotional intelligence-based, 22 general well-being-based and 7 questions regarding the personal information of the respondent. The format of the 16-item WLEI scale is a 7-point agreement Likert type scale (1= disagree to 7= agree) while the 22-item Psychological General Well-Being Index is a 5-point Quality and Frequency Likert type scale. Concerning psychological well-being, each GWB scale was evaluated using a possible total sum score ranging from 22 to 154, whereby the higher the score, the higher the well-being. The responses were then scored and categorized based on the percentage of emotional intelligence/psychological Adjustment (EIPA) score. Data was first collected in Microsoft Excel and then sorted and transferred to SPSS version 22 for analysis. The frequencies of each response, and descriptive statistics of mean, median, mode, standard deviation, minimum, and maximum were calculated. Further, the data were analyzed using descriptive statistics and one-way ANOVA.

3. Results

The results of this current study showed a response rate of 88.4%. Out of 250 questionnaires distributed among the participants, 221 had proper responses to the questions. Of the 230 respondents, 113 (51.1%) were doctors 108 (48.9%) were nursing staff, 132 (59.57%) were females and 89 (40.3%) were males with an average of 4.66 years of work experience. The results are displayed in Table 1.

Table 1: Sociodemographic Details

Variables	**Mean (SD)**	**Median**
Age	26.67 ± 4.8	26
Years of Experience	4.66 ± 3.34	5
Variables	Categories	Frequency (%)
Gender	Male	89 (42.27%)
	Female	132 (59.72%)
Years of exp.	< 5 years	83 (37.6%)
	≥ 5 years	84 (38%)
Occupation	Doctors	113 (51.1%)
	Nurses	108 (48.9%)

The mean total scores of emotional intelligence and general well-being were 52.5257 and 55.1915 respectively. 13.64 was the poorest score in emotional intelligence while 32.14 was the poorest percentage in general wellbeing. In the emotional intelligence-based question section, the overall most well-attempted questions were Use of Emotion (UOE) (57.4176) and Other's Emotional Appraisal (OEA) (57.3206). The

most poorly attempted questions were Self Emotional Appraisal (SEA) (53.2484) followed by Regulation of Emotions (ROE) (52.7796).

In comparison to study groups, the emotional intelligence score of doctors was 56.64 and that of nurses was 53.67. The difference was higher in general well-being scores with doctors at 60.16 and nurses at 44.52. Comparison of means using an independent t-test also elucidated this difference at a significance level of $P<0.05$. The mean emotional intelligence of doctors and nurses showed a statistically significant difference at a P-value of 0.036 while the mean general well-being-related questions of doctors and nurses showed a significant difference at a P-value of <0.001. The results are displayed in Table 2.

Table 2: Comparison of independent variables; gender, years of experience and occupation against emotional intelligence (Emotional Intelligence)

Independent Variables		Frequency	Mean± SD	Median	P value
Gender	Male	89	51.3 ± 8.7	50.9	< 0.001
	Female	132	57.8 ± 10.9	57.6	
Years of Experience	Less than 5 years	83	54.8±9.3	53.6	0.454
	5 years and above	84	56±12.4	55.8	
Occupation	Doctors	113	56.7±11.5	56.25	0.036
	Nurses(including nursing assistants, paramedics, etc.)	108	63.7±9.25	53.12	

Further comparisons in Gender demonstrated males had poorer emotional intelligence (51.25) as compared to females (57.84) while males had a greater mean score of general well-being (70.45) than females (40.43). An Independent t-test was used to compare means at a significance level of $P<0.05$. Mean emotional intelligence and general well-being-related questions of males and females showed significant differences at a P-value of <0.001 in both categories. Comparisons in Mean and independent t-tests in Years of Experience (YOE) with respondents characterised into two groups; (1) Experience of less than 5 years and (2) Experience of 5 years or more showed an insignificant difference in the two comparison groups for both emotional intelligence and general wellbeing. Independent-samples Kruskai Wallis Test showed rejection of the null hypothesis only for general well-being comparison among departments (not emotional intelligence) between doctors and nurses. The results are shown in Tables 3 and 4.

Table 3: Comparison of independent variables; gender, years of experience and occupation against general well-being (General Wellbeing)

Independent Variables		Frequency (n)	Mean ±SD	Median	P value
Gender	Male	89	70.5 ± 10.2	50.9	<0.001
	Female	132	40.4 ± 9.8	57.6	
Years of Experience	Less than 5 years	83	53.2±18.6	48.2	0.846
	5 years and above	84	52.6±16.7	51.4	
Occupation	Doctors	113	60.2±12	63.6	<0.001
	Nurses (including nursing assistants, paramedics, etc.)	108	44.5±19.3	39.0	

Table 4: Kruskai Wallis Test between independent variables: occupation and department of employment against general well-being (Kruskai Wallis Test)

Null Hypothesis	Sig.	Decision
The dissemination of Emotional Intelligence is similar across categories of Departments	0.475	Retain the null hypothesis
The dissemination of General Wellbeing is similar across categories of Departments	0.045	Reject the null hypothesis

4. Discussion

Healthcare workers face extreme physical and psychological stress as a daily routine. In addition, hospital employees may experience non-work-related stress due to responsibilities to family and financial matters, which can damage mental health and result in subpar performance.[16-18] Healthcare workers most often suffer from stress. Of its three tiers, having an extended experience of stress, be it physical or mental strain is among the main causes of emotional stress and it establishes when a person loses an interest in work and organizational commitment.[19] In the current study, the mean total score for emotional intelligence (EI) and general well-being were observed as 52.5257 and 55.1915 respectively. In a comparison of study groups, the mean score of emotional intelligence of doctors was 56.64 and that of nurses was 53.67. As compared to other studies, it is clear that despite having relatively better EI, doctors were overall poor in EI. According to a study report, the median score for the group as a whole for overall EI was higher than the national average and considered to be in the high range (82.70).[20] Our study showed that the difference was higher in percentage psychological adjustment (PA) scores with doctors, perhaps due to their societal status, better working hours or perhaps pay packages were better psychologically adjusted than nurses (60.16 and 44.52 respectively). This relative deficiency in the EI of nurses has been reported in a previous study in Taiwan where nearly half of the staff had either a minor psychiatric disorder or depressive disorder. Nurses and pharmacists had the highest prevalence.[21,22] Another study found that training (EI) enhanced the overall health of intensive care unit nurses. For the control group, the mean general health score climbed from 22.0 to 24.2, and 26.5, respectively, while it declined for the intervention group from 25.4 before the intervention, to 18.1 immediately after the intervention and to 14.6 one month later.[23] Additionally, the study found that male HCWs had lower (EI) (51.25) than female HCWs (57.84). According to the investigation's findings, female students had higher emotional intelligence than male students.[24] Similar findings were found in another study, which showed that female students had greater levels of emotional intelligence than male students.[25] Other studies' findings indicated that there was no gender difference in the overall emotional intelligence score, but that there was a tendency for the genders to differ in emotional self-awareness, interpersonal relationships, self-esteem, and empathy, with females scoring higher than males.[26] Nevertheless, some studies showed that men have higher emotional intelligence than women.[27] Another finding of this study was that there was no significant difference between 2 groups of HCWs with less than 5 years of experience and those with 5 or more years of experience. A weak positive correlation between the department of practice and (PA) was also found, suggesting that the department of practice affected mental well-being with the surgery department (55.64) having the best scores in PA closely followed by the psychiatry department (54.02). However, the poorest scores were in Dentistry (39.18) followed by Gynaecology and Obstetrics department (41.32), two predominantly female departments. This augments the findings of female HCWs requiring emotional guidance and intervention.

5. Conclusion

Harmonious work environments and friendly interpersonal relationships are crucial for the well-being of healthcare workers (HCWs) and patients. Stressful environments increase burnout and mental-emotional disorders, indicating an imbalance in emotional intelligence among doctors and nurses. Changes in work environments can foster friendly relationships and improve HCWs' and patients' well-being.

CONFLICTS OF INTEREST- None

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