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**PERCEIVED EMOTIONAL INTELLIGENCE AMONG HEALTHCARE TEAM IN
PAKISTAN: NEED OF THE HOUR**

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ABSTRACT

Emotional intelligence plays an essential role in training of healthcare professionals as it has immense impact on establishing positive association among patients and them. The objective of this research was to measure emotional intelligence among different healthcare professionals including physicians, pharmacists and nurses and to determine its association with the demographic characteristics of the participants. A descriptive cross sectional study design was used. A pre-validated data collection tool designed by National Health Services (NHS) London Leadership Academy, was distributed to conveniently selected sample of 283 prescribers, 241 nurses and 215 pharmacists. After data collection, data was cleaned, coded and entered in SPSS version 21 and was statistically analyzed. Significant difference ($p \geq 0.05$) in emotional intelligences was observed among different gender, age groups, profession, salary, experience, sector of practice and marital status. Females healthcare professionals were relatively more emotional intelligent. Married healthcare professionals and those having better salary status were relatively more emotionally intelligent. Pharmacists had better social skills than other healthcare professionals. This study provides a valuable insight into emotional intelligence and its

association with the demographic information of healthcare professionals. The results of the current study concluded that although healthcare professionals in Pakistan are emotionally intelligent but they still need to improve their emotion management, motivation, empathy and social skills. Pharmacists scored better in social skills and motivation than the other healthcare professionals.

Keywords: Emotional intelligence, physicians, pharmacists, nurses, Pakistan

INTRODUCTION

Emotional intelligence is an important factor responsible for determining success in life and psychological well-being as well as developing interaction between individuals and their work environment [1]. Emotional intelligence assists to achieve the proficiency for professional and personal growth. People having emotional intelligence can easily face ecological change without any undesirable effect on their everyday life [2]. Being a good healthcare professionals also require to be empathetic in order to understand patients along with having scientific knowledge. Emotional intelligence plays an essential role in training of healthcare professionals as it has immense impact on establishing positive association among patients and them [3]. It helps to improve relationship between patients and healthcare professional in turn enhancing quality of care. A study reported that age has a significant impact on emotional intelligence. Senior physicians were found more emotionally intelligent than younger physicians [4]. On the other hand

physicians working in private sector hospitals were reported with higher levels of emotional intelligence as compared to physicians working in public sector healthcare facilities in India [5]. Similarly, the nurses of private hospitals had better emotional intelligence than the nurses working in public sector hospitals. Experience also had an impact on emotional intelligence [6]. On the other hand, emotional intelligence was reported average among pharmacy students in Malaysia. They were found good in managing emotions but had average social skills [7]. Patients of the dentists with high general emotional intelligence scores were reported significantly more satisfied with treatment than patients of dentists with low emotional intelligence [8]. Limited studies have been found which assessed emotional intelligence among the healthcare team and not a single study to the best of our knowledge has been conducted in Pakistan till date. Therefore, the aim of this research was to enrich the relevant literature from Pakistan perspective

and to highlight the need to develop relevant strategies nurturing the emotional intelligence of healthcare team to meet the challenges of rapidly evolving healthcare profession. The objective of this research was to measure emotional intelligence among different healthcare professionals including physicians, pharmacists and nurses and to determine its association with the demographic characteristics of the participants.

METHODOLOGY

A descriptive cross sectional study design was used to evaluate perceived emotional intelligence among healthcare professionals in Pakistan. Study approval was taken from the Ethical Committee of Hamdard University (ref no HU/ER 756). Beside this approval was also taken from respective authorities of different institutions and pharmaceutical industries from where data was collected. Moreover, consent was also taken from the respondents and their confidentiality of information was also assured. Physicians, nurses and pharmacists working in regulatory, academia, industry, hospitals, retail pharmacies, public and private health care facilities located in twin cities were included as study respondents. Rao Soft sample size calculator was used to determine the sample size. The calculated

sample size was 382 for each group of respondents to achieve 95% confidence interval with 5% margin of error. The total sample came to be 1146. But due to unavailability of respondents at community pharmacies and unwillingness to participate, the total sample achieved for each group of healthcare professionals was: prescribers (n=283), nurse (n=241) and pharmacists (n=215). The response rate among the healthcare professionals was: prescribers (74.0%), nurses (63.0%) and pharmacists (56.2%). Convenient sampling technique was used to select the respondents available at the time of data collection.

A pre-validated data collection tool designed by National Health Services (NHS) London Leadership Academy, was used to measure the emotional intelligence in this study. The questionnaire consisted of 50 items measuring different competencies of emotional intelligence including self-awareness, managing emotions, managing oneself, empathy, and social skill. Participants' responses were rated using a 5-point Likert scale based on participants' reflection towards the item. The demographic components of the participants were added in the questionnaire. The questionnaires were self-administered by the principal investigator to the respondents. To avoid

study biasness, questionnaires were collected back on the same day. After data collection, data was cleaned, coded and entered in SPSS version 21 and was statistically analyzed.

RESULTS

Out of 739 respondents, 40.9% (n= 302) were males while 59.1% (n= 437) were females. Of the total respondents, physicians were 38.3% (n= 283), 32.6% (n= 241) were nurses and 29.1% (n= 215) were pharmacists. Out of the total respondents, 45.5% (n= 336) were working in public sector while 54.5% (n= 403) were working in private sector. Regarding the experience of respondents, 23.7% (n= 175) had working experience of less than one year, 36.0% (n= 266) had working experience of 1-5 years, 23.3% (n= 172) had an experience of 6-10 years while 17.1% (n= 126) had working experience of greater than 10 years (Table 1).

The mean score for different domains of emotional intelligence for physicians was self awareness (35.4, \pm 6.1), emotions (32.4, \pm 6.1), motivation (33.3, \pm 5.8), empathy (34.1, \pm 6.1) and social skills (33.3, \pm 5.9). While for pharmacists emotional intelligence score was: self awareness (35.6, \pm 6.6), emotions (31.9, \pm 5.4), motivation (34.8, \pm 6.4), empathy (34.1, \pm 5.5) and social skills (35.1, \pm 6.5). Moreover for nurses the EI score was self awareness (34.9, \pm 6.6), emotions (33.2,

\pm 6.0), motivation (34.5, \pm 5.9), empathy (34.0, \pm 6.1) and social skills (34.7, \pm 6.5). A detail description is given in (Table 2).

Significant difference ($p \geq 0.05$) in emotional intelligences was observed among different gender, age groups, profession, salary, experience, sector of practice and marital status. Females healthcare professionals were relatively more emotional intelligent. Married healthcare professionals and those having better salary status were relatively more emotionally intelligent. Pharmacists had better social skills than other healthcare professionals (Table 3).

Table 1: Demographic Characteristics

Indicators	Total n (%)	
Age	20-30 Y	378 (51.2)
	31-40 Y	155 (21.0)
	41-50Y	152 (20.6)
	>50 Y	54 (7.3)
Gender	Male	302 (40.9)
	Female	437 (59.1)
Marital Status	Married	424 (57.4)
	Unmarried	315 (42.6)
Profession	Physicians	283 (38.3)
	Nurses	241 (32.6)
	Pharmacists	215 (29.1)
Sector of Practice	Public	335 (45.3)
	Private	404 (54.7)
Level of Experience	<1 Year	175 (23.7)
	1-5 Years	266 (36.0)
	6-10 Years	172 (23.3)
	>10 Years	126 (17.1)
Current Salary	Rs 10,000-20,000	113 (15.3)
	Rs 21,000-30,000	122 (16.5)
	Rs 31,000-50,000	175 (23.7)
	Rs >50,0000	329 (44.5)

Table 2: Emotional Intelligence of Healthcare Professionals in Pakistan

Dimensions of EI	Physicians				Pharmacists				Nurses			
	Mean	Median	S.D	IQR	Mean	Median	S.D	IQR	Mean	S.D	Median	IQR
Self Awareness	35.4	6.1	36.0	9.0	35.6	6.6	36.0	11.0	34.9	6.6	35.0	9.0
Managing Emotions	32.4	6.1	33.0	10.0	31.9	5.4	33.0	8.0	33.2	6.0	34.0	7.0
Motivating Oneself	33.3	5.8	34.0	8.0	34.8	6.4	35.5	9.0	34.5	5.9	36.0	8.0
Empathy	34.1	6.1	35.0	7.0	34.1	5.5	34.0	7.2	34.0	6.1	34.0	10.0
Social Skills	33.3	5.9	34.0	9.0	35.1	6.5	34.0	9.0	34.7	6.5	36.0	7.0

Table 3: Comparison of Mean Scores of Emotional intelligence according to different Demographic Mann-Whittney^a; Kruskal-Wallis test^b Test (p ≥ 0.05)

Demographics	Self Awareness				Managing Emotions				Motivating Oneself				Empathy				Social skill				
	n	Mean rank	Test Stats.	P value	n	Mean rank	Test Stats.	P value	n	Mean rank	Test Stats.	P value	n	Mean rank	Test Stats.	P value	n	Mean rank	Test Stats.	P value	
Gender	M	302	324.83	52323.5	0.001	302	362.40	63691.0	0.425	302	347.45	59176.5	0.016	302	349.47	59785.0	0.029	302	355.26	61535.5 ^a	0.133
	F	437	400.27			437	375.25			437	385.58			437	384.19			437	379.36		
Marital Status	M	424	349.79	58212.0	0.006	424	383.53	60194.5	0.029	424	376.50	63174.0	0.263	424	365.68	64947.0	0.617	424	373.28	64118.0 ^a	0.473
	U.M	313	393.92			313	349.31			313	358.83			313	373.50			313	362.01		
Profession	Phy.	283	372.76	1.229 ^b	0.539	283	365.37	4.801 ^b	0.089	283	339.17	9.615 ^b	0.009	283	375.15	0.369 ^b	0.832	283	334.80	12.464 ^b	0.002
	Nur.	241	357.5			241	393.06			241	387.68			241	363.80			241	356.04		
	Phar.	215	378.68			215	350.25			215	390.75			215	370.17			215	385.55		
Age of Respondents	20-30y	378	407.04	24.847 ^b	0.001	378	357.04	5.796 ^b	0.122	378	368.22	0.793 ^b	0.853	378	381.14	4.145 ^b	0.244	378	376.68	3.983 ^b	0.270
	31-40y	155	331.84			155	362.71			155	376.00			155	370.78			155	349.67		
	41-50y	152	337.39			152	394.17			152	375.82			152	358.30			152	384.37		
	>50y	54	305.93			54	413.62			54	348.87			54	322.76			54	334.40		
Level of Experience	<1y	175	412.65	14.682 ^b	0.002	175	365.16	5.541 ^b	0.137	175	372.41	23.393 ^b	0.001	175	392.19	7.476 ^b	0.058	175	377.36	11.089 ^b	0.12
	1-5y	266	368.85			266	351.16			266	349.81			266	363.40			266	352.13		
	6-10y	172	325.11			172	380.00			172	340.33			172	339.26			172	349.90		
	>10y	126	371.54			126	402.85			126	449.78			126	395.09			126	421.08		

Current Salary	10k-20k	113	329.34	15.367 ^b	0.001	113	380.46	21.479 ^b	0.001	113	328.22	14.760 ^b	0.002	113	351.78	12.934 ^b	0.005	113	326.26	16.568 ^b	0.001
	21k-30k	122	320.64			122	295.55			122	326.63			122	313.41			122	324.38		
	31k-50k	175	394.05			175	360.99			175	402.82			175	387.61			175	407.14		
	>50k	329	388.43			329	398.81			329	382.98			329	387.88			329	381.17		
Sector	Pub.	335	398.04	57606.0	0.001	335	407.31	54835.5	0.001	335	403.95	55961.0	0.001	335	393.24	59551.0	0.005a	335	391.14	59919.5 ^a	0.01
	Pri.	404	344.80			404	338.07			404	340.86			404	349.77			404	350.55		

DISCUSSION

Emotional intelligence in healthcare settings is an important element of the competencies of the health professionals and quality of the service provided in the health organization. Health professionals are dealing with people who are under severe emotional stress and may or may not be able to communicate these emotions. The level of emotional intelligence may vary among different professionals according to their responsibility in the organization and the significance they give to the application of emotional intelligence in performing their tasks. [3]. The results of the present study showed that the healthcare professionals in twin cities of Pakistan had good self awareness but they need to improve their emotion management, motivation, empathy and social skills. However, pharmacists possessed relatively better social skills with higher motivation levels than the other healthcare professionals. Moreover, female healthcare professionals had relatively more self awareness. Similarly, self awareness score was found higher among female healthcare professionals in Malaysia [2].

Self motivated individuals constantly work toward their goals [9]. The results of the present study showed that female healthcare professionals were comparatively more

motivated than males. Female healthcare professionals also scored more in empathy than males, thus, female healthcare professionals were relatively more emotionally intelligent than males. Similar results were reported in a study which showed females were believed to have higher emotional intelligence due to social or biological factors [10].

Personal, family and professional factors influence emotional intelligence. The results of the present study showed that senior healthcare professionals were relatively more emotionally intelligent than younger professionals. Similar findings were reported from another study conducted in United States of America [11]. Furthermore, the results of present study indicated that emotional intelligence was found comparatively more among highly paid healthcare professionals. This argument is supported by a study conducted in United States [12]. On the other hand, the current study revealed that healthcare professionals working in public healthcare facilities had better self awareness, emotional management, motivation, empathy and social skills than those working in private hospitals. Healthcare professionals working in public healthcare facilities were found more emotionally intelligent than those working in

private sector. In contrary to these findings, a study conducted in India reported physicians working in private sector more emotionally intelligent than those working in public sector hospitals [5].

CONCLUSION

This study provides a valuable insight into emotional intelligence and its association with the demographic information of healthcare professionals. The results of the current study concluded that although healthcare professionals in Pakistan are emotionally intelligent but they still need to improve their emotion management, motivation, empathy and social skills. Pharmacists scored better in social skills and motivation than the other healthcare professionals. Clinical outcomes and issues such as malpractice liability may be affected by healthcare professional's ability to convey emotional awareness and empathy to patients. Thus, effective strategies must be designed to improve emotional intelligence among healthcare professionals which can lead to better health outcomes, as patients may become more apt to medication adherence.

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