

The Role of Emotional Intelligence in Health Care Setting

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ABSTRACT:

For long emotions in medicine has been given very little attention. Healthcare professionals often undergo tremendous stress which leads to emotional instability which eventually affects work performances and patient care. A series of recent studies indicates EI is essential in the medical field as it has been reported to be a predictor of the interpersonal and communication skills essential for improving doctor-patient relationships. The impact of emotional intelligence in medicine has been recently highlighted. Persons with high EI are known to better recognize potential stressors and can cope up with stress using emotions. However, it has been argued that the importance of emotional intelligence in healthcare has been underestimated. The purpose of this study was to measure and analyse the emotional intelligence of healthcare professionals and to explore if any additional are factors related to emotional intelligence. The study also highlighted its potential in medicine. The study included 97 doctors and 189 nurses employed in both government and private hospitals, community health centres in the district. The Emotional Quotient Test developed by Singh and Chadha was used to measure the Emotional Intelligence of the healthcare professionals. Data were analysed using ANOVA, t-test, Multiple Regression. The study concluded that factors like occupational groups, age, and gender of the healthcare professionals are a significant factor influencing emotional intelligence.

Key words: Emotional Intelligence, Medicine, Healthcare professionals, Doctors, Nurses

INTRODUCTION

The healthcare sector is moving toward a more patient-centred healthcare delivery system. There's a strong body of research showing emotional intelligence has a real effect on patient doctor relationship (Weng et al., 2008), quality of care (Adams & Iseler 2014), performance of their staff (Agrawal et al., 2010). Healthcare professional with poor emotional intelligence can neither communicate effectively with patients nor with staff, which in turn deter their ability to identify and understand the emotional needs of their patients. Lack of emotional intelligence can also create a poor organizational climate at work leading to increase cases of medical errors. Thus with inadequate research on emotional intelligence its proper impact is still to be determined, besides without a reasonable impact there continues to be an inconsistent focus on emotional intelligence in the healthcare sector and is therefore worthy of investigation.

In the west Garo hill district of Meghalaya, there is a serious shortage of specialized medical and para-medical staff, infrastructure facilities, drugs, etc. (Government of Meghalaya, 2009). The hilly terrain and poor road infrastructure are making the health sector scenario, even the worst (AMC Research Group, 2011). This makes the life of health care professionals more stressful in the district. However, some researchers have tried to advocate that emotional intelligence is important for effective practice, particularly with respect to delivering patient-centred care (Bellack,

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1999; Cadman & Brewer, 2001). It is important for the health care professionals to have control over their emotions to provide better healthcare services.

OBJECTIVE

1. To study the distribution of healthcare professionals according to their selected socio-demographic variables.

Concept of Emotional Intelligence

In 1920 Thorndike came with the concept of Social Intelligence (Walker & Foley, 1973) as "the ability to understand men and women, boys and girls - to act wisely in human relations" which in due course of time led to the foundation of Emotional intelligence (Salovey & Mayer, 1990). Caruso and Salovey (2004) defined emotional intelligence as "the ability to perceive and express emotion, assimilate emotion in thought, understand and reason with emotion, as well as regulate emotion in the self and others". Emotional intelligence was also defined as "the capacity for recognizing our own feelings and those of others, for motivating ourselves, and for managing emotions well in ourselves and in our relationships" (Goleman, 1999). In 1997, Bar-On conceptualized emotional intelligence as emotional, personal and social abilities of a person which are interconnected and can control one's capability to adjust with demands and stress. Mayer et al. (1999) defined emotional intelligence "as the capacity to reason about emotions, and of emotions to enhance thinking. It includes the abilities to accurately perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions so as to promote emotional and intellectual growth".

In the Indian context, Singh (2001) made an attempt to conceptualize emotional intelligence as "the ability of an individual to appropriately and successfully respond to a vast variety of emotional stimuli being elicited from the inner self and immediate environment." He further added that emotional intelligence constitutes three psychological dimensions as emotional sensitivity, emotional maturity, and emotional competency which motivate an individual to recognize truthfully, interpret honestly and handle tactfully the dynamics of human behaviour. His definition captures the Indian psyche and thus shall be used as an operational definition in the proposed study.

Models/Theories of Emotional Intelligence:

Currently, there are four main models of emotional intelligence: Ability model; Mixed model, Trait

model and Bar-On model. The ability-based model views, emotions as useful sources of information that help one to make sense of and navigate the social environment (Mayer & Salovey, 1997; Salovey & Grewal, 2005). The mixed model focuses on emotional intelligence as a wide array of competencies and skills that drive leadership performance (Goleman, 1998). The Trait model defines emotional intelligence as "a constellation of emotional self-perceptions located at the lower levels of personality" (Petrides & Kokkinaki, 2007). This definition of emotional intelligence encompasses behavioral dispositions and self-perceived abilities and is measured by self report, as opposed to the ability based model which refers to actual abilities, which have proven highly resistant to scientific measurement. According to Bar-On (1997), emotional intelligence is concerned with understanding oneself and others, relating to people, and adapting to and coping with the immediate surroundings to be more successful in dealing with environmental demands. His model of emotional intelligence can be viewed as a mixed intelligence, also consisting of cognitive ability and aspects of personality, health and well being. A number of emotional intelligence measurement instruments have been developed on the basis of available theories and models viz. Multifactor Emotional Intelligence Scale (MEIS) developed by Mayer & Salovey (1997); Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) developed by Mayer et al. (1999); Emotional Intelligence Scale developed by Schutte et al. (1998); Bar-on EQ-I developed by Bar-On (1997) and Swinburne University Emotional Intelligence Test (SUEIT) developed by Palmer & Stough (2001).

The present study derives uses the definition given by Singh (2003). It also uses the Emotional Quotient Test developed by Chadha and Singh (2003). The Emotional Quotient Test is also based on the emotional intelligence definition proposed by Singh (2003).

REVIEW OF LITERATURE

Emotional intelligence lately has been recognised as important competencies along with other competencies of professionals of health care sector (Freshman and Rubino, 2002) because these professionals have to repeatedly deal with patients having high level of stress which demands high sensitivity on the part of doctors, nurses and support staff to develop confidence among their patients (Colie, 1998; Dye, 2000). In spite of growing recognition of the importance of the emotional intelligence, it is to be understood that different professionals have different level of emotional intelligence and they use

it differently while performing their duties (Freshman and Rubino, 2002). The ability of a healthcare worker to manage their emotions while interpreting and responding to those of others is a prerequisite of anyone working in the caring professions (Cadmen and Brewer 2001).

Though emotional intelligence lately given importance in health care sector in treating patients, it is still to be given due significance while judging the proficiency level of doctors and nurses and other from the health care sector (Faguy, 2012). Researchers have emphasised that empathy backed communication with patients develops good relationship which in turn help in providing better treatment and experience to patients (Goleman, 1998). Emotional intelligence also had an impact on Physician-Patient Interaction (Morales 2014). It also contributed to skills of the medical professionals leading to achieve their core competencies (Arora et al., 2010). Emotional intelligence helps in gaining the trust of the patient (Weng et al. 2008; Arora et al. 2010), improving physicians interpersonal communication (Arora et al., 2010; Cherry et al., 2012), and also helps in listening to the voice of the patient (Last, 2012) which helps in overall patient satisfaction.

METHODOLOGY

a) Study participants/study setting

The study included 286 healthcare professionals including 189 nurses and 97 doctors employed in hospitals and CHC's (4 government and 2 private hospitals & 5 CHC's).

b) Study period:

The study was undertaken from March 2019- July 2019

c) Sampling and data collection technique

The data was collected using collected by personal interview method using a well structured and pre-tested schedule. Using Population sampling technique where all the doctors and nurses employed in Government and private hospitals as well as community health Centres within the West Garo Hills district of Meghalaya was included.

d) Measurement Instruments, Variables and Data Collection

The study proposes to measure the Emotional Intelligence of the healthcare professionals was measured using Emotional Quotient Test Singh & Chaddha (2003). The Emotional Quotient Test

is one of the most widely used tests on Indian population (Sharma & Nathawat, 2013). The EQ test has been utilized in a number of studies as a measure of EI (Rajkhowa, 2002, Punia 2005). Adopting Dalip Singh's definition this instrument covers three psychological dimensions emotional sensitivity, emotional maturity and emotional competency which motivates an individual to recognize truth, interpret honestly, and handle tactfully the dynamics of human behaviour. The test has been designed in such a way that it measures all three dimensions. It consists of 22 questions which measure emotional reactions to different situations. This EQ test has a test-retest and split-half reliability of 0.94 and 0.89 respectively and validity of 0.89. The current study's full scale reliability was found to be .740.

e) **Statistics:** Data was analysed using SPSS version 20. Using descriptive statistics: frequency, percentage, means & standard deviation was calculated. Means of various dimensions were compared using independent sample t- test & one way ANOVA.

f) **Scoring:** Emotional intelligence was scored on three psychological dimensions- emotional competency, emotional maturity, and emotional sensitivity but their values were added and taken as a whole depicting the Total EQ Score. All three dimensions were scored by using their respective keys or scoring guides.

Results and Discussion

In this study, majority of the respondents are in the age range between 20 and 30 (43.2%) and are female (83.3%). A large section of the respondent are married (64.5%) and have 0 to 2 dependents (77.7%). Majority of the respondents work in the government sector (80.5%) and have 0-5 years of experience (40.1) (Table 1).

Table 2 presents the mean score and standard deviation for the various emotional intelligence dimensions. Table 2 also presents the total emotional intelligence doctors and nurses. Results indicate that the mean EI score of doctors and nurses are 320.15 and 308.30 respectively. This shows that emotional intelligence score slightly differs among the two occupational groups. Doctors, thus, had a higher Emotional Intelligence score as compared to nurses. Results also indicated that doctors compared with nurses had significantly higher scores on the emotional maturity and emotional competency. Only the emotional

Table 1: General Characteristics of the Study Population

Demographic variable	Category of Respondents	Frequency	Percentage
Gender	Male	48	16.7
	Female	239	83.3
Age range	20 to 30 yrs	124	43.2
	30 to 40 yrs	91	31.7
	40 to 50 yrs	57	19.9
	50 to 60 yrs	15	5.2
Marital status	Married	185	64.5
	Single	89	31.0
	Widow	5	1.7
	Separated	8	2.8
Job sector	Government Sector	231	80.5
	Private Sector	56	19.5
Years of service	0 to 5 yrs	115	40.1
	5 to 10 yrs	94	32.8
	10 to 15 yrs	43	15.0
	15 to 20 yrs	24	8.4
	20 to 25 yrs	6	2.1
	More than 25 yrs	4	1.4

sensitivity dimension did not significantly differ across occupational groups.

Relations among the Dimensions of Emotional Intelligence

The intercorrelations among the dimensions of emotional intelligence that is emotional sensitivity, emotional maturity and emotional competency are

carefully observed in Table 3. The correlations among the three EI dimensions and Total EI indicates that there exists a significant and Positive correlation among the three EI dimensions, total EI and Total EI ($r = 0.832, .777, .891$ and $p < .01$).

The differences in the emotional intelligence level and occupational groups and are presented in Table 4.

Table 2: Table of Means for the three EI factors, EI scale

Variables	Occupational Groups	Male		Female		Total	
		Mean	SD	Mean	SD	Mean	SD
EI	Doctors	321.09	44.06	319.33	48.16	320.15	46.05
	Nurses	327.50	17.68	308.10	28.23	308.31	28.18
ES	Doctors	74.13	12.88	73.65	14.08	73.88	13.46
	Nurse	70.00	7.07	73.93	9.41	73.89	9.39
EM	Doctors	104.78	15.74	101.92	17.21	103.27	16.51
	Nurse	97.50	3.54	99.01	11.11	98.99	11.05
EC	Doctors	142.17	20.46	143.75	21.44	143.01	20.89
	Nurse	160.00	7.07	135.16	16.06	135.42	16.18
	Nurses	12.50	0.71	12.93	2.41	12.92	2.40

Results indicated that there is significant differences among doctors and nurses for emotional intelligence (EI $F=7.27$, $p= .007$) and its two dimensions of emotional maturity (EI $F=6.78$, $p= .010$) and emotional competency (EI $F=11.56$, $p= .001$). However the two

groups did not differ across emotional sensitivity.

Next comparison was done between emotional intelligence and age groups and is presented in Table 5. It was expected that Emotional Intelligence and its dimensions will vary according to age. The difference

of groups was analysed using analysis of variance and results highlighted differences among age groups for Emotional Intelligence (EI F=1.859, $p = .003$) and its dimensions emotional maturity (EI F=1.371,

$p = .087$) and emotional competency (EI F= 1.838, $p = .004$). However, emotional sensitivity did not vary according to age.

Independent samples t-test was conducted to examine

Table 3: Results of Correlation analysis among EI factors and total EI

		ES	EM	EC	EI
ES	Pearson Correlation	1	.516**	.651**	.832**
	Sig. (2-tailed)		.000	.000	.000
EM	Pearson Correlation	.516**	1	.482**	.777**
	Sig. (2-tailed)	.000		.000	.000
EC	Pearson Correlation	.651**	.482**	1	.891**
	Sig. (2-tailed)	.000	.000		.000
EI	Pearson Correlation	.832**	.777**	.891**	1
	Sig. (2-tailed)	.000	.000	.000	
	Sig. (2-tailed)	.000	.000	.000	.000

** . Correlation is significant at the 0.01 level (2-tailed).

if there was a significant difference in occupational stress based on selected sample characteristics (Table 6). As indicated in Table 6, occupational stress does not vary according to Job Sector ($p = .166$). And healthcare professionals working in the private sector are more stressed than healthcare professionals working in the government sector.

A further comparison was done between emotional

intelligence and gender and is presented in Table 7. It was expected that emotional intelligence score would vary across gender. One group of respondents will have higher EI score as compared to others. Similarly it was found that emotional intelligence (EI F=3.705, $p = .055$) and its dimensions emotional maturity (EI F=5.363, $p = .021$) and emotional competency (EI F=4.206, $p = .041$) varies among gender. Similarly

Table 4: Results of ANOVA (Emotional Intelligence and occupational Groups)

		Sum of Squares	df	Mean Square	F	Sig.
Emotional Sensitivity	Between Groups	.008	1	.008	.000	.993
	Within Groups	34143.197	285	119.801		
	Total	34143.206	286			
Emotional Maturity	Between Groups	1177.018	1	1177.018	6.789	.010
	Within Groups	49414.097	285	173.383		
	Total	50591.115	286			
Emotional Competency	Between Groups	3714.817	1	3714.817	11.564	.001
	Within Groups	91553.127	285	321.239		
	Total	95267.944	286			
Emotional Intelligence	Between Groups	9056.551	1	9056.551	7.271	.007
	Within Groups	354980.905	285	1245.547		
	Total	364037.456	286			

Table 5: Results of ANOVA (Emotional Intelligence and age)

		Sum of Squares	df	Mean Square	F	Sig.
Emotional Sensitivity	Between Groups	5053.996	36	140.389	1.205	.207
	Within Groups	29009.990	249	116.506		
	Total	34063.986	285			
Emotional Maturity	Between Groups	8366.514	36	232.403	1.371	.087
	Within Groups	42194.762	249	169.457		
	Total	50561.276	285			
Emotional Competency	Between Groups	20002.751	36	555.632	1.838	.004
	Within Groups	75261.235	249	302.254		
	Total	95263.986	285			
Emotional Intelligence	Between Groups	77089.457	36	2141.374	1.859	.003
	Within Groups	286794.896	249	1151.787		
	Total	363884.353	285			

emotional sensitivity dimension of emotional intelligence did not vary according to gender.

Subsequently comparison was done between emotional intelligence and Working Experience and presented in Table 8. Results indicated that there is no significant differences among doctors and nurses

Table 6: Emotional Intelligence across Job Sector

	Job Sector	N	Mean(S.D)	T	df	P
Emotional Intelligence	Government	231	313.79(37.24)	1.387	285	.166
	Private	56	306.43(27.84)			
Emotional Sensitivity	Government	231	74.42(10.66)	1.231	285	.219
	Private	56	72.5(9.49)			
Emotional Maturity	Government	231	100.22(13.74)	-.611	285	.542
	Private	56	101.43(11.35)			
Emotional Competency	Government	231	139.35(18.80)	2.544	285	.011
	Private	56	132.5(14.71)			

for emotional intelligence (EI F=9.23, p= 4.66) and its three dimensions emotional sensitivity (EI F=.843, p=.520), emotional maturity (EI F=.406, p= .844) and emotional competency (EI F=1.494, p= .192).

DISCUSSION

As mentioned above, lately there has been growing significance of the EI in healthcare. Emotional intelligence (EQ) is the ability to use one’s own

emotions to positively deal with high-stress situations and overcome challenges. For persons employed in the medical professionals, this can assist the doctors and nurses in their ability to better communicate and empathize with their patients and co-workers, as well as control their internal stress and approach the problems with a clear, open mind.

In this study various factors like occupational groups, age, gender and working experience of the

Table 7: Emotional Intelligence across Gender

	Gender	N	Mean(S.D)	t	df	p
Emotional Intelligence	Female	239	310.54(33.78)	-1.925	285	.055
	Male	48	321.35(43.21)			
Emotional Sensitivity	Female	239	74.02(10.10)	-.091	285	.928
	Male	48	74.17(12.17)			
Emotional Maturity	Female	239	99.64(12.70)	-2.316	285	.021
	Male	48	104.48(15.48)			
Emotional Competency	Female	239	137.03(17.68)	-2.051	285	.041
	Male	48	142.92(20.36)			

healthcare professionals were analysed in order to examine whether these might have any impact on the dimensions of Emotional intelligence among Healthcare Professionals. The study highlighted that emotional intelligence varies across occupational groups, age, and gender. And working experience does not influence the healthcare professional's emotional intelligence. It was also observed that health care professionals in the younger age group were more likely to score lower on the emotional intelligence scale.

Implications

Although a number of studies have assessed stress and

burnout relation, very few have given importance to the emotional competencies in the medical field. The study suggests the use of emotional competencies as one of the parameters for permitting someone in the health care sector dealing directly with the patients. During the training period, focus should be on the developing emotional intelligence of the professionals. This may reduce the case of stress and burnout among the health care professionals. It will also assist in the management and control of emotions which will ultimately help in controlling anger, stress and anxiety and will lead to harmonious relationship and better work and family environment for the healthcare professionals. Thus, both personal and professional

Table 8: Results of ANOVA (Emotional Intelligence and Working Experience)

		Sum of Squares	Df	Mean Square	F	Sig.
Emotional Sensitivity	Between Groups	462.094	5	92.419	.843	.520
	Within Groups	30799.404	281	109.606		
	Total	31261.498	286			
Emotional Maturity	Between Groups	363.193	5	72.639	.406	.844
	Within Groups	50227.922	281	178.747		
	Total	50591.115	286			
Emotional Competency	Between Groups	2466.601	5	493.320	1.494	.192
	Within Groups	92801.343	281	330.254		
	Total	95267.944	286			
Emotional Intelligence	Between Groups	5883.671	5	1176.734	.923	.466
	Within Groups	358153.785	281	1274.569		
	Total	364037.456	286			

relationships can be improved in organisations. The insights drawn from the present study can be used to develop EI based training modules which may lead to develop the competencies of the health care professionals in dealing with patients. This will one side improve the productivity of the staff and on the other hand reduce the employee turnover rate of the organisations. In addition, emotional intelligence can be considered as one of the most important factors in selecting and employing healthcare professionals and job promotions during their services.

Recommendation of the study

The study suggests that the management should focus on the concept of emotional intelligence, such as emotional sensitivity, maturity and emotional competency and should include it in the academic curriculum and training of healthcare professionals from the beginning. This will help them to develop their emotional intelligence. The study also recommends that various educational and training courses for the promotion of healthcare professionals wellness should be developed, which will improve their ability to deal with stressful situations which would gradually create a harmonious workplace and also would reduce the situation of malpractice.

CONCLUSION :

It may be concluded that the paper shows factors like occupational groups, age, and gender of the healthcare professionals are an influential factor of emotional intelligence and factors like job sector and length of service both are not an influential factor of emotional intelligence. Results also highlighted that doctors and nurses differ in their emotional intelligence skills and doctors have higher EQ as compared to nurses and emotional intelligence is found to be increase with age for health care professionals.

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