Emotional Intelligence and its Relation to Coping Styles in Medical Internees

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ABSTRACT

Introduction: Emotional intelligence contributes to wellbeing, success of a person and good doctor-patient relationship. Coping styles also affect the wellbeing of a person. It is possible that these two concepts may influence one another. With this, background present study aimed to assess emotional intelligence and coping styles, in a group of medical internees and study the relation between them.

Material and methods: Study was conducted in a medical college. It was a cross sectional study. Consecutive sampling method was employed. Medical internees who consented for the study were given a brief introduction about the study. They were administered Emotional Quotient test and Coping Checklist. SPSS 17 software was used for statistical analysis. Tests for correlation and independent t test were employed for analysis.

Results: The sample had high total Emotional Quotient; high Sensitivity and Competency but low Maturity. Healthy Coping styles were more frequently used than unhealthy ones. Emotional Quotient had significant positive correlation with healthy coping styles and negative correlation with unhealthy coping styles.

Conclusion: Medical internees had overall high Emotional Quotient and used more of healthy coping styles. Emotional intelligence can influence the type of use of coping styles.

Keywords: Emotional intelligence, emotional quotient, coping styles, medical internees, doctors

INTRODUCTION

Emotional Intelligence (EI) is defined as 'the ability to perceive emotions, to access and generate emotions as to assist thought, to understand emotions and emotional knowledge and to reflectively regulate emotions so as to promote emotional and intellectual growth'.[1]

Coping styles are defined as 'Efforts, both action-oriented and intra-psychic, to manage i.e. to master, tolerate, reduce or minimize, environmental and internal demands and conflicts among them which tax or exceed a person's resources'.[2] Coping styles are the strategies used in adapting to stress. Coping styles are classified in many ways, but each have core concept that the strategy used to reduce stress is either helpful or harmful to the individual.

Emotional Intelligence and Coping Styles

Emotional intelligence determines how individuals differ in the extent to which they attend to, process and utilise emotional information of an intrapersonal or interpersonal nature, which can also refer to a stressful situation. Study done by Bar-On has shown that EI has significant impact on social interaction and the ability to be resilient.[3] On the other hand coping may also be related to emotional competencies, self-monitoring and empathy and facilitate reduction of the frequency, intensity and duration of distress.[4] Hence, it can be hypothesized that EI can also influence the type of coping styles used. Individuals with high EI utilize more of problem solving strategies.[5] They probably also have greater ability to plan and decide on coping resources that reduce harmful effect of stress.[6] Studies done in India have revealed that high EI is associated with healthy coping styles.[7,8] But these results are not consistent as opposite relation between the two concepts has also been reported.[9] In this background, present study is planned to assess EI and coping styles in a group of medical internees and assess the relationship between the two.

MATERIAL AND METHODS

This was a cross sectional descriptive study in a sample of medical internees.

Method

A brief introductory script explaining the concept of EI and Coping strategies, need for the study and the procedure of self-administration of scales, were provided to all participants. Written consent was taken and feedback was given to all candidates who participated. Ethical clearance for the study was obtained from Institutional Ethical Committee Review Board.

Subjects

Internees belonging to both sexes, who were undergoing training after completing four and half years of M.B.B.S. course were included in the study using consecutive sampling method, during a one year period from December 2011 to November 2012. They were of approximately 22-24 years of age. All those who consented were given the test.

Materials

A self-designed proforma was used to elicit socio-demographic data. EI was assessed using EQ test developed by Dalip Singh and N K Chadha.[10] Test contains 22 items, which measure three domains- Sensitivity, Maturity, Competency and Total EQ. Retest reliability for the test was found to be 0.94. The split half reliability in the case of odd-even items was 0.89 and for the first half and second half was 0.91. Validity was found to be 0.89. Coping checklist developed by Kiran Rao,[11] consisting of 70 items, was used to elicit coping

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styles used. Coping styles measured were Problem Solving, Distraction Positive, Distraction Negative, Acceptance/ Redefinition, Faith/ Religion, Blame/Denial and Social support. The test-retest reliability is 0.74 and the internal consistency (alpha) ranges from 0.75 to 0.85 indicating adequate reliability. The above Coping styles were grouped as healthy and unhealthy based on literature review.[12] The coping styles like Problem Solving, Distraction Positive, Acceptance/Redefinition, Faith/ Religion and Social support were considered as healthy coping styles and Distraction Negative and Blame/ Denial were considered as unhealthy coping style.

STATISTICAL ANALYSIS

Analysis was done using SPSS 17 version of software. Scoring of Coping styles were converted from continuous to categorical variable as high and low by dividing maximum score by half, for statistical analysis. Variables like gender and substance use, which were heterogeneous across group were also included in the comparative analysis and assessed using independent t test. Pearson's correlation and independent t test were used to assess the relationship between EI and Coping styles.

RESULTS

The sample consisted of 167 participants. The mean age was 23 years, with standard deviation of 0.95. Sample had almost equal gender distribution, with 86 female (51%) and 81(49%) male participants. Majority of the sample were belonging to urban (87%) nuclear family (81%). Majority (80%) reported not to be using any psychoactive substance.

The mean scores of the sample on EQ and Coping styles are presented in table-1. The sample had high total EQ and domain-wise they had high Sensitivity and Competency but low Maturity. Coping styles like Problem Solving, Distraction Positive, Acceptance / Redefinition and Social Support were used frequently while Denial/ Blame, Distraction Negative and Faith / Religion were seldom used. Gender differences were noted in some of these domains. Men reported to be using more Distraction Negative (t= 2.33, P = 0.02, 95% CI 0.09 to 1.08) and women more of Faith/ Religion style of coping (t= 2.35, P = 0.02, 95% CI -1.24 to -0.11) which were statistically significant. Those who used one or more psychoactive substance had low total EQ (t=2.17, P = 0.03, 95% CI 1.07 to 22.50). They also had lesser use of Acceptance/ Redefinition (t= 2.57, P = 0.01, 95% CI 0.20 to 1.52) and excessive use of Distraction Negative (t=3.87, P < 0.001, 95% CI -1.77 to -0.57) when compared to those who didn't use any psychoactive substance. All these findings were statistically significant.

Table – 2 shows the correlation between EQ and Coping Styles. Total EQ had significant positive relation with Problem Solving (r = 0.22, P = 0.004), Distraction Positive (r = 0.18, P = 0.02), Social Support (r =0.24, P = 0.002) and negative correlation with Distraction Negative (r = -0.27, P = 0.001) and Blame/ Denial (r = -0.34, P < 0.001) styles of Coping. When each domain of EQ was separately tested with Coping styles, Sensitivity had significant negative relationship with Distraction Negative (r = -0.21, P =0.008) and Blame/ Denial (r =-0.16, P =0.04) styles of Coping. Maturity domain of EQ had positive relation with Problem Solving (r =0.21, P = 0.006), Distraction Positive (r =0.19 P = 0.01), Acceptance/ Redefinition (r =0.19, P =0.01) and negative correlation with Distraction Negative (r =-0.16, P = 0.04) and Blame/ Denial (r =-0.29, P =0.001) styles of Coping. Competency domain had positive relationship with Social support (r=0. 22, P =0.004) and negative relation with Distraction Negative (r=-0.2, P =0.001) and Blame/ Denial (r

Mean scores of the sample (N=167)	
Emotional Quotient (EQ)	**Mean (SD)**
Total EQ	343.35 (28.55)
Sensitivity	86.47 (7.69)
Maturity	102.9 (13.15)
Competency	153.7 (19.15)
Coping Styles	
Problem solving	7.20 (1.55)
Distraction positive	7.52 (2.78)
Distraction negative	1.77 (1.64)
Acceptance/Redefinition	7.77 (1.77)
Faith/ Religion	2.5 (1.88)
Blame/Denial	3.92 (2.17)
Social support	4.01 (1.14)

Table-1: Shows mean scores of the EQ and Coping styles in the sample.

Coping Styles	**EQ**			
	Total EQ	**Sensitivity**	**Maturity**	**Competency**
Problem solving	0.22 p=0.004	0.13 p= 0.08	0.21 p=0.006	0.13 p=0.08
Distraction positive	0.18 p=0.02	0.08 p=0.33	0.19 p=0.01	0.12 p=0.11
Distraction negative	-0.27 p=0.001	-0.21 p=0.008	-0.16 p=0.04	-0.20 p=0.001
Acceptance/ Redefinition	0.08 p=0.31	-0.08 p=0.33	0.19 p=0.01	0.02 p=0.81
Faith/ Religion	0.04 p=0.65	0.02 p=0.8	0.01 p=0.94	0.04 p=0.60
Blame/ Denial	-0.34 p=0.0001	-0.16 p=0.04	-0.29 p=0.001	-0.25 p=0.001
Social support	0.24 p=0.002	0.14 p=0.08	0.13 p=0.09	0.22 p=0.004

Table-2: Correlation between EQ and Coping styles

=-0.25, *P* =0.001) styles of Coping.

Those with high EQ had significantly greater use of Problem Solving (t = 2.73, *P* =0.007, 95% CI 0.29 to 1.79), Distraction Positive (t = 2.79, *P* =0.006, 95% CI 0.55 to 3.23) and Social support (t = 3.95, *P* <0.001, 95% CI 0.54 to 1.61) styles of Coping than low EI group, when compared using independent t test. Though there was an indication of frequent use of Blame/ Denial and infrequent use of Faith / Religion types of Coping in those having low EQ, they didn't reach statistical significance.

DISCUSSION

This study emphasizes the relevance of the concept of Emotional intelligence in daily life, as it empowers people to have superior self-control, ability to motivate themselves, manage and express emotions appropriately, be assertive yet sympathetic and caring. Thus EI is important for an individual, more so for doctors. Doctors are expected to be kind, caring, affectionate, have unbiased empathetic approach, adequate self-control and maintain cordial relation with one's colleagues.

Higher EI in doctors is associated with better patients' trust, satisfaction with treatment and better treatment outcome.[13] Despite its importance in doctors, EI is neither a selection criteria in pre medical entrance nor are medical students trained in it during their course, either in India or many other countries. Intelligence alone being the deciding factor to become a doctor may produce a knowledgeable but not necessarily an efficient doctor. The association between EI and doctor's competence carries significant implications for medical training, which would be to educate doctors in EI-related skills for better achievement of their required competencies.[14]

Coping skills are necessary to deal the overwhelming stress. Stress is universal in all living beings. The ever expanding knowledge in the field of medicine, tougher competition and lengthier course contribute to the stress experienced by medical students.[15] The burden of dealing constantly with morbidity and mortality in others' lives, the need to meet the unrealistic demand of the care givers and impreciseness of medical knowledge make the work environment of a medical practitioner stressful. So when stress is inevitable, individual better cope up.

Medical internees were chosen as the sample of study because they were in the transition period between student life and professional life. This was advantageous as they were fresh with experiences of both stages of life. This phase poses tremendous challenges and resolution of which needs capabilities like EI and Coping skills. Our assessment showed that total EQ of the sample was high. Other studies have yielded inconsistent results, reporting physicians to have high emotional competence, average EQ and poor EQ.[16-18] As of now lesser emphasis is laid on teaching of soft skills during one's formative period or in medical colleges. Thus the high EQ in our sample may not be due to formal training in these skills. They might have acquired it through informal learning. Possibly this is the reason that doctors vary widely in EQ. But fortunately EQ is a dynamic ability and training can improve these skills.[19] In this study, when the domains of EQ were assessed individually, the sample had high Sensitivity and Competency. This means that they were Emotionally Sensitive in recognising emotions, understood emotions better and communicated/expressed emotions appropriately and also Emotionally Competent in handling emotional upsets, inter-personal relationships and had good self-esteem. This could be because the sample probably had better psychosocial environment. Exposure to EI related skills during their academic period could be another contributing factor as also observed by Satterfield et al.[20] The sample was not Emotionally Mature in empathising, delaying gratification and adaptation. Younger age and relative inexperience with vagaries of life might have contributed to this finding.[20] There was no gender difference noted in EQ in the present study but contradictory results were observed by researchers.[14,17]

Coping Styles most frequently used by the sample were Problem Solving, Distraction Positive, Acceptance / Redefinition and Social Support. This may be due to awareness about the better ways to deal with stress or skills imbibed from seniors, teachers and /or parents who were competent in dealing with stress, serving as role models.[21] Coping styles like Blame/ Denial, Distraction Negative and Faith/ Religion were used less frequently, as they might have been aware of negative consequences of maladaptive coping. Earlier studies done on medical undergraduates show that problem solving, planning, acceptance and positive reframing were frequently used and denial, self-blame and substance use were seldom used.[15,21-23] Infrequent use of Faith and Religion domain of coping in the present study sample was in contrast to our understanding of existing social practices. Sami et al.[22] also found similar results in Indian students but Kadayam et al.[23] found that medical students in UAE used more of religious coping. In our study significant gender differences were noted in types of coping used; Religion/ Faith coping was more used by females while Distraction Negative was more used by males. This could reflect prevailing social norms in dealing with stress.

Correlation between EQ and Coping Styles in our study showed that, total EQ, Sensitivity, Maturity and Competency had negative correlation with Blame/ Denial and Distraction Negative coping styles. This would suggest that higher EQ would prevent one from using unhealthy styles of coping. Further, it was found that being more emotionally mature would make one to utilise problem solving, accepting and redefining problem and distracting oneself adaptively from stress. Being more emotionally competent would allow one to elicit social support system in a stressful situation. Positive correlation between EQ and Problem Solving has been reported in previous studies.[4,7,24] Social support and distraction have also been positively correlated with EQ in earlier studies.[9] EQ was negatively correlated with maladaptive Coping Styles such as avoidance and rumination.[7] Overall, high EQ is said to be associated with adaptive and effective coping strategies.[6]

It was observed that those who used psychoactive substances had low EQ. Conversely those who were less emotionally intelligent tended to use psychoactive substances. This suggests that they had poor emotional control and inability to deal with emotional upsets. They were also unable to use Ac-

ceptance/ Redefinition coping but used Distraction Negative excessively. This finding is in consonance with earlier studies that report association between low EQ and maladaptive Coping Styles.[25] But not all studies support these findings. There is contradictory evidence in literature that high EQ was associated with selective maladaptive coping.[9]

Comparing the result of present study with existing literature is beset with certain difficulties. Confusion exists in the literature regarding definition of terms like 'healthy' and 'unhealthy' coping styles and 'adaptive' and 'maladaptive' coping styles. This is because different authors use different definition/ descriptions for these terms in their studies.[22] Subscales in the coping checklist used by us differ from the grouping done by the earlier researchers.[9,23] Some of the items in this scale have combined two types of coping styles together. Thus it is difficult to score each coping styles separately. This makes comparison of results across studies difficult.

This study has certain limitations. This was a cross sectional study, hence it is possible that the prevailing mood state and motivation to participate might have had considerable bearing on the results. Self-administered questionnaire were used in the study. The questionnaire contained questions about life situations that they might have faced in the past. Some questions needed the individual to imagine a hypothetical situation and his/her reaction to that situation. But what a person would think of doing may not be same as what he/she actually does. Thus the protocol is subjected to reporting bias and recall bias. Sample consisted of a selected group of individuals in a single medical college. There was no control or comparative group. Future studies could address these issues.

CONCLUSION

Medical internees had high EQ which was probably acquired through informal learning. They also had frequent use of healthy coping and seldom use of unhealthy coping styles. Emotionally intelligent people cope with stress in a better way because effective coping strategies are acted upon based on the attributes of a person with good EQ like good affective control, empathy, postponement of gratification. Implications of this study would be the need to formally develop EI as it can have significant impact on coping skills, which are essential for healthy living.

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