EMOTIONAL INTELLIGENCE AND PERCEIVED STRESS IN HIV POSITIVE PATIENTS: PERCEIVED SOCIAL SUPPORT AS A MEDIATOR

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ABSTRACT

OBJECTIVE

To investigate the mediational role of perceived social support in relationship between emotional intelligence and perceived stress in HIV positive patients in Pakistan.

STUDY DESIGN

Cross sectional research design

PLACE AND DURATION OF THE STUDY

Data were collected from three HIV treatment centres from August 2015 to August 2016. Patients were recruited from Pakistan Institute of Medical Sciences Islamabad(PIMS), Jinnah Hospital Lahore and New Light AIDs Control Program (NGO) Rawalpindi.

PARTICIPANTS AND METHOD

Participants of the current study were 204 registered HIV positive patients of age ranged between 20 to 60 years. Both male and female sample was included in the study. Participants completed the scales of Perceived Stress Scale (PSS), Berlin Social Support Scale (BSSS) and Emotional Intelligence Scales (EIS). All the Scales took 20- 25 minutes to be completed by the respondents.

RESULTS

Regression analysis revealed that emotional intelligence appeared to be a significant predictor of perceived social support and perceived stress. Morover mediational analysis revealed that relationship between emotional intelligence and perceived stress was found to be mediated by perceived social support.

CONCLUSION

Perceived Social supports carries the impact of emotional intelligence on perceived stress among HIV patients.

KEY WORDS

Perceived Social Support, Emotional Intelligence, Stress, HIV positive patients

INTRODUCTION

Emotional intelligence has become an important topic of study for researchers who believe that it plays an important role in the prediction of health, life satisfaction and stress in various life settings[1]. HIV is a condition which is marked with pain, threat to life and stigmatization. Stigma attached to HIV illness and fear of unavailability of complete cure is a source of stress for people living with HIV. Moreover, it is well documented that people with chronic and acute illnesses experience uncertainty about their life and social relationships which is a major source of stress among them[2].

Emotional intelligence is the ability to find the ways to adjust to one's own environment and it not only helps in basic survival, but also influences the relationships and mental health of individuals[3,4]. Emotionally intelligent people can perceive and manage their emotions in an appropriate manner in comparison with others and experience lesser distress and experience more positive emotions[5,6].

In individualistic cultures, mental health and wellbeing is dependent upon more on internal forces while in collectivistic cultures interpersonal relationships play more significant role in determining the response of individuals towards different stressors[7]. Social support is one of the coping mechanisms for stress[8]. Social support can be defined as the feelings of being cared from family friends and loved ones. It gives feelings of a valued person. Yadav identified two sources of support for the people living with HIV (i) family and friends (ii) community based support[9]. Social support is very important to reduce psychological stress in HIV patients[10]. A study revealed that perceived stress is highly associated with the severe mental health issues in people living with HIV, and perceived social support is helpful to control perceived stress. Social support is considered as a protective mechanism against stress[11,12].

Luszczynska, Sarkar and Knoll investigated the people living with HIV and concluded that social support has positive influence on the physical and psychological functioning and as a result patients feel readiness to engage in antiretroviral therapy (ART)[13]. Posse and Baltussen also concluded that people living with social support were twice likely to adhere to ART as compared with people living without non-social support[14]. Family support is helpful to increase the psychological health of HIV patients. Social support helps in determining the decreased level of psychopathological symptoms in HIV patients [15].

Prior research has documented that emotional intelligence influence individual's way to determine social interactions and as a result emotions play an integral part in managing stress and anxiety[16]. Theorists agree on this point that emotions related characteristics develop social competence, and it determines healthy and good social relationships, and it results in better mental health[17]. Consistent empirical evidences related to different type of samples depicted that emotional intelligence is likely to be associated with greater life satisfaction and mental health via experiencing good interpersonal relationship and support received from the

society[18,19]. No study has yet assessed the perceived social support as a mediator in the prediction of perceived stress by taking emotional intelligence as an independent variable among HIV patients. Therefore current study aimed to test these relationships among HIV positive patients living in Pakistan. the study hypothycised the following;

H_1: There will be significant negative relationship between emotional intelligence and stress of HIV positive patients

H_2: There will be significant positive relationship between emotional intelligence and perceived social support of HIV positive patients

H_3: There will be significant negative relationship between perceived social support and stress of HIV positive patients

H_4: perceived social support will significantly mediate the relationship between emotional intelligence and stress of HIV positive patients

SUBJECTS AND METHODS

Participants

Purposive sample of the study was comprised of N=204 confirmed HIV positive patients. Male (n=137) and Female (n=67) both were given representation in the sample. Sample of the study was recruited from HIV treatment centres: Pakistan Institute of Medical Sciences Islamabad (PIMS), Jinnah Hospital Lahore and New Light AIDs control program (NGO) Rawalpindi. All participants were registered cases with confirmed diagnosis of HIV. Participants having different educational levels were given representation in the sample with age ranged between 20-60 years (M=37.5, SD=6.1). All the patients were undergoing Antiretroviral therapy treatment. Patients with AIDS and any other chronic physical and psychiatric illnesses were not included in the study to maitain the homogeneity of the sample.

Instruments

Perceived Stress Scale[20]
Perceived Stress Scale was translated into Urdu language with the help of standardized forward backward translation method. Translated urdu version was used in the current study to measure the perceived stress of the participants. This scale was comprised of 10 items and response format was five point scale ranging from 0=never to 4=very often. Four items (4, 5, 7 & 8) of the scale are reversely scored. Minimum possible score on the test was 0 and maximum possible score was 40, higher the score greater the level of perceived stress among particiapants.This scale is reported to be reliable and valid20. Urdu translated version appeared to have .51 reliability.

Berlin Social Support Scale[21]
Urdu translated version of Berlin social support Scale[22] which was originally developed in English language was used in the current study to measure the social support of participants. Urdu version scale comprises of 32 items and response format of the scale is four point likert scale ranging from 1=strongly disagree to 4= strongly agree. Original scale comprises of 6 subscales which are Perceived Available Support, Need for Support, Support Seeking, Actually received support, provided support and Protective Buffering Scale. Four items are reverse scored (12, 21, 22, 23). Translated version

revealed to be highly consistent with alpha reliability .8822.

Emotional Intelligence Scale[23]
In the current study an indigenous self-report scale of Emotional Intelligence[23] was used to measure the emotional intelligence of participants. Emotional Intelligenece scale developed in urdu language comprises of 56 items that includes ten subscale (Interpersonal Skill, Self-Regard, Assertiveness, Emotional Self Awareness, Empathy, Impulse Control, Flexibility, Problem Solving, Stress Tolerance, and Optimism). Response format of the scale is four point scale ranging from 0=never to 3=always. Validity and reliability of the scale was ensured by the author and reported internal consistency of total scale and subscale lies between .67 and .91[23].

Procedure and Recruitment

After all ethical considerations, approval to execute the study was obtained from Advance Studies and Research Board of Government College University Lahore. Permission was also taken from National AIDs Control Program Pakistan which works under the Ministry of Health Government of Pakistan and Punjab AIDs Control Program run by the Government of Punjab Pakistan to undertake the study. Participants were recruited from HIV treatment centres of Pakistan Institute of Medical Sciences Islamabad (PIMS) New Light AIDs Control Program (NGO) Rawalpindi and Jinnah Hospital Lahore. With the permission of Incharge and Heads of these HIV treatment centres, all HIV positive patients who were registered with these hospitals and receiving health services in these centres were contacted personally. Patients were briefed about the aim and purposes of study and were assured of the privacy, anonymity and confidentiality of data. Written informed consent was obtained from them and before administering instruments of the study their queries were resolved. Only those HIV positive patients were included in the study who willingly participated in the study. After taking their consent, questionnaires were administered to the participants and at the end they were thanked for their cooperation and participation in the study.

RESULTS

Table 1
Demographic Characteristics of the Sample (N=204)s

Variables		Frequency	%	Total
Gender	Men	137	80.6	204
	Women	67	19.4	
Marital Status	Married	140	38.6	204
	Unmarried	39	10.8	
	Divorced	03	.8	
	Widow	22	6.1	
Age category	18-25 years	23	6.3	204
	26-35 years	85	23.4	
	36-45 years	49	13.5	
	46-54 years	31	8.5	
	55 years and above	16	4.4	
Education	Illiterate	47	12.9	204
	Primary	36	9.9	
	Middle	38	10.5	
	Matriculation	36	9.9	
	Intermediate	27	7.4	
	Graduation	11	3.0	
	MA ?MSc	08	2.2	
	M.Phil./ PhD	01	.3	

Table 2
Means, Standard Deviations, and Correlations among Emotional
Intelligence, Perceived stress and Perceived Social Support (N = 204)

	Scale	α	M	SD	2	3
1	Emotional Intelligence	.78	117.2	17.2	.16*	-.19**
2	Perceived Social Support	.76	110.1	15.9		-.43***
3	Perceived stress	.77	16.3	8.49		

*p< 0.05, **p< 0.01, ***p< 0.001

Table 2 illustrates the reliability indices and correlations among variables of the study. Reliability of the different scales were assessed by using Cronbach's alpha which is the best known standardized measure of internal consistency / reliability. Table indicates that all the scales used in the study had good reliability. Moreover, table above also reveals that emotional intelligence is positively correlated with social support and negatively correlated with perceived stress.
A hierarchical regression analysis in Table 3 has revealed the meditational role of perceived social support in relationship between emotional intelligence and perceived stress. Mediation model is established on the basis of Baron and Kenny24 guidelines. Regression analysis of all these conditions are tested and these conditions are find out to be significant such as for first condition emotional intelligence appeared to be significant negative predictor of perceived stress (β = -.19, t = 2.76, p =.01) at R2 = .03, F (1, 202) = 7.63, p <.01, with 3% variance in perceived stress, for second condition perceived social support appeared as significant negative predictor (β = -.41, t = 6.41, p <.01) at R2 = .20, F (1, 202) = 25.25, p <.001, with 4 % variance in perceived stress .

Final evidence for mediation is also illustrated in Table 3. Results depict that significant prediction of perceived stress from emotional intelligence is converted into non-significant one (β = -.12, t = 1.9, p > .05) when mediator (perceived social support) is entered into the model and these results show the full mediation. The mediational model is further supplemented by Sobel (1986) test[25] (z = 2.33, p<.05) which determines the significant indirect effect of perceived social support on perceived stress through emotional intelligence.

Table 3
Mediational Role of Perceived Social Support in relationship between
Emotional Intelligence and Perceived Stress (N = 204)

Predictors	ΔR^2	B
Step 1	.03	
Emotional Intelligence		-.19**
Step II	.19	
Emotional Intelligence		-.12
Perceived Social Support		-.41***
Total R^2	.20	

**p<.01, ***p<.001

DISCUSSION

The study aimed to predict perceived stress via emotional intelligence. It was also aimed to assess meditational role of perceived social support in relationship between emotional intelligence and perceived stress in HIV Positive patients. Results of the study reveal that emotional intelligence significantly and

negatively predict perceived stress. These results are in line with a previous study which reported that components of emotional intelligence like emotional expression and emotional problem solving help HIV positive patients to cope with life stressors[26]. It is consistently reported in the empirical literature that emotional intelligence help individuals to cope with different stressors of life and as a result decrease the level of stress in individuals living with different levels of stressors[5,6].

Emotional intelligence significantly and positively predicted perceived social support as well. Earlier research supports our findings and provides evidence for the positive relationship between emotional intelligence and perceived social support [27]. The reason behind these results might be the nature of emotional intelligence which makes an individual to interact with other people in a more positive and effective manner and as a result perceive and receive more social rewards.

Results also suggest that perceived social support significantly and negatively predict perceived stress. These results are in line with the stress buffering hypothesis given by Cohen and Wills[28] which states that social support work as buffer against the drastic effects of stressful events and circumstances. Previously it is proved that uncertainty due to illness and stigma attached with the disease is a source of psychological stress and perceived stress is highly associated with the severe mental health issues in people living with HIV, and perceived social support is helpful to control perceived stress so the social support is considered as a protective mechanism against stress[11].

Findings of current study also supported the last hypothesis of the study as results illustrate that perceived social support mediate the negative relationship between emotional intelligence and perceived stress in HIV positive patients. Review of related literature reveals that no prior research has explored the relationship among these variables in HIV positive patients to date but findings of current study are in line with the previous literature which supported the role of social support in relationship between emotional intelligence and perceived stress among diverse samples[18,19,29]. Moreover these results are supporting the idea of Goleman[30], who stated that emotional intelligence helps an individual to understand his/her personal emotions and utilize these emotions in appropriate way which further pave the way for proper communication with the people and adaptation to the environment and face less difficulty in coping with problems. Emotional intelligence helps in dealing with life stressors and lead to better mental health possibly because of the reason that adaptive perception of emotions contributes to positive outcomes (e.g., social support) in various ways and these positive outcomes help in reducing stress and improved mental health.

The study therefore makes a contribution in empirical health literature in that it adds to the body of knowledge on the meditational role of social support in the psychological well being of HIV positive patients.

LIMITATIONS AND SUGGESTIONS

Sample of the current study was taken from Lahore , Rawalpindi and Islamabad HIV Positive centres. Patients and treatment centres from other provinces of pakistan were not given representation in the

sample which may possibly affect the generalizibility of the results of the study ,therefore it is recommended that future researchers should include the sample from other provinces of pakistan as well. Self report measures were used which might have contributed social desirability element in the responses of participants. It is suggested that in future researches social desireability scale should be initially used to screen out the possibility of social desireability in the participants. Some of the questionnaires used in the study were quite lengthy and patients faced difficulty in completing them in the treatment centres because sometime they were in a distressed state and sometime they came from far off areas and were in a hurry which might have caused hinderence in eliciting the honest responses from them.

IMPLICATIONS OF THE STUDY

Current study highlighted important points for the health psychologists, clinical psychologists and counselors who deal with people living with HIV. As it is revealed from the analysis that HIV Positive patients experience stress but if they are emotionally intelligent and perceiving adequate social support, they can better cope it will decrease the level of their distress. Clinical and health psychologists, medical professionals and other mental health workers working with HIV positive patients should devise certain strategies to help them regulate their emotions appropriately and moreover family and group counseling can also be provided to develop insight in the family members that their support can decrease the stress of HIV positive patients.

CONCLUSION

Emotional intelligence is a significant positive predictor of perceived social support as it benefits people living with HIV to interact with other people in a more positive and effective manner and as a result they perceive and receive more social rewards. However, it is also evidenced by present study that perceived social support is helpful to control perceived stress so the social support is considered as a protective mechanism against stress. Finally, it is also specified that perceived social support mediate the negative relationship between emotional intelligence and perceived stress in HIV positive patients, this has highlighted the indirect effect of social support via EI in reducing the perceived stress level of HIV positive patients and thus proved advantageous in improving their general health.

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