Prediction of Perceived Stress Based on Self-concept and Emotional Intelligence in Females with HIV/AIDS

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Abstract: Background - Paying attention to the psychological issues of patients with HIV/AIDS, improving their quality-of-life (QoL), and promotion of mental health in such patients are of great importance. The present study aimed at predicting the perceived stress based on self-percept and emotional intelligence in patients with HIV/AIDS. Methods - The population of the present descriptive, correlation study was all females diagnosed with HIV/AIDS of which 90 subjects selected by the convenience sampling method were evaluated. The data collection tools were the Cohen perceived stress scale (PSS), the Rogers self-concept scale, and the Bar–On emotional intelligence questionnaire; the stepwise regression analysis was used to analyze data. Results - Results of the present study indicated a negative and significant relationship between the perceived stress with self-concept and emotional intelligence; also, emotional intelligence could better predict the level of perceived stress than self-concept. Positive self-concept and higher levels of emotional intelligence, followed by the use of coping strategies, may cause lower levels of perceived stress in such patients. Conclusion - It seems that the findings can indicate that the emotional intelligence can predict perceived stress better than self-concept.

Keywords: HIV/AIDS; perceived stress; self-concept; emotional intelligence.

Introduction

From the beginning of mankind, as different periods of history have come and gone by, humans have been affected by natural events and disasters and their lives have been threatened by them, but the type and form of such events are changed today. Bacteria, viruses, fungi and other newly-found pathogens, which frequently become more complicated and unidentified, affect humans. In spite of human attempts to overcome such dilemmas, they bring humans stress and overwhelming anxiety, caused by fears of the unknown.

When AIDS (Acquired Immune Deficiency Syndrome) was first identified in 1981, few could guess the disaster imposed by it to human communities. Shortly after finding the first cases of AIDS, its outbreak increased surprisingly, but the mortality caused by this disease reduced as rapid and timely therapeutic measures began to be implemented (Feng et al., 2015).

AIDS affects the physical, mental and social aspects of life in patients due to the dominant ideas of the society. It also impedes the patients’ activities in various dimensions. Patients with AIDS face various problems in their relationships as soon as their disease is diagnosed. Studies have revealed a globally hostile view toward patients with AIDS (Behravan, Noghani, & Abaachi, 2011).

As a result, AIDS is one of the most challenging diseases in today’s world that affects the patients’ quality-of-life (QoL) and even survival due to the dominant ideas of the society and the existing stigmas (Naji, Abedi, & Sasan, 2014; Rzeszutek, Oniszczenko, & Firląg-Burkacka, 2016; Rzeszutek, Oniszczenko, Schier, Biernat-Kałuża, & Gasik, 2016; Tsai, Lu, Wu, & Feng, 2017).

Women were taken as the study population in this research due to the considerably larger number of female patients with AIDS in Iran. Based on the official statistics provided by the Iranian Ministry of Health and Medical Education, 30,727 cases of HIV (Human Immunodeficiency Virus) infection were registered in Iran until May 2017, although estimates indicate 110,459 HIV-infected cases. Nevertheless, based on the official statistics provided by the Iranian National Center for AIDS Prevention (2017), only 15% of the patients with HIV in Iran were female in 2013, which indicates the increasing trend of the disease among women. Sexist views stigmatize women with AIDS and deem them unchaste; under these circumstances, female patients are much more vulnerable to the consequences of this
disease (Parvin & Eslamian, 2014). Homelessness and general expulsion from the society are critical factors involved in the transmission of the disease from female patients to others, because the difficult economic conditions imposed by this disease encourage female patients to have multiple sexual partners (Cederbaum, Wenzel, Gilbert, & Chereji, 2013). For female patients, the experience of AIDS is not solely associated with psychological complications (such as pain, depression, anxiety, feeling deprived, lack of social support, disrespect, insecurity, etc.); rather, these women also have to bear societies’ prejudices and stereotypes to a greater degree than their male peers (Abbasiyan, Mo'eyyediniya, Naaserirad, Tavakkol, & Abbasi, 2015). All the aforementioned factors should be considered in evaluating women with AIDS. Female patients with AIDS who enjoy greater social support experience less depression and mental complications and have better mental health (Illangasekare, Burke, Chander, & Gielen, 2014).

Mental and social issues such as stress, anxiety, feeling ashamed and sinful, being expelled from the society, experiencing physical and mental violence, poor relationships, reduced satisfaction with life, lack of security, negative views toward life and feeling challenged, being limited, pain and fear of the future are among the most important problems in the life of patients with HIV (Abachi & Behravan, 2013a; Illangasekare et al., 2014; Rao, Ramapuram, & Kotian, 2016; Rzeszutek et al., 2016; Rzeszutek et al., 2016).

Although researchers and physicians strive to find new medicines and modern therapeutic methods, there is still a long way and an uncertain time to find a definitive treatment for this disease. Consequently, there is no way for patients to deal with the complications of AIDS, reduce its stress and enhance their QoL, unless they rely on their personal knowledge. Based on the experiences of patients with other chronic diseases, even if there is a definitive treatment for a condition, dealing with its mental complications helps the patients accept their disease, shorten the treatment course and increase the chance of accomplishing their personal and social goals (Fattahi et al., 2015; Hossienzadeh, Alizadeh, Khademi, & Mosarezaie Moqaddam, 2015; Kalichman & Kalichman, 2016; Moghanloo, Moghanloo, Babapour-Kheiroddin, Poursharifi, & Pishvaei, 2014; Mokhtari, Alipor, Hasanzaheh Pashang, & Exiri Fard, 2014; Pirasteh Motlagh, Nikmanesh, & Akbari Ali Abad, 2014; Rao et al., 2016; Safarcherati, Amin-Esmaeili, Shadloo, Mohraz, & Rahimi-Movaghar, 2016; Tsai et al., 2017; Yazdanpanah, 2013; Zarekar, Rahimiyambogar, & Ghodrati, 2015).
Stress is an inclusive and inevitable phenomenon in the modern world that is defined as a tangible mental reaction caused by the perception of threat to the biological balance of the body (Levine, 2005). The process of stress is developed by the interpretation of an event that imposes pressure on the individual; this interpretation of the stressful event indicates the concept of evaluation, which determines the threatening or safe nature of the situation (Folkman & Lazarus, 1986). Perceived stress refers to the situation in which an individual evaluates his life events as unpredictable, uncontrollable and complicated (Cohen & Williamson, 1988).

The most common mental complications in patients with AIDS include severe mental distress, depression and anxiety. Different investigations suggest that when they have a lower socio-economic status and poor financial and emotional support, patients with AIDS experience higher degrees of depression and anxiety (Brandt, 2009).

Moreover, many studies have emphasized how QoL and satisfaction with life in patients affected by AIDS depend on the level of stress that they experience (Feng et al., 2015; Tsai et al., 2017). Different types of research on Post-Traumatic Stress Disorder (PTSD) in HIV patients can majorly determine the indescribable level and extent of stress experienced by these patients. Researchers have argued that HIV+ patients experience greater degrees of PTSD and mental complications such as stress, suicide, social anxiety disorder, major depression, alcohol or drug consumption etc. (Olley, Zeier, Seedat, & Stein, 2005). The undeniable effect of stress on the progression and treatment of AIDS makes stress much more significant in patients with this disease (Kolodziej, 2016).

Realizing the goal of physical and mental health in patients with AIDS appears to require a combination of General Coping Factors (GCF) and Scientific Factors (SF), which are major contributing personal characteristics (Hansen et al., 2013). People often have a self-image defined as their general evaluation of their character or their ‘self-concept’. Self-concept is the image or perception that the person has about what he is (Shamloo, 2011) and is considered a cognitive layout in contemporary views (Campbell et al., 1996) that includes cognitive, perceptual and emotional aspects and evaluation procedures (Goleman, 1995). Self-concept is the individual’s attempt to form a layout to organize his perceptions, feelings and attitudes toward himself (Woolfolk Hoy, Hoy, & Davis, 2009). People with clear, well-defined, and consistent self-concept enjoy greater mental health (Campbell et al., 1996); as a result, the impact of self-concept on mental health cannot be neglected. The individual’s perception of his personal characteristics (i.e. whether he has a positive and balanced self-
concept or not) determines the way he controls the environment and enjoys mental health (Hassanzadeh, Hosseini, & Moraadi, 2005).

Life crises, stresses and tensions are among the factors that severely threaten physical and mental health. In addition to mental impressions, attitudes and perceptions, the actual way of dealing with stresses is also very important. This study found that emotional intelligence is also used to cope with tensions and increase the adoption of rational and logical methods, such as self-efficacy and environmental adaptation (Habibi, Khosro Javid, & Hosein Khanzadeh, 2014). According to Bar-On (1997), emotional intelligence is a set of abilities, competences and non-cognitive skills that affect the individual’s ability to achieve success against his needs and the environmental pressures (Johnson, Batey, & Holdsworth, 2009). Emotional intelligence is the main form of non-cognitive intelligence and involves understanding feelings, proper decision-making, and the ability to manage one’s mood, impulse control and favorable social skills (Mohnke et al., 2015).

Emotional intelligence is a modern approach to predicting improvements in QoL and effectively dealing with stressful conditions (Habibi et al., 2014). A high emotional intelligence is associated with suitable emotional regulation and is a good protective factor against daily tensions and the incidence of mental and physical diseases (Marino et al., 2012). Recent findings suggest a high correlation between emotional intelligence and vulnerability to different diseases. Stress, anxiety and depression weaken or suppress the immune system and cause vulnerability to different diseases. Emotional intelligence skills facilitate the return to health and may even reduce the rate of disease recurrence (Bradbury & Greaves, 2007; Mokhtari et al., 2014; Seligman & Rozenhan, 2007).

Emotional intelligence skills assist people in the management of their mentality and mood under mental pressures before their emotions become uncontrollable. The direct relationship between emotional intelligence and a safe and healthy life indicates that paying attention to emotions, being and staying aware of them and using them to manage behaviors are of great importance (Bradbury & Graves, 2005, 2007).

Different aspects of emotional intelligence affect the individual’s life and can make a successful person out of an ordinary and vulnerable one by influencing their inter- and intrapersonal relations, aiding in crisis management and adjusting their mood (Bar-On, 2000).

Based on the results of different studies, emotional intelligence (Habibi et al., 2014; Hossienzadeh et al., 2015) and self-concept are specific coping factors (Yazdanpanah, 2013) that can explain the level of perceived
stress. The evaluation of emotional intelligence and self-concept variables in different diseases (Habibi et al., 2014; Soltani Shal, AghaMohammadiyan She'rbaf, & Kareshki, 2013; Yazdanpanah, 2013) raises the question of whether it is possible to predict the level of stress perceived by women with AIDS/HIV using their self-concept and emotional intelligence.

2. Materials and Methods

The present descriptive study has a post-event method and a retrospective design that typically applies to surveys due to their objectives. The population of the study consisted of all the women with AIDS who lived in Karaj, Iran. The study was conducted on 90 female patients with AIDS who were selected using the Stevens method (15 observations per variable) (Hooman, 2005; Stevens, 1996) and convenience sampling. The study samples constituted only the female patients presenting to centers for behavioral diseases in Karaj and Alborz Charity of Health Nurturer Advocates in Alborz Province of Iran.

The inclusion criteria consisted of a positive HIV or AIDS test, confirmation of the test result after a specified timeframe, willingness to cooperate with the researchers, continuously visiting a center for behavioral diseases and a state of mental and physical health appropriate for completing the questionnaires. The exclusion criteria consisted of a positive HIV test in the first testing, a lack of interest in cooperating with the researchers and severe psychiatric conditions in such a way that the patient could not answer the questions.

The Bar–On Emotional Intelligence Questionnaire (Bar-On, 1997), the Rogers self-concept questionnaire (Rogers, 1959, 1961) and Cohen’s Perceived Stress Scales (PSS) (Cohen, Kamarck, & Mermelstein, 1983) were used as the data collection tools.

After the distribution of the questionnaires among the participants, owing to the sensitivity of the issue and the special conditions of patients with AIDS, the author visited the clinics on certain days in order to control the trend of distribution and completion of the questionnaires.

2.1. Tools

The perceived stress

In this study, the score of perceived stress was calculated using Cohen’s Perceived Stress Scale (PSS). The PSS was developed by Cohen in 1983 to assess the level of general stress perceived within the last month, thoughts and emotions about stressful events, the control and overcoming
of and adaptation to mental pressures and experienced stresses by its 14 items. The Cronbach’s alpha was 0.84-0.86 for this scale (Cohen et al., 1983). The criterion validity of the PSS was confirmed with a correlation coefficient of 0.52-0.76 using semiotic measurements (Pourseyyed, Motevalli, Pourseyyed, & Barahimi, 2015). The PSS is scored using a 5-point Likert scale (0= ‘never’, 1= ‘almost never’, 2= ‘sometimes’, 3= ‘often’ and 4= ‘most of the times’; the scores range from 0 to 56.

**Self-concept**

In this study, participants’ self-concept score was obtained using the Rogers self-concept questionnaire.

This questionnaire was developed by Carl Rogers to assess the level of self-concept. The scale has two separate forms, i.e. A and B. The A form includes self-concept basics as a self-image and perception of the current situation. The B form evaluates the ideal or desired self-concept, i.e. what the person wants to be. There are 25 polar traits (positive and negative) in each form. The respondent should first complete form A and then form B. Form A is about the person’s characteristics and properties and form B should be completed based on the respondent’s wishes and desires. To complete the forms, the opposite word was written against each trait and the respondent assessed herself in terms of both traits. The score obtained in this questionnaire ranged from 1 to 7 (C. Rogers, 1959, 1961). The validity and reliability of the scale were evaluated and confirmed in different studies by Moattari, Soltani, Moosavinasab, and Ayatollahi (2005) (Cronbach’s alpha =0.87; concurrent validity =0.81) and Ybrandt (2008) (validity =0.82 and reliability =0.67). A self-concept score <7 indicated positivity and ≥7 indicated negativity. The validity and reliability of the scale were 0.77 and 0.69, respectively (Hosseinzadeh & Farrokhi, 2003).

**Emotional intelligence**

In this study, emotional intelligence refers to the score obtained by the respondent using the Bar–On Emotional Intelligence Inventory (Bar-On, 1997).

This 90-item inventory was normalized on students in Iran (Dehshiri, 2003). The validity of the questionnaire was confirmed with a Cronbach’s alpha of 0.74 for the male and 0.68 for the female students. The Cronbach’s alpha for the entire study population was 0.93. The reliability coefficient was 0.68 using the test-retest method. The test scales in the Bar-On model included emotional self-awareness, self-expression, self-esteem, self-actualization, independence, empathy, responsibility, interpersonal
relationships, realism, flexibility, problem solving, mental stress tolerate, impulse control, optimism and happiness. The questionnaire is scored based on a 5-point Likert scale (‘completely agree’, ‘agree’, ‘somewhat agree’, ‘disagree’ and ‘completely disagree’). The scores ranged from 5 to 1 (‘completely agree’ = 5 and ‘completely disagree’ = 1) for most items and, reversely, from 1 to 5 (‘completely disagree’ = 5 and ‘completely agree’ = 1) for some of the items. The total score was obtained by calculating the sum of the scores in all the 15 scales. The Cronbach’s alpha of the subscales ranged from 0.69 (for “responsibility”) to 0.86 (for “self-esteem”), with the average score being 0.76 (Zare, 2001).

3. Results

The Kolmogorov-Smirnov test was used to evaluate the normality of perceived stress, self-concept and emotional intelligence; Table 1 presents the results.

**Table 1.** Distribution of Perceived Stress, Self-concept, and Emotional Intelligence using Kolmogorov-Smirnov Test

<table>
<thead>
<tr>
<th>Variable</th>
<th>K-S</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived stress</td>
<td>0.944</td>
<td>0.335</td>
</tr>
<tr>
<td>Self-concept</td>
<td>1.287</td>
<td>0.073</td>
</tr>
<tr>
<td>Emotional intelligence</td>
<td>0.461</td>
<td>0.984</td>
</tr>
</tbody>
</table>

As shown in Table 1, P > 0.05 in the Kolmogorov-Smirnov test for emotional intelligence, perceived stress and self-concept. The present findings showed no significant differences between the distribution of perceived stress and self-concept in women with HIV/AIDS in this study and the normal distribution. Parametric tests were therefore used to evaluate the study hypotheses.

**Table 2.** The Mean and Standard Deviation of Perceived Stress, Self-concept, and Emotional Intelligence

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived stress</td>
<td>2.08</td>
<td>0.325</td>
<td>1.50</td>
<td>2.88</td>
</tr>
<tr>
<td>Self-concept</td>
<td>4.46</td>
<td>0.558</td>
<td>3.36</td>
<td>6.12</td>
</tr>
</tbody>
</table>
The results of the regression analysis showed that part of perceived stress is predictable in women with HIV/AIDS through the variable of self-concept. In addition, there was a negative and significant relationship between self-concept and the level of perceived stress in women with HIV/AIDS.

**Table 3.** The Correlation Coefficient for the Perceived Stress and Self-concept

<table>
<thead>
<tr>
<th>Correlation</th>
<th>R-Squared</th>
<th>Standard Error for Prediction</th>
</tr>
</thead>
<tbody>
<tr>
<td>-0.227</td>
<td>0.052</td>
<td>0.32</td>
</tr>
</tbody>
</table>

Table 4 presents the results of the ANOVA for the regression sum of squares.

**Table 4.** Analysis of Variance for regression sum of squares

<table>
<thead>
<tr>
<th>Relationship</th>
<th>Sum of Squares</th>
<th>Degree of Freedom</th>
<th>Mean Squares</th>
<th>F</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>0.485</td>
<td>1</td>
<td>0.485</td>
<td>4.782</td>
<td>0.31</td>
</tr>
<tr>
<td>Residuals</td>
<td>8.919</td>
<td>88</td>
<td>0.101</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>9.403</td>
<td>89</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The analysis of the sum of squares using the regression analysis yielded an F (1, 88) = 4.782 and P<0.05, and the relationship between perceived stress and self-concept was linear and significant in women with HIV/AIDS (P<0.05) (Table 5).

**Table 5.** Regression analysis for relationship between perceived stress and self-concept in women with HIV / AIDS

<table>
<thead>
<tr>
<th>Variable</th>
<th>Non-standard Coefficient</th>
<th>Error</th>
<th>Standard Coefficient</th>
<th>t</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>2.672</td>
<td>0.272</td>
<td></td>
<td>9.823</td>
<td>0.001</td>
</tr>
<tr>
<td>Self-concept</td>
<td>-0.132</td>
<td>0.060</td>
<td>-0.227</td>
<td>-2.187</td>
<td>0.031</td>
</tr>
</tbody>
</table>
There was a negative and significant relationship between self-concept and perceived stress in women with HIV/AIDS; the relationship can be showed through the following equation:

\[
\text{Perceived Stress} = (\text{Self-Concept})^{2.672-0.132}
\]

Perceived stress can be predicted in women with HIV/AIDS through emotional intelligence; the second hypothesis of this study was thus confirmed. The results of the regression analysis showed a relationship between perceived stress and emotional intelligence in women with AIDS/HIV (Correlation = -0.301) (Table 6).

**Table 6.** Correlation Coefficient for the relationship between perceived stress and emotional intelligence

<table>
<thead>
<tr>
<th>Correlation</th>
<th>R-Squared</th>
<th>Standard Error for Prediction</th>
</tr>
</thead>
<tbody>
<tr>
<td>-0.301</td>
<td>0.091</td>
<td>0.31</td>
</tr>
</tbody>
</table>

Table 7 shows the results of the ANOVA for the regression sum of squares.

**Table 7.** Analysis of Variance for regression sum of squares

<table>
<thead>
<tr>
<th>Effects</th>
<th>Sum of Squares</th>
<th>Degree of Freedom</th>
<th>Mean Squares</th>
<th>F</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>0.852</td>
<td>1</td>
<td>0.852</td>
<td>8.765</td>
<td>0.004</td>
</tr>
<tr>
<td>Residuals</td>
<td>8.552</td>
<td>88</td>
<td>0.097</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>9.403</td>
<td>89</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In the analysis of the regression sum of squares, \( F (1,88) = 8.765 \) and \( P<0.05 \), and the relationship between perceived stress and emotional intelligence was linear and significant in women with HIV/AIDS. Table 8 shows the results of the regression analysis.

**Table 8.** Regression Analysis for relationship between emotional intelligence and perceived stress in females with HIV/AIDS

<table>
<thead>
<tr>
<th>Variable</th>
<th>Non-standard Coefficient</th>
<th>Error</th>
<th>Standard Coefficient</th>
<th>t</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>3.022</td>
<td>0.319</td>
<td></td>
<td>9.468</td>
<td>0.001</td>
</tr>
<tr>
<td>Emotional Intelligence</td>
<td>-2.96</td>
<td>0.100</td>
<td>-0.301</td>
<td>-2.961</td>
<td>0.004</td>
</tr>
</tbody>
</table>
The results shown in Table 8 indicate a negative and significant relationship between emotional intelligence and perceived stress in women with HIV/AIDS. This relationship can be shown through the following equation:

\[
\text{Perceived Stress} = (\text{Emotional Intelligence})^{3.022} - 0.296
\]

To answer the question of which of the variables including “emotional intelligence” and “self-concept” can better predict perceived stress, the correlation coefficient for the relationship of emotional intelligence and self-concept to perceived stress was measured. According to the results (Table 9), the correlation of emotional intelligence and self-concept to perceived stress was 0.328 and had a coefficient of determination \( (R^2) \) of 0.108. The results of the stepwise regression analysis showed that only emotional intelligence entered the equation, and its correlation coefficient with perceived stress was -0.301 in women with HIV/AIDS. It can therefore be argued that emotional intelligence better predicts perceived stress in women with HIV/AIDS.

**Table 9.** Correlation Coefficient for relationship between perceived stress with emotional intelligence and self-concept

<table>
<thead>
<tr>
<th>variable</th>
<th>Correlation</th>
<th>R-Squared</th>
<th>Standard Error for Prediction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Stress</td>
<td>-0.328</td>
<td>0.108</td>
<td>0.311</td>
</tr>
<tr>
<td>Emotional intelligence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-concept</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. Discussion

AIDS is a tsunami that has affected many people in the world today and involves the physical, economic, social, and mental aspects of life. Owing to the increasing prevalence of AIDS and the failure to find a definitive treatment, HIV patients and the community in general are exposed to different negative consequences of the disease.

Given the crucial role of stress in the treatment of chronic diseases, particularly AIDS, the present study was conducted for predicting the effect of the influential variable ‘perceived stress’ in women with HIV/AIDS based on self-concept and emotional intelligence and evaluate the factors
expected to have a significant correlation with perceived stress in these patients.

The study examined women with HIV/AIDS and the results showed a negative and significant relationship between perceived stress and variables including self-concept and emotional intelligence in the patients; however, emotional intelligence was a better predictor of the level of perceived stress than self-concept.

The relationship between perceived stress and self-concept was found to be linear and significant in women with HIV/AIDS and perceived stress can be measured by self-concept in these patients; that is, the greater is the patient’s self-concept, the less stress he perceive.

Based on the results of different studies, stress and anxiety are considered significant, effective and highly influential factors in people with HIV/AIDS (Feng et al., 2015; Kalichman & Kalichman, 2016; Liu et al., 2013; Tsai et al., 2017; Yariyan, 2008). Moreover, higher levels of stress in such patients lower their mental health and reduce their QoL and in turn expose them to more mental disorders, such as depression, which is the main mental complication in patients with AIDS (Abachi & Behravan, 2013b; Basavaraj, Navya, & Rashmi, 2010; Feizollahi, Asgari, & Khosravipour, 2015; Hansen et al., 2013; Hatefiniya, 2011; Illangasekare et al., 2014; Kalichman & Kalichman, 2016; Liu et al., 2013; Primeau, Avellaneda, Musselman, St Jean, & Illa, 2013; Sheybani, 2012; Tsai et al., 2017; Yi et al., 2006). Additionally, stress and depression affect the mental health of patients with HIV/AIDS, and expose them to different opportunistic diseases by reducing the number of CD4 cells and in turn deteriorate their physical health (Kołodziej, 2016).

Self-concept is an important factor that has a close correlation with stress. Self-concept is the person’s impression or perception of who he is (Shamloo, 2011). A positive self-concept improves mental health and people with a higher self-concept experience lower levels of stress (Safaee, Hhiasi, Jafari Nodoushan, Kakaei, & Jafari Nodoushan, 2016). Since stress affects AIDS progression significantly, self-concept can also be considered an influential factor in this disease (Kołodziej, 2016). In addition, a positive self-concept can affect the formation and development of coping strategies significantly by encouraging participation in the community and accepting and experiencing different roles (Khodabakhshi Koolaee, Hosseinian, & Falsafinejad, 2014).

Self-concept has a close correlation with valuable factors such as satisfaction with life, self-interest and self-esteem (Dunn, Shields, Taylor, & Dodd, 2009), and all these factors can positively affect mental health and the
level of stress experienced by the person. The results of the present study and similar studies emphasize the fact that people with a higher self-concept can perform better and experience less stress under stressful conditions (Safaee et al., 2016).

A positive self-concept can affect the mental health of individuals significantly. Since stress is one of the main threats to mental health, a close relationship can be expected between the variables. In addition, people with a positive self-concept benefit from higher self-efficacy and are better capable of adapting to new conditions and have more positive and valuable feelings. These positive feelings can improve their performance and efficacy and strengthen them in dealing with stressful conditions (Taheri, Zandi Ghashghaei, & Honarparvaran, 2012).

The results of the present study also showed a significant linear correlation between perceived stress and emotional intelligence in women with AIDS/HIV. The relationship between emotional intelligence and perceived stress was negative and significant in these patients, and the level of perceived stress could thus be predicted in these patients by way of their emotional intelligence.

Cantisano et al. showed that being ashamed of one’s disease can predict the quality and extent of expressing emotions in interpersonal relationships; perceived stigma mediates the quality of emotion expression and feelings of guilt, and perceived mental health in such patients is in association with the quality of their emotion expressions and physical health. The most important issue regarding AIDS and other chronic diseases is that, under stressful conditions and anxiety and fatigue, the mind decreases the amount of energy needed to invest in order to cope with the disease, and the body then becomes more vulnerable to various diseases. Emotional intelligence accelerates the return to health and helps patients relieve faster. Based on the results of research carried out in Harvard University, the physical effect of emotional intelligence is so high that significant physical changes also form in the brain with changes in emotional intelligence (Bradbury & Graves, 2005, 2007).

Emotional intelligence is a set of abilities, including maintaining the motivation to deal with disadvantages, impulse control, postponing success, regulation of mental states, prevention of distress and undermined thinking power, empathy with others and hopefulness (Goleman, 1995, 2004); all the noted factors can be considered personal abilities against different sorts of mental afflictions, and stress is at the top of this list. It can be concluded that people who empower themselves toward life problems are full of hope for the future, perceive less conditions as stressful and also perform better under
stressful conditions; in addition, based on the results obtained by Bradbury and Graves, these people can experience significant psychological and physical impact on their mental health by relying on emotional intelligence, because people with lower emotional intelligence experience higher levels of depression, disappointment and other negative outcomes in their life, and it is undeniable that a higher emotional intelligence empowers people in dealing with tensions and allows them to better adapt to new conditions (Ciarrochi, Forgas, & Mayer, 2001). The results of the present study on women with HIV/AIDS were consistent with the results of the discussed studies.

5. Conclusion

Emotional intelligence is an important skill for the management of daily stresses and the promotion of mental health. Emotional intelligence enables people to control their feelings before they become uncontrollable and also prevents physical complications. It thus plays a significant role in mental health and can reduce stress while the person faces difficult situations (Bradbury & Greaves, 2007). These explanations show that emotional intelligence can predict perceived stress better than self-concept.

Limitations

The study participants were recruited only out of the patients visiting centers for behavioral diseases, who benefitted from different mental and medical services. The lack of access to the entire population of AIDS patients and their exact figures and also the use of self-report questionnaires, which reduces the trustworthiness of the findings, can be considered the limitations of this study.

Since the present study was conducted on a female population, further studies on men could also prove useful. It is also recommended to conduct similar studies in different cultural and social backgrounds.

References


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