



Original Article

Exploring the Role of Cognitive Emotion Regulation Strategies on the Quality of Life of HIV Patients

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ABSTRACT

Quality of life (QoL) is recognized as an essential end point in the disease management of chronic conditions such as HIV. Cognitive impairments impact a broad spectrum of experiences and is a common issue affecting people living with HIV. Due to the chronicity of the illness, HIV/AIDS individuals' experiences adverse psycho-social and emotional problems causing severe effect on the quality of life. **Objective:** To explore the impact of Cognitive Emotion Regulation Strategies on the Quality of Life of HIV patients. Besides, the study also explored the impact of adaptive and maladaptive Cognitive Emotion Regulation Strategies on the Quality of Life of HIV infected individuals. **Methods:** For the purpose of collecting data, a sample of (N = 50) HIV patients was acquired by means of convenient sampling for the present study from the specialized HIV clinics of South Punjab, Pakistan. The data were obtained through these standardized instruments' Urdu versions; Cognitive Emotion Regulation Questionnaire (CERQ) and WHOQOL-HIV BREF. **Results:** The results showed a role of individuals' Cognitive Emotion Regulation on the quality of life. The study further categorized the function with regard to both adaptive and maladaptive Cognitive Emotion Regulation Strategies on the HIV patient's quality of life. **Conclusions:** The study ends the literature with empirical evidence by targeting a submerged and stigmatized population.

INTRODUCTION

Individuals with HIV/AIDS are enduring the consequences of this serious affliction physically, mentally, emotionally and socially [1]. In the words of Taylor "chronic illness is not easy to deal particularly for people with HIV infectivity" [2]. The concept of quality of life states that an individual's orientation of goals, expectations, standard of living and concerns with respect to the culture/society he/she belongs [3]. According to Garnefski and Kraaij Cognitive emotion regulation refers to the thoughts that an individual has after experiencing a negative event. There are nine cognitive emotion control strategies as defined by Garnefski et al., as: Maladaptive Strategies; holding responsible oneself for the negative event, recurring

thoughts and feelings about an incident, focus on how dreadful the incident was, holding others responsible for what happen and Adaptive strategies; approval of what happened, expressing feelings to pleasing issues, view about actions that can help contract with the negative event, retreating the meaning of the incident, and discovery of the positive aspect of the negative incident [4, 5]. In contrast to the first four techniques, which are considered maladaptive, the last five are deemed to be useful. Acceptance may, nevertheless, be considered a bad habit by certain researchers [6]. The ability of cognitive emotional regulation is used for increasing the rate of positive thinking and emotions and decreasing the rate of

negative thinking and emotions. When a person is showing positive thinking patterns and emotions it means that his/her thoughts and feelings are positive, the individual has become optimistic and adaptive. Adaptive people comprehend situations of their lives in a positive approach [7]. In point of fact, cognitive emotional regulation does not change the challenging circumstances, but it changes the perception of peculiar circumstances. The emotions and their regulations influence construal of the world. The maladaptive increases negative interpretations of stimuli and adaptive increases positive interpretations of stimuli [8]. With HIV, maladaptive thinking patterns and emotions have been associated to a poorer quality of life for people living with this infection. Individuals with complex or later phase HIV/AIDS are more likely to suffer from bad quality of life because of maladaptive cognitive emotional regulation had been found to be a biggest analyst of reduced quality of life in HIV affliction [9]. A study suggests that higher ranks of adaptive Cognitive Emotion Regulation Strategies improve physical and psychological health [10]. It results in to good relationships with others that provide social support and satisfaction, that may in the due course reduce diverse kinds of psychological troubles. Cognitive Emotion Regulation Strategies are imperative aspects in favor of healthier mental development and well-being. A study assessed that HIV ailment has a central influence on the fractions of quality of life and life functioning. Acquiring appropriate life skills from experts may result in healthier outcomes and help in mounting life expectancy [11]. Another study on Indian population suggests that among the high-risk domains of poor WHOQOL are the illness stage, apparent social support, HIV related stigma, and non-adherence to treatment [12]. The present study underscores the relationship between Cognitive emotion regulation and Quality of life (QoL) in HIV patients in the state of Pakistan. Therefore, in the light of the literature cited above; the study hypothesized that higher the adaptive Cognitive Emotion Regulation Strategies; the positive quality of life and the higher the maladaptive Cognitive Emotion Regulation Strategies; the lower will be the quality of life of HIV patients.

METHODS

The present work is a fraction of the PhD study. The recent extraction had been planned to explore the role of Cognitive Emotion Regulation Strategies on the quality of life of HIV persons. A linear regression type research design was used to gather information from these individuals. The basic aim of the research was to establish the function of an individual's employment of the Cognitive Emotion Regulation Strategies on the quality of life among HIV patients. The information was gathered from the HIV patients purposively from the specified HIV Special clinics,

South Punjab of Pakistan. The data were gathered by the researchers from these patients by using convenient sampling technique from the specified HIV Special clinics, South Punjab of Pakistan. A sum figure of 50 HIV individuals recognized from their medical tests and health reports took part in the study. These patients were on either phase 1 or phase 2 of their infection period and do not have any other kind of chronic illness. The data were obtained from males (34; 68%), females (10; 20%) and transgender (06; 12%) with mean age; $M = 2.27$ and $SD = 1.015$. The following standardized tools were employed to collect the information for the study variables: The Cognitive Emotion Regulation Questionnaire (CERQ) [13] is a self-report instrument comprising of thirty-six items and nine subscales. In the current work, the Urdu translation [14] of the Cognitive Emotion Regulation Questionnaire (CERQ) was utilized. Cronbach alpha α value of translated edition of the cognitive emotion regulation test was 0.83. The WHOQOL-HIV BREF [15] involves thirty-one items. The questionnaire includes two average questions and twenty-nine overt items that illustrate 6 domains of quality of life. A five-point rating scale had been used to establish scores providing 1-5 response options. In the current investigation, Urdu translation [16] was utilized to evaluate the health illness related quality of life for HIV/AIDS infected persons. The responses were analyzed by using the SPSS 26.0.

RESULTS

The central purpose of the research study was to explore the role of Cognitive Emotion Regulation strategies both adaptive and maladaptive on the quality of life among HIV individuals. Descriptive analysis of demographic variables was carried out on the current sample. Besides, regression analysis was done to check the analysis in the study. The assumptions of regression were met in both analyses [17]. The results are given below. Table 1 gives an overall picture about the frequencies and percentage of the study participants. The table shows the participant's gender; with a figure of 34 male participants, 10 female participants and 06 transgender participants. The mean age of the sample ($M = 2.27$ with $SD 1.015$) depicts the sample fits into early to middle age group. The mean education ($M = 3.40$ with $SD 1.248$) shows majority of the participants below graduation level. The socio-economic status working out ($M = 1.40$ with $SD .498$) shows that the sample fits into low income group.

Table 1: Demographic data of study participants (N=50) HIV Patients

Demographic Variable	Type	n/ M ± SD
Gender	Males	34
	Females	10/1.63 ±.81
	Transgender	06
	Total	50(100%)
Age	50	2.27±1.06
Education	50	3.40±1.25
Socio-Economic Status	50	1.40±.49

Table 2 designates that adaptive Cognitive Emotion Regulation Adaptive strategies positively predicts Quality of Life in HIV patients ($\beta=.51$, $t=18.97$, $p<.001$) that elucidate 33% variation in Quality of Life { $R^2=.33$, $F(1,49)=141.4$, $p<.001$ }. Multiple regression analysis was run to investigate the impact of subscale of adaptive cognitive emotion regulation strategies to predict quality of life. As shown by the results in Table 2, significant prediction indicated by the beta weights representing the relative contribution of the independent variables; acceptance ($\beta = .266$, $t = 2.98$), positive refocusing ($\beta = .255$, $t = 2.64$), refocus on planning ($\beta = .278$, $t = 2.13$), putting into perspective ($\beta = .253$, $t = 2.13$) and positive reappraisal ($\beta = .421$, $t = 3.19$).

Table 2: Cognitive Emotion Regulation strategies (Adaptive) as Predictor of Quality of Life(QoL) in HIV patients(N=50)

Predictor Variables	B	SEB	β	T	R^2
CERQ	4.11	.27	.51***	18.97	.33***
Acceptance			.266	2.98	
Positive refocusing			.255	2.64	
Refocus on planning			.278	2.13	
Putting into perspective			.253	2.13	
Positive reappraisal			.421	3.19	

CERQ=Cognitive Emotion Regulation strategies

*** $p<.001$

Table 3 demonstrates that maladaptive Cognitive Emotion Regulation Maladaptive strategies negatively predicts Quality of Life in HIV patients ($\beta = -.41$, $t = -11.89$, $p < .001$) that elucidate 20% variation in Quality of Life { $R^2 = .20$, $F(1,49) = 141.4$, $p < .001$ }. Multiple regression analysis was run to investigate the impact of subscale of maladaptive cognitive emotion regulation strategies to predict quality of life. As shown by the results in Table 3, significant prediction indicated by the beta weights representing the relative contribution of the independent variables; self-blame ($\beta = -.315$, $t = -2.01$), rumination ($\beta = -.333$, $t = -2.13$), Catastrophizing ($\beta = -.455$, $t = -3.23$) and Other-blame ($\beta = -.337$, $t = -2.27$).

Table 3: Cognitive Emotion Regulation strategies (Maladaptive) as Predictor of Quality of Life(QoL) in HIV patients(N=50)

Predictor Variables	B	SEB	β	T	R^2
CERQ	-3.01	.26	-.41***	-11.89	.20***
Self-blame			-.315	-2.01	
Rumination			-.333	-2.13	
Catastrophizing			-.455	-3.23	
Other-blame			-.337	-2.27	

CERQ=Cognitive Emotion Regulation strategies

*** $p<.001$

DISCUSSION

The most important rationale of the research is to explore the impact of Cognitive Emotion Regulation strategies both adaptive and maladaptive on the Quality of Life of HIV patients. The research was conducted from the HIV special clinics of South Punjab, Pakistan. The inspiration behind this study was that HIV persons are an exceptionally stigmatized and susceptible people. The results of the regression analysis explain that CER both adaptive and maladaptive were significant predictors of quality of life of HIV patients. It may also be inferred that there is a considerably vital connection between individual's cognitive emotion regulation strategies and quality of life. HIV patients can improve their health and quality of life by cognitively regulating emotions [18]. The study outcomes are also in procession with a former study that concluded that CER and optimism were significant predictors of quality of life of patients with chronic illness [19]. According to prior studies by Thompson and Tice & Bratslavsky on the phenomenon, the prototypes that cognitive emotion regulation tactics utilize are the behavioral indicators that reflect upon the core configuration and purpose of an individual's affective states. Maladaptive cognitive emotion regulation generates negative apprehensions and evaluations. Such negative cognitions and maladaptive schemas do not let them to move ahead and hence outcome is dysfunctional performance. Few previous studies have also shown similar results [20, 21], their findings revealed that cognitive emotion regulation contributes a significant function in the context of general self-control, mental health and well-being of participants. Few studies have established the important function in health-related outcomes that cognitive emotion regulation tactics plays after the individual experiences of traumatic situations. A study also observed the association linking psychological factors and quality of life (QoL) from the stand point of people living with HIV and found that strategies ought to be embattled in empowerment, better public sustenance, and buoyancy [22]. The current findings are in line with researches that have explained the phenomenon that a predominantly

influential grouping of emotion regulation entails the cognitive way of managing the intake of emotionally arousing information [23, 24, 25].

CONCLUSIONS

Coping approaches can be explained as "constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person". Therefore, if CERs considered from this point of view, it explicates a number of considerable features of cognitive emotion regulation strategies. Firstly, CERS is a Cognitive building up of automatic thoughts about presenting troubles to smooth the progress of change or increase quality of life. Quality of life has a number of methods— physical execution, psychological standing, social performance, and infection or management associated indicators. Since, the study was a regression approach design therefore; a fundamental relationship amongst the study variables cannot be established.

Authors Contribution

Conceptualization: RJB, SF

Methodology: RJB, SF, SR

Formal analysis: RJB

Writing—review and editing: RJB, SR

All authors have read and agreed to the published version of the manuscript.

Conflicts of Interest

The authors declare no conflict of interest.

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