COPING STYLES IN RELATION TO DEPRESSION AND ANXIETY IN PEOPLE LIVING WITH HIV/AIDS IN AIZAWL, MIZORAM

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Abstract : Ever since HIV/AIDS was discovered in 1981, the AIDS pandemic has continued to be an increasing health problem in various parts of the world. With studies showing the importance of successful coping for PLHIV in the maintenance of physical and mental health, the present study aims to identify the coping strategies used by PLHIV and to analyze the relationship between coping styles with depression and anxiety of PLHIV in Aizawl, Mizoram. The sample consisted of 300 PLHIV (150 males and 150 females) between the ages of 20 - 70 years. Results revealed that lower levels of Depression and Anxiety were significantly associated with the use of the coping style Acceptance, whereas higher levels of Depression and Anxiety were significantly associated with the use of Venting, Substance Use and Behavioral Disengagement as coping strategies. In addition, lower level of Depression was associated with the use of Religion as a coping strategy. With the coping styles Acceptance and Religion being the most frequently used coping styles, and Venting, Substance Use and Behavioral Disengagement being among the least frequently used coping styles, the results of the present study may be indicative of healthy coping styles being employed by PLHIV in Mizoram.

IndexTerms - HIV/AIDS, coping, depression, anxiety, PLHIV, Aizawl, Mizoram

I. INTRODUCTION

Ever since HIV/AIDS was discovered in 1981, the AIDS pandemic has continued to be an increasing health problem in various parts of the world. Even though much effort has been made in terms of prevention, treatment and care, and though the prevalence has decreased in some countries, the AIDS epidemic is very much still an issue of concern in Mizoram (a small north-eastern state in India).

Initially, HIV transmission in Mizoram was drug-driven, through sharing of needles and syringes. The first case of HIV infection in Mizoram was detected in an Injecting Drug User (IDU) in October, 1990. In 1998, the HIV epidemic took off quickly among the state's male IDUs who were previously the high risk group (almost 90 per cent of the injecting drug users shared needles and syringes without adequate cleaning). However, over the years the risk of transmission has shifted to sexual mode increasing the vulnerability of the general population. While the incidence of HIV prevalence declined over the years after an initial rising trend, Mizoram is still witnessing a very alarming number of new infections each year, with the total HIV detection rising to more than 18,000 in September, 2018 (MSACS, 2018). According to the latest HIV Sentinel Surveillance, Mizoram has the highest HIV prevalence in the country at present (NACO, 2017).

The life of an HIV infected person is one that is full of stressful events, both from the stress of the illness itself and the stigma that it brings with it. Even as it moves into the general population, HIV/AIDS is still misunderstood among the public and is often seen as “someone else’s problem”. The disease has also become subject to many debates including religion. Thus, as in any other society, Mizo PLHIV in addition to coping with the effects of having a fatal disease, have to cope with the many challenges they face in the society.

Studies have revealed the high percentage of depression and anxiety among People Living with HIV/AIDS (PLHIV), which in turn may lead to poorer health outcomes. When faced with different problems in life, different individuals use different strategies for coping, as a means to reduce stress. Such coping mechanisms are important in patients suffering from chronic illnesses such as depression, breast cancer, and HIV/AIDS and the use of some of these coping styles may prove beneficial for the person (Kasi, Kassi & Khawar, 2007; Vosvick et al., 2003; Carver, Scheier & Weintraub, 1989).

With studies showing the importance of successful coping for PLHIV in terms of physical and mental health, the present study aims to:

1. Identify the most frequently used coping strategies among PLHIV in Mizoram
2. Analyze the relationship between coping styles with depression and anxiety of PLHIV in Mizoram.

II. METHODS

2.1 Sample: Purposive random sampling procedure was used for the present study which was carried out in agencies catering to the care, support and treatment needs of PLHIV in Aizawl. The primary data for the study was collected in face to face interactions between the participants and the researcher after informed consent from all participants. The sample consisted of 300 PLHIV (150 males and 150 females) between the ages of 20 – 70 years.

2.2 Psychological tools: The assessment tools consisted of the following measures:

The BRIEF COPE Inventory (Carver, 1997): This is a 28-item scale to assess a broad range of coping responses used in confrontation to difficult or stressful events. The inventory consists of 14 subscales namely, Self-distraction, Active Coping, Denial, Substance Use, Use of Emotional Support, Use of Instrumental Support, Behavioral Disengagement, Venting, Positive Reframing, Planning, Humor, Acceptance, Religion and Self-blame. Regardless of the number of items in each sub-scale (2 items each), the total coefficient of correlation of the subjects emerged to be unacceptable (less than 0.50; George & Mallery, 2003) for only four sub-scales of Brief COPE, namely, Self -Distraction, Denial, Positive Reframing and Self- Blame (Table 1). Thus, these four sub-scales have not been included for further analysis in the present study.

Beck Depression Inventory – Second Edition (BDI-II; Beck, Steer & Brown, 1996): This is a 21-item self-report instrument to assess the existence and severity of symptoms of depression as listed in the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders Fourth Edition (DSM-IV; 1994). Each of the 21 items corresponding to a symptom of depression is summed to give a single score for the BDI-II. Total score of 0-13 is considered minimal range, 14-19 is mild, 20-28 is moderate, and 29-63 is severe. The Cronbach's alpha for BDI-II for the present population under study was found to be 0.89.

Beck Anxiety Inventory (BAI; Beck & Steer, 1993): The Beck Anxiety Inventory (BAI)is a 21-question multiple-choice self-report inventory to measure the severity of an individual's anxiety. It consists of questions about how the subject has been feeling in the last month, expressed as common symptoms of anxiety (such as numbness and tingling, sweating not due to heat, and fear of the worst happening). It is designed for an age range of 17–80 years old. Total score of 0-9 is considered minimal range, 10-16 is mild, 17-29 is moderate, while30-63 is indicative of severe anxiety. The Cronbach's alpha for BAI for the present population under study was found to 0.94.

III. RESULTS AND DISCUSSION

3.1 Coping styles of PLHIV in Mizoram:
The coping styles used by the subjects under study have also been analyzed and shown in Figure 1. It has been found that the most frequently used coping styles are Acceptance, Religion, Planning, and Active Coping. The least frequently used coping styles have been found to be Humor, Behavioral Disengagement, Substance Use and Venting.
Religious Coping being the second most frequently used coping strategy in the present study may be a reflection of the importance/influence of religion in the society under study. Majority of the Mizos comprise of Christians and it is seen that the religious background of Mizo PLHIV may play an important role in the coping strategies used by them.

3.2 Gender and Coping:
In the present study, females were found to score significantly higher than males in the use of Behavioral Disengagement, Venting and Religion. Males, on the other hand, were found to score significantly more than females in the coping styles such as Substance Use and Acceptance. (Table 1)

3.3 Differences in Depression and Anxiety based on Coping Styles:
The differences in the use of different coping styles were analyzed using the level of scores of Depression and Anxiety among PLHIV and shown in Table 2. Results revealed that there are significant differences in Depression and Anxiety among PLHIV based on coping styles such as Acceptance, Venting, Substance Use and Behavioral Disengagement. In addition, a significant difference was found in Depression based on the use of the coping style Religion. Results further revealed that lower levels of Depression and Anxiety were significantly associated with the use of the coping style Acceptance, whereas higher levels of Depression and Anxiety were significantly associated with the use of Venting, Substance Use and Behavioral Disengagement as coping strategies. In addition, lower level of Depression was associated with the use of Religion as a coping strategy.

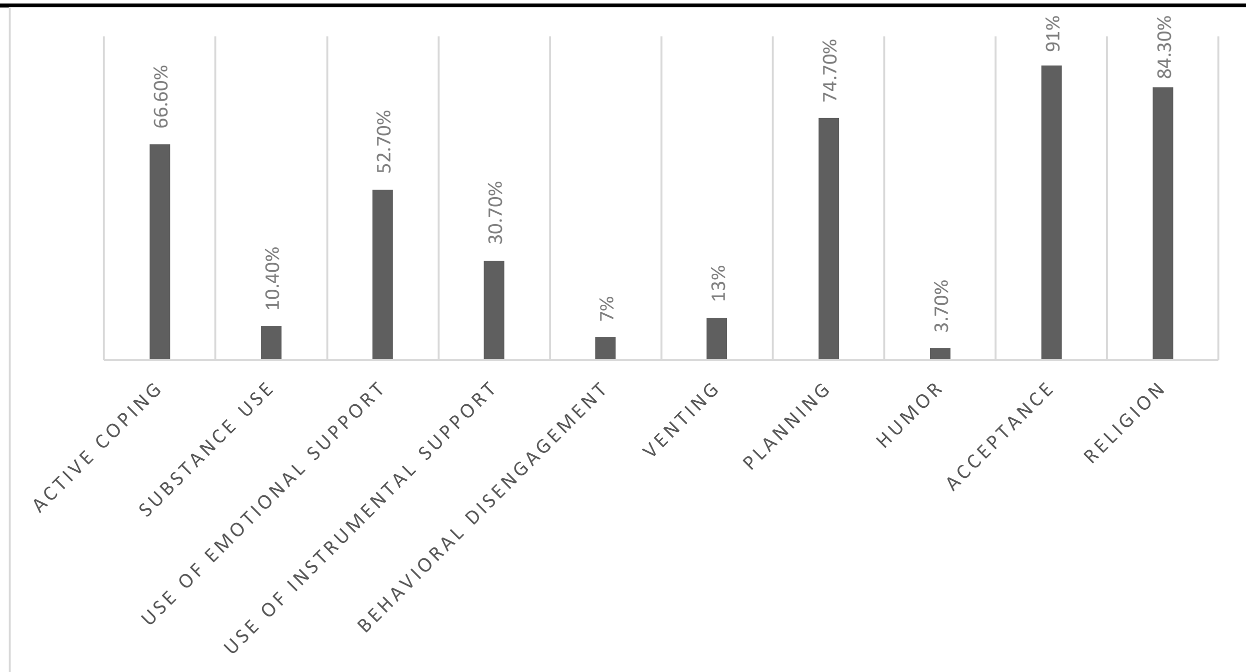

Fig 1: Coping styles used by PLHIV in Mizoram

Table 1: Kruskal Wallis test - Comparing Gender differences in Coping
Cronbach Alpha for Coping sub-scales

COPING STYLES	GENDER	Mean Rank	Chi-Square	Cronbach Alpha
ACTIVE COPING	Male	150.68	0.001	0.66
	Female	150.32		
SUBSTANCE USE	Male	165.46	12.35*	0.93
	Female	135.54		
USE OF EMOTIONAL SUPPORT	Male	147.32	0.43	0.55
	Female	153.68		
USE OF INSTRUMENTAL SUPPORT	Male	144.31	1.34	0.61
	Female	155.73		
BEHAVIORAL DISENGAGEMENT	Male	136.79	7.66*	0.50
	Female	163.30		
VENTING	Male	132.63	13.99*	0.50
	Female	168.37		
PLANNING	Male	155.59	1.33	0.70
	Female	145.41		
HUMOR	Male	150.28	0.003	0.55
	Female	150.72		
ACCEPTANCE	Male	160.41	10.35*	0.74
	Female	140.59		
RELIGION	Male	143.29	3.95**	0.75
	Female	157.71		

*p<.05
**p<.01

Table 2: Kruskal Wallis Test - Mean Ranks - Comparing differences in levels of Depression and Anxiety based on Coping Styles

COPING STYLES		DEPRESSION			ANXIETY		
		LEVEL OF DEPRESSION	Mean Rank	Chi-Square	LEVEL OF ANXIETY	Mean Rank	Chi-Square
MOST FREQUENTLY USED	ACCEPTANCE	Minimal	158.40	19.29**	Very low anxiety	156.75	15.05**
		Mild	160.57		Moderate Anxiety	126.22	
		Moderate	132.33		High Anxiety	151.81	
		Severe	123.67				
	RELIGION	Minimal	159.00	21.65**	Very low anxiety	149.59	0.9
		Mild	165.43		Moderate Anxiety	156.67	
		Moderate	130.36		High Anxiety	143.07	
		Severe	113.69				
	PLANNING	Minimal	160.30	5.33	Very low anxiety	151.63	0.86
		Mild	141.07		Moderate Anxiety	143.09	
		Moderate	137.18		High Anxiety	159.05	
		Severe	146.22				
	ACTIVE COPING	Minimal	159.60	4.04	Very low anxiety	151.26	1.28
		Mild	142.09		Moderate Anxiety	142.34	
		Moderate	142.72		High Anxiety	165.00	
		Severe	135.57				
LEAST FREQUENTLY USED	VENTING	Minimal	136.65	19.18**	Very low anxiety	134.35	32.50**
		Mild	138.50		Moderate Anxiety	191.72	
		Moderate	181.03		High Anxiety	206.64	
		Severe	187.74				
	SUBSTANCE USE	Minimal	136.35	23.04**	Very low anxiety	142.01	12.83**
		Mild	160.57		Moderate Anxiety	167.72	
		Moderate	150.35		High Anxiety	192.26	
		Severe	207.78				
	BEHAVIORAL DISENGAGEMENT	Minimal	109.61	101.77**	Very low anxiety	127.31	63.02**
		Mild	149.99		Moderate Anxiety	209.11	
		Moderate	208.95		High Anxiety	224.43	
		Severe	244.91				
	HUMOR	Minimal	152.66	0.68	Very low anxiety	148.23	1.02
		Mild	144.49		Moderate Anxiety	156.11	
		Moderate	151.42		High Anxiety	158.90	
		Severe	149.89				

*p<.05
**p<.01

IV. CONCLUSION:

The study reveals that the most frequently used coping styles by PLHIV in Mizoram are Acceptance, Religion, Planning and Active Coping, while Humor, Behavioral Disengagement, Substance Use and Venting were found to be the least frequently used coping styles. Results revealed that lower levels of Depression and Anxiety were significantly associated with the use of the coping style Acceptance, whereas higher levels of Depression and Anxiety were significantly associated with the use of Venting, Substance Use and Behavioral Disengagement as coping strategies. In addition, lower level of Depression was associated with the use of Religion as a coping strategy. With the coping styles Acceptance and Religion being the most frequently used coping styles, and Venting, Substance Use and Behavioral Disengagement being among the least frequently used coping styles, the results of the present study may be indicative of healthy coping styles being employed by PLHIV in Mizoram. The findings of the present study may prove useful towards the advocacy of useful and healthy coping resources among PLHIV.

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