TO STUDY PERCEIVED SOCIAL SUPPORT AND COPING STRATEGIES AMONG HIV INFECTED PEOPLE ON ANTIRETROVIRAL THERAPY

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Summary

This study examines the relationship of perceived social support and coping strategies of HIV infected people on antiretroviral therapy. To examine the relationship of gender on perceived social support of HIV infected people on antiretroviral therapy. To examine the relationship of gender on coping strategies of HIV infected people on antiretroviral therapy. Methodology: Subject who had been tested positive & undergone pre-test & post-test counseling with on ART were screened for eligibility, the target group of 120 participants were selected. The age group is 20 to 45 years. Questionnaires that were used to measure different variables include personal data sheet, coping checklist by Rao, Subbakrishna and Prabhu and Perceived Social Support by Mary.E.procidano & Kenneth hellar. The data were analyses by using correlation and t value. Results revealed that there is significant relationship between coping strategies and perceived social support of HIV infected persons on antiretroviral therapy. It was also noticed that there is no significant difference in the perceived social support of HIV infected males and females and there is no significant difference in the coping styles of HIV infected males and females.

Keywords: Coping styles; perceived social support; HIV/AIDS; antiretroviral therapy; males & females.

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Introduction

AIDS, which is one of the most dreaded diseases of humanity, has spread to every part of the world, threatening people from all spheres of life. The first of HIV infection was reported in 1981 among commercial sex workers form Chennai, India. HIV was first described in 1983. Before that it was called by various other names. There are two types of HIV: HIV type 1 and HIV type 2. HIV is a member of a group of viruses called retroviruses. Retroviruses are simple microscopic organisms dependent on host for reproduction. These microscopic organisms lake an independent metabolism. Therefore, they cannot grow without energy and nutrients supplied by a host cell. HIV is the acronym for human immunodeficiency virus. A person infected with HIV is medically known as an HIV-positive person. Only blood test can establish one's HIV status. However, this does not mean that the person is suffering from AIDS.

The development of antiretroviral therapy (ART) marks a turning point in the management of the HIV/AIDS epidemic. The use of these medications has dramatically reduced HIV-associated morbidity and mortality. Very high levels of adherence are a prerequisite for a successful immunological response. Low adherence increases the risk of treatment failure and disease progression.[1] A more significant consideration is the fact that low adherence is likely to lead to further transmission of resistant viruses. This is a strong indicator of a highly negative impact on the cost-effectiveness of HIV management. Antiretroviral drugs (ARVs) act on various stages of the life-cycle of HIV on the human body. These drugs act by interrupting the process of replication of the virus and hence reduce the destruction of CD4 cells. These drugs are therefore instrumental in delaying disease progression. ARVs have improved and lengthened the lives of thousands of patients fighting the disease.

Lower CD4 counts are associated with an increase in the number of episodes of OIs and continued disease progression. Higher CD4 counts indicate a lower risk of OIs and improved health status. Patients should know their CD4 cell count and monitor how it changes with treatment. Knowledge about the disease improves levels of adherence to treatment. Dealing with drug side-effects can be a challenge to every doctor. Every anti-HIV drug, as well as drugs that prevent and treat infections, has its own set of possible effects. These may vary from one person to the next. Some people experience few or no side-effects at all, while some experience mild and manageable side-effects. Others have severe side-effects.

Social support may play a small but potentially important role in helping HIV-positive people adhere to the complicated schedules for taking their drug "cocktails" to control the virus that causes AIDS.[2] Previous studies have shown that as many as 60 percent of people taking the antiviral cocktails adhere to their medications less than 90 percent of the time. Other studies indicate HIV-positive people need to take their medicine at least 95 percent of the time to control the AIDS virus. HIV prevalence among people with mental illness has substantially increased in recent years. Advanced brain impairment in people with HIV infection is clinically difficult to manage and usually requires residential care, because the presence of psychiatric illness would negatively affect treatment adherence. We need innovative approaches to increase access and adherence to antiretroviral therapy (ART), especially among these difficult-to-treat populations**.**

The significant contribution of social influence/social networks in choosing Complimentary and alternative Medicine modalities demonstrated has not heretofore been examined in Complimentary and alternative Medicine user studies Relationships among functional social support, HIV-related stigma, Discriminators of complementary and alternative medicine provider use among men with HIV/AIDS.

Cognitive behavioral stress management in HIV-symptomatic gay men, which uses group interventions to target maladaptive cognitions, enhance social support, and facilitate more active coping strategies, increased their cognitive coping skills and significantly improved social support. Disclosure and mental health. Results suggest each sub-group experienced perceived social support as significantly predictive of better mental health while the effect of actual social support was minimal. The effect of perceived and actual social support on the mental   health of HIV-positive persons.[3]

This study illustrates that the support provided by family makes multiple levels of positive impact on people living with HIV/AIDS, suggesting the importance of including families in HIV/AIDS interventions. Understanding Family Support for People Living with HIV/AIDS in Yunnan, China.[4]

Results indicate that while each outcome has slightly different significant predictors, perceived family support was predictive of the reduced loneliness over the past few days and past year, stress, and presence of depressive symptoms. Implications for researchers and therapists are discussed. The role of family and friend social support in reducing emotional distress among HIV-positive women.[5]

Heller and Swindle suggest that the perception of social support is one element in an individual's appraisal of and subsequent coping with stress.

The Scope has demonstrated reliability (internal consistency and test-retest), and its validity is supported through construct and criterion-referenced analyses. Non adherence as a strategy for coping with side effects was associated with poorer provider relations, lower treatment knowledge, and higher beliefs of treatment effectiveness. Findings have the potential to inform investigations and interventions in the context of treatment of HIV disease and other medical conditions. Coping with HIV treatment side effects: Conceptualization, measurement, and linkages.[6]

African Americans reported higher use of multiple coping strategies. High levels of perceived social support were related to greater use of positive coping and seeking support; lower levels of social support were related to greater use of self-destructive coping. There were no race-related differences in social support, and no race by social support interactions.

This bereavement group aimed at improving coping with grief also had a positive impact on health-related quality of life among HIV+ men and women, and suggests that cognitive-behavioral interventions may have a broad impact on both emotional and physical health. Improvements in health-related quality of life following a group intervention for coping with AIDS-bereavement among HIV-infected men and women.

Objectives:

To examine the relationship of gender on perceived social support and coping strategies of HIV infected people on antiretroviral therapy.

Hypothesis:

There is a significant relationship of gender on perceived social support and coping strategies of HIV infected people on antiretroviral therapy.

Method:

Subject who had been tested positive & undergone pre-test & post-test counseling with on ART were screened for eligibility, the target group of 120 participants were selected. The age group is 20 to 45 years. The Study was conducted at ART Center K.R Hospital Mysore, ICTC General Hospital Sira Tumkur District. Karnataka State,India. Each participant was meet individually they were informed in detailed regarding the study. They were some Absolute confidentiality regarding their identification and the information provided by them. A written informed consent by the participant was obtained.

Tools:
 The Following Questioner were used to measure different variable:
1. Personal Data Sheet (Develop by the Investigator)
2. Coping check list (CCL Rao Dr.Cama Subbakrishna &Prabha 1989)
3. Perceived Social Support (Mary.E.procidano & Kenneth hellar 1983)

Personal Data Sheet: The Data Sheet was developed by the Investigate After observation the need to examine in the Relationship of a few demographical variables and their role in contributing to coping style and perceive social support on HIV infected people.
Coping check list (CCL: Rao, Subbakrishna and Prabhu 1989)**:** The CCL is a self report inventory comprising 70 items, it covers wide range of behavioral, cognitive and emotional response to handle stress, items are scored in a yes/no format, the response indicating presence or absence of a particular coping behavior.
Perceived Social Support (PSS) (Mary E. Procidano and Kenneth Heller, 1983): Perceived social support has 40 items; it measures perceived social support from friends and family. The PSS measures were internally consist and appeared to measure valid constructs that were separates from each other and from network measure. Friends (PSS – Fr), consist 20 items and family (PSS – Fa) consist 20 items.

Analysis of data:
The mean, SD and correlation co-efficient of HIV infected people on coping styles and perceived social support were calculated. The first objectives were tested using correlation co-efficient. The second and third objectives were tested using mean, SD and t value.

Result and discussion

Descriptive statistics are presented below with results by research question. Using SPSS Version 10.0, analyses were run for each question. Type of analysis was determined based upon the level of measurement of the independent and dependent variables within each question. Table 1 show there is a significant relationship of perceived social support and coping strategies of HIV infected people on antiretroviral therapy. The correlation coefficients ranged from .226 to .392 which is significant at .05 levels and .01 levels. However, family support component correlated significantly and positively with problem solving, distraction positive and religion strategies. Total perceived social support correlated significantly and positively with all the coping strategies except for social support coping strategy. only 3 coping strategies best predicted perceived social support of HIV+ patients- Distraction positive (CCL 2), problem solving (CCL 1), and Religion (CCL 5). Only correlation coefficients between perceived social support from friends and coping strategies were found to be positively related and significant. Perceived Social support from family did not have much influence over coping strategies. High levels of perceived social support were related to greater use of positive coping and seeking support; lower levels of social support were related to greater use of self-destructive coping. There were no race-related differences in social support, and no race by social support interactions.[7] Table 2 shows there is a significant relationship of gender on perceived social support and coping styles of HIV infected people on antiretroviral therapy. Male and female HIV Positive people on ART did not differ significantly in their mean perceived social support scores from their t value of .343 was found to be significant at .732 levels (Table 2.1). This study does not support the literature in regards to a gender difference in coping styles. The respective mean values for total patients were 43.58 and 43.03, which are same statistically.

Table 3 shows there is a significant relationship of gender on coping styles of HIV infected people on antiretroviral therapy. Overall coping strategies like problem solving, distraction positive, distraction negative, acceptance, religion and social support in male and female HIV positive people on antiretroviral did not differ significant(table 3.1). A finding supported by current literature.[8]

Correlation coefficients between coping strategies and perceived social support.

Coping Check List		Friends	Family	Total
Problem Solving	Pearson Correlation	.392	.202	.340
	P value	.000	.027	.000
Distraction Positive	Pearson Correlation	.312	.288	.354
	P value	.001	.001	.000
Distraction Negative	Pearson Correlation	.384	.108	.274
	P value	.000	.240	.003
Acceptance	Pearson Correlation	.364	.117	.269
	P value	.000	.202	.003
Religion	Pearson Correlation	.383	.210	.340
	P value	.000	.021	.000
Social support	Pearson Correlation	.226	.066	.163
	P value	.013	.474	.076
Denial	Pearson Correlation	.307	.132	.249
	P value	.001	.150	.006

Table: 1

Mean Perceive social support scores (Friends, family and Total) of male and female HIV Positive People on ART.

Perceive Social Support from	Gender	N	Mean	S.D
Friends	Male	60	21.08	5.47
	Female	60	21.02	3.61
Family	Male	60	22.50	6.61
	Female	60	22.02	4.79
Total	Male	60	43.58	10.36
	Female	60	43.03	6.86

Table: 2

Results of Independent samples tests for mean social support scores (Friends, family and total) of male and female HIV patients.

Perceive Social Support	t value	df	Sig. (P value)	Mean Difference
Friends	.079	118	.937	.06
Family	.458	118	.647	.48
Total	.343	118	.732	.55

Table: 2.1

Mean Coping Strategies scores of male and female HIV Positive People on ART.

Coping styles	Gender	N	Mean	Std. Deviation
Problem Solving	male	60	5.80	2.00
	Female	60	6.07	2.07
Distraction Positive	male	60	8.67	2.49
	Female	60	8.23	1.84
Distraction Negative	male	60	6.00	1.76
	Female	60	5.93	1.46
Acceptance	male	60	7.08	2.26
	Female	60	7.65	1.64
Religion	male	60	4.38	1.64
	Female	60	4.65	1.22
Social Support	male	60	3.93	1.19
	Female	60	4.02	1.20
Denial	male	60	6.32	2.08
	Female	60	6.28	1.45

Table: 3

Results of Independent sample 't' tests for mean Coping Strategies scores of male and female HIV Positive People On ART.

Coping Check list	t	df	Sig.	Mean Difference
Problem Solving	-0.719	118	.474	-0.27
Distraction Positive	1.086	118	.280	0.43
Distraction Negative	0.226	118	.822	0.07
Acceptance	-1.572	118	.119	-0.57
Religion	-1.012	118	.314	-0.27
Social Support	-0.382	118	.703	-0.08
Denial	0.102	118	.919	0.03

Table: 3.1

Conclusion

In conclusion, this study support a relationship perceived social support and coping strategies were examined using Pearson correlation techniques. The result indicates that there is a significant relationship between perceived social support and coping strategies among HIV infected people on antiretroviral therapy.[9] The perceived social support and coping strategies of male and female HIV infected peoples obtained very similar scores the result indicates there is no significant relationship between HIV infected male and female. Limitations of the study the sample population should have been larger and sample was not representative of the pregnant women. A number of significant findings from the data above have implications for strategies in supporting people living with HIV and AIDS. Particularly the availability of ongoing counseling as well a support groups needs to be strengthened and explored.[10] While the specific nature and the activities of the support groups were not explored, the data presented make a strong case for the positive benefits of counseling and support groups among women. Our study points to the need for further research to be undertaken in the fields of effectiveness of support groups and counseling and the cost-effectiveness of integrated counseling and testing centre as a public health approach.[11] Particular research would be welcomed to understand the finding of strong social support in the rural community sample.

Acknowledgment

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