



CLINICAL AND DEMOGRAPHIC CORRELATES OF DEPRESSION AMONG WOMEN LIVING WITH HIV

Nisar Ahmad Wani

Assistant Prof.

Govt. Degree College for Women

Anantnag

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ABSTRACT

A study was done to determine the relationship of certain clinical and demographic variables to depression among women living with HIV. Based on purposive sampling 25 women were selected from a tertiary HIV care centre in Srinagar. Their age ranged between 18 and 45 years with mean age around 31 years and 1 month. Data were collected using a personal data sheet and Beck's Depression Inventory II after getting approval from the Ethics Committee and informed consent from the participants. The research design was ex-post-facto, cross sectional and inevitable in nature. Co relational analysis revealed age to be inversely related to depression in women living with HIV. However other variables such as monthly income, parity, ART status and CD4+ cell counts were not significantly related to depression among women living with HIV.

Keywords : Depression, Age, CD4+ cell counts, ART.

INTRODUCTION

HIV is a chronic manageable disease with a complex interplay of various clinical factors such as opportunistic infections, disease progression, co morbidities and chronic drug intake and also psychosocial factors like stigma, denial, guilt, cost of therapy, issues related to adherence and disclosure. Numerous studies have shown that these psychosocial factors can adversely affect disease progression and drug intake.

The estimate of the prevalence of depression among people living with HIV from several studies is from 1 to 48%. Several studies have reported high levels of depression among people living with HIV and this was particularly higher in women (Ickovics, et al, 2001) The same study has also demonstrated that HIV positive women with severe depression were twice more likely to die than those without depression (Ickovics et al, 2001). The disease progression was significantly arrested by the presence of positive psychology resources (Ickovics et al, 2001). Ironson and colleagues found that cumulative depression caused decrease in CD4+ cell counts and increase in viral loads (Ironson et al, 2005). Research also supports the hypothesis that depression can affect clinical and immunological progression of HIV infection in the post ART era when the incidence of opportunistic infections has significantly come down (Leserman, 2008). In an analysis of its behavioral effects, depression has been found to be associated with poor medication adherence, impaired work performance and also reduced libido (Rabkin, 2008).

In a study among Botswanian women, lower education, higher income and lack of control in sexual decision making were positively associated with depression (Gupta. Et al, 2010). In an analysis of the trends in mortality and causes of death among women in the US over ten years followed as part of the WIHS study found that the mortality among the women had not declined as much as that of the men. Analysis of various factors showed that depression was significantly associated with mortality. This



association was independent of the use of ART and was significantly related with the non AIDS causes of mortality, especially in cardiovascular diseases and non AIDS malignancies (French et al, 2009). Interventions that effectively decrease stigma and depression and increase social support and illness acceptance are likely to improve the well-being and quality of life of HIV infected adolescent women (Andrinopoulus et al, 2011). A review of various studies reiterates the fact that depression is higher in the women living with HIV than in the men. This depression significantly impairs drug adherence leading to an unfavourable course of the disease and also seems to be a predictor to higher mortality in these women (Mello, Segurado, Malbergier, 2010).

Various studies done among different populations have shown that depression is more prevalent among women than in men living with HIV. This could be attributed to different factors. Women are biologically more vulnerable to acquiring HIV and unfortunately acquire it sexually though they live in monogamous relationships. The traditional social establishment also places women in a more vulnerable position psychologically than men. Women are perceived as care givers and seem to be resigned to that role themselves. Women seldom access healthcare except at the time of childbirth or in the advanced stages of disease. Resources are also inequitably distributed with more always allocated for the care of the men, as the breadwinners and the children.

The stigma associated with HIV has always been a deterrent in the access of healthcare in these women who might fear social ostracisation if their status is disclosed. Fear, a sense of shame, guilt and fear of exposure all seem to complicate the course of the disease in these women. This is the rationale behind selecting women and excluding men from this particular study.

METHOD

OBJECTIVES

1. To ascertain the clinical factors in relation to depression among HIV positive women.
2. To study the relationship between demographic variables and depression in women living with HIV.

HYPOTHESES

Based on the findings of previous research studies, the following hypotheses were formulated:

1. There would be significant relationship between the CD4+ cell count and depression in women living with HIV.
2. ART status would be significantly related to depression in women living with HIV.
3. Parity would have a significant relationship with depression in women living with HIV.
4. Age would be significantly related to depression in women living with HIV.
5. There would be significant relationship between monthly income and depression in women living with HIV.

RESEARCH DESIGN

An ex-post-facto, cross sectional, univariate research design was used to collect data from the sample.

SAMPLE DESCRIPTION

Purposive sampling method was followed to draw sample from a tertiary HIV care centre in Srinagar. Women in the reproductive age group between 18 years and 45 years who attended the clinic for regular care were screened and consented. Women were excluded from participation if they were pregnant, had attained menopause, had undergone hysterectomy and if they were not in the age group described above. Based on these criteria 25 women were recruited. The mean age of the sample was 31 years and 1 month. 1 woman was nulliparous, 6 were primiparous and 20 women were multiparous with two or more children. Most of the women who participated in the study were from the lower income



group. 15 women were from low income earning households, 8 were from middle income groups and the remaining 2 were from the higher income group. 15 of these women were already taking ART and 12 were ART naïve. The CD4+ cell counts ranged between 86 cells/ μ L to 765 cells/ μ L with a mean CD4+ cell count of 433 cell/ μ L.

MATERIALS

1. PERSONAL DATA SHEET

The personal data sheet designed to collect demographic and participant specific information such as Age, Income, Marital status, Employment status and Parity. Clinical information regarding the CD4 cell counts, history of intake of antiretroviral drugs or antiretroviral naïve status was also collected. For women on ART, adherence was recorded. This was self-reported.

2. BECK'S DEPRESSION INVENTORY

The Beck Depression Inventory Second Edition (BDI-II) is a 21 item self report instrument intended 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. There is a four-point scale for each item ranging from 0 to 3. BDI has been used for 35 years to identify and assess depressive symptoms, and has been reported to be highly reliable regardless of the population (Beck, Steer, Ball, Raniera, 1996). It has a high coefficient alpha (.80) its construct validity has been established, and it is able to differentiate depressed from non-depressed patients. Total score of 0 – 13 is considered minimal range, 14 – 19 is mild depression, 20 – 28 is moderate and a score of 29 – 63 is indicative of severe depression.

RESULT

After testing the data for linearity, product moment correlation was computed for finding out the significance of relationship of age, CD4+ cell count and monthly income separately to depression in women living with HIV. Biserial method was used for finding out the relationship between depression and such of those variables which were discrete namely, parity and ART status.

Table 1
Correlation Coefficients of continuous variables (Age, Monthly Income, CD4+ cell Count) with Depression in women living with HIV.

Variables	r	p-value
Age	-0.445	0.0258
Monthly Income	0.3972	0.1798
CD4+ Cell Count	0.1292	0.5475

Table 02
Correlation Coefficients by Biserial method of Discrete Variables (Parity, ART status) with Depression in Women living with HIV

Variables	Biserial Correlation Coefficients	p-value
Parity	-0.024	0.07974
ART Status	0.3628	0.0747

DISCUSSION

Age was the only variable which had significant inverse relationship with depression that is, the younger the women, the higher the level of depression. Obviously, the younger women not only lacked in emotional maturity but also would have had more commitments in life than the older women. Hence



age was found to be inversely related to depression in women living with HIV.

The study showed that among the cohort of women studied, age is significantly related to depression with younger women more depressed than the older women. This could be due to the fear and anxiety associated with life expectancy and the course of the disease. Older women could be more resigned to the diagnosis and could be women living longer with the disease than the younger women who were more likely to be diagnosed recently. Women are traditionally married early and younger women have younger children and toddlers and these young mothers are filled with apprehensions regarding their future. In addition to these the health status of the spouse and the HIV status of the children could be other contributing factors. For women living in discordant relationships, the sense of guilt or fear of being labeled as being of bad character are strong demotivators for accessing care. The relationship between years of diagnosis and the status of children and spouses in these women might be a worthy exploration.

Women on ART were more depressed than women who are ART naïve. ART requires lifelong psychological and sometimes financial commitments when support programmes are not available. ART could also cause not only cosmetic problems but sometimes necessitate hospital admissions and discontinuation of treatment until resolution. This is important because of its possible adverse effect on adherence. The other concern that needs to be addressed is the preparedness of these women for ART. They will definitely benefit from assessment and appropriate counseling prior to initiation of ART.

Antiretroviral therapy has changed what was a terminal illness into a chronic disease but the success of therapy is based on adherence. Depression and menstrual disorders impair adherence and thereby affect the success of therapy. ART is also associated with toxicities like lipodystrophies which are cosmetically disfiguring. For women living in a family without revealing their status, taking their medicines without being discovered or questioned is a daily challenge.

The study also shows lack of a significant relationship between parity and income though other studies have shown significant relationship between these. These results could be due to the low prevalence of depression in the sample (8%).

CONCLUSION

Within the limits of the study it could be concluded that age alone was related to depression in women living with HIV. A multi variate research design with a larger sample may bring out the significance of the other demographic and clinical variables in relation to depression among women living with HIV. However, the study definitely highlighted the importance of psychological counseling for management of depression as part of medical treatment of women with HIV.

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