Mental Health of Persons Living with HIV/AIDS

Shankar Paripally¹, K. Subramanyam²

¹Assistant Professor, Department of Education, Member, NCTE-SRC, University College of Education, Osmania University, Hyderabad, Telangana State; ²Principal, Sravanthi College of Education, Dharmaram, Warangal (Dist), Telangana State.

ABSTRACT

Introduction: Living with HIV/AIDS can significantly impact a person’s mental health, posing various challenges that extend beyond the physical aspects of the disease. The intersection of HIV/AIDS and mental health presents a complex landscape influenced by a range of factors, including stigma, social isolation, psychological distress, and the implications of a chronic illness. Upon receiving an HIV/AIDS diagnosis, individuals often experience a whirlwind of emotions, such as fear, anxiety, shock, and uncertainty about the future. The stigma surrounding HIV/AIDS can exacerbate these feelings, leading to self-isolation, shame, and a reluctance to seek support or disclose their status due to fear of discrimination or rejection.

Aim/Objectives: Impact of gender, age and stages of HIV on mental health among persons living with HIV/AIDS in Rayalaseema region of Andhra Pradesh state. To assess the impact of gender, age and stages of HIV on mental health among persons living with HIV/AIDS.

Sample: The subjects of the present investigation are drawn HIV/AIDS persons in ART and ICTC centers in Rayalaseema Region of Andhra Pradesh State of India.

Tool: Mental health status inventory designed by Jagadish and Srivastava (1983) was used.

Design: There are three independent variables in the investigation and each variable is further classified into two, a 2 × 3 × 4 factorial design was employed.

Results: Mean, SD and ANOVA (Analysis of Variance) were calculated.

Discussion: Males are good mental health than females.

Conclusion: Subjects of 26-35 years are good mental health than the subjects of 46-55 years. Subjects with Primary Infection are good mental health than subjects with Opportunistic Infections/AIDS.

Key Words: Gender, Age, Stages of HIV, Mental Health, Tremendous advances, Emotions, Challenges

INTRODUCTION

Tremendous advances have been made in HIV prevention and treatment since the discovery of the virus that causes AIDS. Today, most people newly diagnosed with HIV can expect a near normal lifespan with steady access and adherence to combination antiretroviral therapy (cART). Moreover, in recent years there is great optimism about the potential to end the HIV epidemic or at least substantially ‘bend the curve’ of the epidemic with current biological and behavioral tools. Preexposure prophylaxis (PrEP) is highly effective at protecting individuals from acquiring HIV when taken consistently.¹

Mental health problems can increase risk of HIV acquisition through both direct and indirect pathways. Although people with SMI tend to be less sexually active compared with the general population, sexually active adolescents and adults with SMI evidence higher risk sexual behavior, including inconsistent condom use, having multiple sexual partners, trading sex, and drinking alcohol before sex.⁶

Lisa Comer et al., (2000) studied the relationship between illness disclosure and mental health among an ethnically diverse group of women with HIV/AIDS. Results showed...
that these women constituted a highly-disclosed population; over one-third of them had disclosed their HIV status to their entire social networks. Contrary to expectation, disclosure was unrelated to mental health among the African-American \((n = 72)\) and European-American \((n = 47)\) women. Among the Latina women \((n = 57)\), however, greater disclosure was related to higher levels of depression, psychological distress, and reported pain.

Amirkhanian et al., (2011) showed that HIV discrimination experiences are common in Russia and large numbers of participants said they were forced to sign written documents acknowledging their HIV positive status; many had been denied general health care, HIV health care and dental care. The findings are consisted the prevalence of psychological distress among persons living with HIV in western countries when HIV/AIDS could not be successfully treated. Enhanced HIV mental health services are needed by a large proportion of those in Russia with HIV infection.

Thomas et al., (2009) conducted a study on gender differences in sexual behavior patterns among HIV seropositive men and women.\(^3\) In order to ensure that people with HIV receive high quality sexual and mental health services, providers must have a comprehensive understanding of the issues and challenges faced by men and women with HIV. Fifty-three per cent of the women were discontented with the sexual relationship with their spouse as compared to 23 per cent of the men.

Sharp, Susan et al., (2010) investigated that Canada and the United States, HIV infection among women has been associated with mental health symptoms, injection drug use, past trauma history, sexual partner characteristics, gender power inequalities, poverty, racial segregation and health care disparities. The psychosocial needs of women living with HIV often go unmet, facilitating HIV transmission, poor psychiatric outcomes and faster disease progression.

HIV-related neuro-cognitive disorders, and substance use were less and varied. Only one study investigated posttraumatic stress disorder and reported a prevalence of 46.2\%. Conflicting results about health and treatment related factors of mental health were found (Lu Niu, 2016).

Tremendous biomedical advancements in HIV prevention and treatment have led to aspirational efforts to end the HIV epidemic.\(^2\) However, this goal will not be achieved without addressing the significant mental health and substance use problems among people living with HIV (PLWH) and people vulnerable to acquiring HIV. These problems exacerbate the many social and economic barriers to accessing adequate and sustained healthcare and are among the most challenging barriers to achieving the end of the HIV epidemic. Mental health impairments increase risk for HIV acquisition and for negative health outcomes among PLWH at each step in the HIV care continuum.

**Significance of the study**

Several attempts were made by the researches to describe factors related to HIV/AIDS. But only few attempts were made to investigate the psychological factors related to HIV/AIDS in Indian context. It is also noted that only meager and negligible probe has been made to explore mental health among persons living with HIV/AIDS.\(^4\) The need is strongly felt to explore this complex and integrate problem.

**Objective**

1. To examine the impact of gender, age and stages of HIV on mental health among persons living with HIV/AIDS.

**Hypotheses**

1. There would be significant impact of gender on mental health among persons living with HIV/AIDS.
2. There would be significant impact of age on mental health among persons living with HIV/AIDS.
3. There would be significant impact of stages of HIV on mental health among persons living with HIV/AIDS.

**Sample**

The subjects of the present investigation are drawn HIV/AIDS persons in ART and ICTC centers in Rayalaseema Region of Andhra Pradesh of India. The subjects were in the age group from 26 to 55 years. 600 male and female subjects were constituted the sample using stratified random sampling technique.

**Variables Studied**

**Dependent Variable**

1. Mental health

**Independent Variables**

1. Gender (Male and Female)
2. Age (26-35 years, 36-45 years and 46-55 years)
3. Stages of HIV (1\(^{st}\) Primary Infection, 2\(^{nd}\) Asymptomatic Infection, 3\(^{rd}\) Symptomatic Infection and 4\(^{th}\) opportunistic infections/AIDS).

**Tool**: Assessment of Mental Health Inventory: Mental health status was assessed by using mental health status inventory designed by Jagadish and Srivastava (1983), and the scale was consisting of 56 statements. The statements are related to Positive Self-Evaluation, Perception of Reality, Integration of Personality, autonomy, Group Oriented Attitude, and Environmental Mastery. In this scale four alternative responses have been given to each statement i.e., always is given a score of 4 to 1, for true keyed (positively) in the case of false keyed (Negatively). The reliability of the test was established by test-retest method and it is 0.82.
**Research Design**

As there are three independent variables like gender (men & women), age (26-35 yrs, 36-45 yrs and 46-55 yrs) and Stages of HIV (1\textsuperscript{st} Primary Infection, 2\textsuperscript{nd} Asymptomatic Infection, 3\textsuperscript{rd} Symptomatic Infection and 4\textsuperscript{th} opportunistic infections/ AIDS) and each variable is further classified into, a $2 \times 3 \times 4$ factorial design was employed.

**Statistical Analysis:** The obtained data was analyzed statistically in order to test the hypotheses using Means, SDs and Analysis of Variance (ANOVA).

**RESULTS**

| Table I: Mean and SD for the mental health scores of among persons living with HIV/AIDS. |
|---|---|---|---|---|---|---|---|---|---|
| Stages of HIV | Gender | Male | 26-35 years | 36-45 years | 46-55 years | Female | 26-35 years | 36-45 years | 46-55 years |
| Primary Infection | Mean | 140.32 | 126.61 | 128.6 | 129.12 | 137.56 | 133.92 |
| | SD | 11.08 | 12.53 | 12.41 | 11.91 | 11.37 | 12.09 |
| Asymptomatic Infection | Mean | 131.72 | 126.72 | 129.53 | 131.28 | 139.4 | 131.8 |
| | SD | 12.24 | 11.23 | 12.23 | 12.69 | 11.43 | 14.83 |
| Symptomatic Infection | Mean | 128.48 | 129.12 | 129.81 | 130.32 | 129.64 | 128.49 |
| | SD | 15.20 | 10.64 | 13.05 | 10.38 | 10.65 | 11.01 |
| Opportunistic /AIDS | Mean | 129.84 | 134.8 | 126.72 | 128.84 | 127.4 | 122.48 |
| | SD | 10.89 | 11.75 | 15.09 | 10.44 | 9.03 | 12.58 |
| Grand Means | | | | | | |
| Male: (M=130.88) | 26-35 years: (M=131.40) |
| Female: (M= 125.85) | 36-45 years: (M=131.24) |
| 46-55 years: (M=128.91) |
| Primary Infection: (M=132.68) |
| Asymptomatic Infection: (M=131.74) |
| Symptomatic Infection: (M=129.31) |
| Opportunistic Infections/AIDS: (M=128.35) |

Table–I shows that male with primary infection of 26-35 years age group subjects obtained a high mean score of 140.32 indicate they have good mental health compared to other groups. Female with Opportunistic Infections/AIDS of 46-55 years age group subjects obtained a high mean score of 122.48 indicate they have poor mental health compared to other groups.

In terms of gender, males (M=130.88) are good mental health than females (M=125.85). In terms of age, subjects of 26-35 years (M=131.40) are good mental health than the subjects of 46-55 years (M=128.91). In terms of stages of HIV, subjects with Primary Infection (M=132.68) are good mental health than subjects with Opportunistic Infections/ AIDS (M=128.35).
Table II: Summary of ANOVA for mental health scores among persons living with HIV/AIDS.

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>df</th>
<th>MSS</th>
<th>F-Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender (A)</td>
<td>10209.375</td>
<td>1</td>
<td>10209.375</td>
<td>36.30 **</td>
</tr>
<tr>
<td>Age (B)</td>
<td>6974.910</td>
<td>2</td>
<td>3487.455</td>
<td>12.40 **</td>
</tr>
<tr>
<td>Stages of HIV (C)</td>
<td>17073.298</td>
<td>3</td>
<td>5691.099</td>
<td>20.24 **</td>
</tr>
<tr>
<td>A × B</td>
<td>11048.610</td>
<td>2</td>
<td>5524.305</td>
<td>19.64 **</td>
</tr>
<tr>
<td>A × C</td>
<td>6022.738</td>
<td>3</td>
<td>2007.579</td>
<td>7.14 **</td>
</tr>
<tr>
<td>B × C</td>
<td>18643.237</td>
<td>6</td>
<td>3107.206</td>
<td>11.05 **</td>
</tr>
<tr>
<td>A×B × C</td>
<td>14927.377</td>
<td>6</td>
<td>2487.896</td>
<td>8.85 **</td>
</tr>
<tr>
<td>Within</td>
<td>161976.240</td>
<td>576</td>
<td>281.209</td>
<td>--</td>
</tr>
<tr>
<td>Total</td>
<td>246875.785</td>
<td>599</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

**-Significant at 0.01 level

Hypothesis-1: There would be significant impact of gender on mental health among persons living with HIV/AIDS.

It is evident from the table-I that obtained ‘F’ value of 36.30 is significant at 0.01 level implying that gender has significant impact on the mental health among persons living HIV/AIDS. As ‘F’ value is significant, hypothesis-1 which predicted that gender would significantly influence on mental health among persons living with HIV/AIDS is accepted as warranted by the results. Male (M=130.88) are good mental health than female (M=130.85).

The results of present study corroborate with the findings of Gina Wingood et al., (2008), Thomas et al., (2009), Sharp, Susan et al., (2010) and Jallow et al., (2014) which reported that gender has significantly associated with the mental health.

The results of the present study contradicts the findings of the study conducted by Lisa Comer et al., (2001) which reported that gender has not significantly associated with the mental health.

Hypothesis-2: There would be significant impact of age on mental health among persons living with HIV/AIDS.

As shown in the table-II that the obtained ‘F’ values of 12.40 is significant at 0.01 level implying that age has significant impact on the mental health among persons living HIV/AIDS. As ‘F’ value is significant, hypothesis-2 which predicted that age would significantly influence on mental health among persons living with HIV/AIDS is accepted as warranted by the results. Subjects of 26-35 years (M=131.40) are good mental health than the subjects of 46-55 years (M=128.91).

The results of present study corroborate with the findings of Faika Zanjani Kirsten Saboe and David Oslin (2008) and Nirmala and Manju (2013) which reported that age has significantly associated with the mental health.

Hypothesis-3: There would be significant impact of stages of HIV on Mental Health among persons living with HIV/AIDS.

Table-II clearly indicates that the obtained ‘F’ values of 20.24 is significant at 0.01 level implying that stages of HIV have significant impact on the mental health among persons living HIV/AIDS. As ‘F’ value is significant, hypothesis-3 which predicted that stages of HIV would significantly influence on mental health among persons living with HIV/AIDS is accepted as warranted by the results. Subjects with Primary Infection (M=132.68) are good mental health than subjects with Opportunistic Infections/AIDS (M=128.35).

The results of present study corroborate with the findings of Robert Remien (2019) which reported that stages of HIV has significantly associated with the mental health.

Data reveals that ‘F’ values for the first order interaction between i.e., gender × age (A×B) 19.64; age × stages of HIV (A×C) 7.14 and gender × stages of HIV (B×C) 11.05 and second order interaction among gender × age × stages of HIV (A×B×C) 8.85 are significant in causing the effect on mental health among persons living with HIV/AIDS.

CONCLUSIONS

1. There is significant impact of gender on mental health among persons living with HIV/AIDS. Male are good mental health than female.
2. There is significant impact of age on mental health among persons living with HIV/AIDS. Subjects of 26-35 years are good mental health than the subjects of 46-55 years.
3. There is significant impact of stages of HIV on mental health among persons living with HIV/AIDS. Subjects with Primary Infection are good mental health than subjects with Opportunistic Infections/AIDS.
**Policy Implications**

1. Across the all levels of education from KG to PG the curriculum should address the component of Health and Emotional wellbeing. Educational institutions to promote awareness programs on HIV for its prevention

2. The major suggestion of the present study is to understand the need of intervention programs for the people living with HIV/AIDS to restore their optimal level of their social and psychological functioning and help them to avoid from maladjustment, maintaining the self-esteem and emotional balance.

3. The important suggestion of the present study is to seek consideration of Government and Non-Government Organizations (NGO’s), social workers, sociologists and other health professionals. As well they should focus more on the children of HIV/AIDS patients and children who diagnosed with disease they should implicated special training to the parents, teachers through guidance and counselling services.

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**Authors’ Contribution:**

Dr Subramanyam collected data from the sample of the study. Dr Paripally Shankar did the data analysis and report writing.

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