

A Comparative Study of Mental Health and Level of Adjustment of HIV Infected and Haemophilic Adolescents

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ABSTRACT: : *Mental health means the well-being of an individual enclosed in the accomplishment of their abilities, coping with normal stresses of life, productive work ad contribution to their community. Adjustment is the behavioural process by which humans maintain a balance among their various conflicting needs. The aim of the study is to examine the mental health and adjustment level of HIV and Hemophilic infected adolescents. A sample of 40 adolescents suffering from HIV and Hemophilia were selected. Mental Health Inventory by Dr. Jagdish and Dr. A.K. Srivastav and Adjustment Inventory by H.S. Asthana was used. It was hypothesized that there will be no significant difference on mental health and adjustment level on both categories. Results revealed that Hemophiliacs have poor mental health in comparison to HIV patients. It was also found that both the groups show a good adjustment level.*

Key Words: *Mental health, Adjustment, HIV, Hemophilia.*

Introduction:

MENTAL HEALTH

Mental health is an elusive but a very significant concept. In general, laymen uses this term to refer to the absence of debilitate “disease” or/and disturbed human relationship affiliated with mental illness and borderline or infective functioning. But Mental health is understood as the level of cognitive, behavioral, and emotional and psychological well-being or where there is an absence of mental illness - the state of someone “functioning at a satisfactory level of emotional and behavioral adjustment”, which can affect day to day life, relationships, along with the physical health. Mental health also encloses one's ability to enjoy life - to attain an equilibrium between the daily life activities and efforts to achieve psychological resilience. **ADJUSTMENT** The term “adjustment” develops from the biological term “adaptation”, which is used by biologist strictly to refer the physical demands of the environment, but the psychologists use this term for varying conditions of social or inter-personal relations in the society. Successful adjustment is pivotal for having a high quality of life. In psychology, adjustment is defined as the behavioral process by which humans and other animals maintains a balance among their various conflicting needs and the obstacles of their environments. The course of adjustment begins when a need is felt and ends when it's satisfied.

Normally, the adjustment process includes four parts: (1) a need or motive in a form of a strong steady stimulus, (2) the foil or unfulfillment of this need, (3) diverse activity, or exploratory behaviour followed by problem solving, and (4) some response that eliminates or reduces the initiating stimulus and completes the adjustment. **HIV (Human Immunodeficiency Virus)** HIV is a virus that hampers the functioning of the immune system, which helps the body to fight off all kinds infections. Untreated HIV infects and kills CD4 cells, a type of immune cell also known as T cells. With time, HIV kills more and more of these CD4 cells, which makes the body more likely to get various types of infections and cancers. **Causes** : The virus is transmitted in persons' bodily fluids which includes: **blood, semen, vaginal and rectal fluids** and **breast milk**. The most prominent areas/way from which HIV is spread from person to person include:

- through vaginal or anal sex considered as the most common route of transmission.
- by sharing needles, syringes, and other items for injection drug use.
- by sharing tattoo equipment without sterilizing it between uses.
- during pregnancy, labor, or delivery from a woman to her baby.
- during breastfeeding.
- through “pre-mastication,” or chewing a baby's food before feeding it to them.
- through exposure to the blood of someone living with HIV, such as through a needle stick.
- through a blood transfusion or organ and tissue transplant.

Cases of HIV develops through three stages:

- **stage 1:** acute stage, the first few weeks after transmission
- **stage 2:** clinical latency, or chronic stage
- **stage 3:** AIDS

HEMOPHILIA Hemophilia is a rare chronic disease which is mostly said to be inherited genetic disorder impairing the body's ability to make blood clots, which is the process needed to stop bleeding. People with a mild effect of so may have symptoms only after an accident or during surgery. Bleeding is mostly internal, which needs to be quickly stopped with treatment, for avoiding pain and swelling. Frequent bleeding into joints and muscles can cause permanent damage such as arthritis, chronic pain and joint damage requiring surgery. Whereas bleeding in the brain may result in prolonged headaches, seizures, or a low level of consciousness. Specialized and proper treatment is necessary to help blood clot normally and is frequently infused or injected into a vein. People suffering from hemophilia lack a protein called a clotting factor, which works along with the platelets to stop the bleeding at the site of an injury. Which means the person will bleed for a longer time after an injury, and are susceptible to internal bleeding. There are two types of hemophilia. Both have the similar symptoms.

- Hemophilia A is the most common form and is due to having reduced levels of clotting factor VIII.
- Hemophilia B, also known as Christmas Disease, is caused by having reduced levels of clotting factor IX.

Both Haemophilia A and B are X-linked recessive disorders therefore, females are rarely severely affected by them.

Review of Literature : A research was conducted by Kestone Lyambai, Lonia Mwape. (2018) on 'Mental Health Problems Experienced by HIV Positive Adolescents in Choma District, Zambia. A sample of 103 HIV positive adolescents using the Strengths and Difficulties Questionnaire (SDQ). It was found that multiple mental health problems particularly emotional and peer problems are present among adolescents with HIV/AIDS yet are mostly undiagnosed, and marks that the adolescents with high levels of internalized stigma are more prone to have multiple mental health problems. Similar finding in a cross-sectional research conducted by Nora West Icon, Holly France, Jeremy Nel, et al., (2018) on 'Mental Health in South African adolescents living with HIV' studying the prevalence of mental health conditions, social support, and associated factors among adolescents (9-19 years old) living with HIV in South Africa. Taking a sample of 278 adolescents using four self-report tools- Children's Depression Inventory-Short, Revised Manifest Anxiety Scale, Child Post-Traumatic Stress Disorder (PTSD) Checklist, and a modified version of the Medical Outcomes Study Social Support Scale were employed. The findings indicated 12% of adolescents screened positive for symptoms of depression, anxiety or PTSD, and an inverse relationship between adolescent's mental health symptoms with the measures of social support. Another significant research by Kirsty Brittain, Landon Myer, Nicole Phillips, et al., (2018) on 'Behavioural Health risk during early adolescence among perinatally HIV infected South African adolescents and same-age, HIV-uninfected peers' was conducted taking 506 HIV infected and 110 HIV uninfected sample. The findings indicated the prevalence of behavioral health risks of perinatally HIV infected to be lower than that among same-age of HIV-uninfected peers. A research was conducted by Rachel C. Vreeman, Brittany M. McCoy, Sonia Lee, (2017) on 'Mental Health challenges among Adolescents living with HIV'. The results suggesting the prevalence of Mental and behavioural health challenges in HIV-infected adolescents impacting all the aspects of HIV prevention and treatment. Another remarkable research by Megan K. Ramaiya, Kristen A. Sullivan, et al., (2016) on 'A Qualitative Exploration of the Mental Health and Psychosocial Contexts of HIV-Positive Adolescents in Tanzania' identifying the major psychosocial and mental health challenges faced by HIV-positive youth. A sample of adolescents (12-24 age) receiving outpatient HIV care were selected. Psychosocial challenges confronted included chronic domestic abuse, financial stressors limiting access to medical care and education, community stigma etc. among social contacts and over half of youth reporting difficulties settling to their HIV diagnosis and developing feelings of self-blame. Similar findings by Paul Narh Doku (2010) on 'Psychosocial adjustment of children affected by HIV/AIDS in Ghana. 4 groups were formed of the total sample, who were interviewed on depressive symptoms, prosocial behaviours, hyperactivity, conduct and peer problems using the Strengths and Difficulties Questionnaire (SDQ). The results indicated that the orphans and children with HIV-infected parents consistently demonstrated poorer psychosocial adjustment than the children of their same community. Another study conducted by Sopena S1, Evangeli M, Dodge J, Melvin D. on 'Coping and psychological adjustment in adolescents with vertically acquired HIV' (2010). Aiming to study the psychological adjustment and relationship between coping and

psychological adjustment among adolescents with vertically acquired HIV. Taking a sample of 30 adolescents with vertically acquired HIV (11-17 age) and used the questionnaires of coping and psychological adjustment and a correlational design determining specific coping styles were related to quality of psychological adjustment. Results highlight that the younger adolescents had a lower degree of psychological adjustment than elder adolescents. A research was conducted by Ahmad Ghanizadeh (2009) on 'Depression, anxiety and suicidal behaviour in children and adolescents with Haemophilia'. A sample of 83 children and adolescents with haemophilia A or B (aged 5-19) were taken and were assessed using Kiddie Schedule for Affective Disorders and Schizophrenia. The results indicate that the rate of major depressive disorder was 6.0% and the number of patients with death wish was very high the size of patients with suicidal thought and attempt was much lower. Another research conducted by Sharon Nichols, Elizabeth M. Mahoney, Patricia, et al., (2000) on 'HIV Associated Changes in Adaptive, Emotional, and Behavioral Functioning in Children and Adolescents with Hemophilia'. Aimed at studying the change in adaptive, emotional, and behavioral functioning in children and adolescents with hemophilia and with or without HIV infection with a sample of 277 HIV-seropositive and 126 HIV-seronegative boys with hemophilia. The results indicated the boys with hemophilia and HIV infection showed significant resilience with regard to adaptive behavior and emotional and behavioral problems. Similar research conducted by Fakhari A.1, Dolatkah R. on 'Psychiatric Disorders In Hemophilic Patients'. 48 hemophilic patients and 40 healthy people as control grouped were studied using SCL-90 questionnaire. The results indicated a significant high percentage of hemophilic patients suffering from various psychiatric problems. Another research conducted by N.P. Buxbaum, M. Ponce, P. Saidi, L. A. Michaels (2010) on 'Psychosocial correlates of physical activity in adolescents with haemophilia'. 17 adolescents (aged 11-18) with hemophilia were compared with 44 healthy controls (aged 10-16.5 years) wherein, the physical activity was measured by accelerometry and Psychosocial correlates were assessed using validated questionnaires. The findings indicated that the adolescents with hemophilia had a desirable self-image and similar levels of anxiety as the other group but the Self-efficacy scores were lower than for controls. Another significant research was conducted by Janet R. Schultz, Rod A. Gragg, et al., on 'HIV-Infected Adolescents With Hemophilia: Adaptation and Coping'. A sample of 297 HIV-positive adolescents with hemophilia was taken. The results show that distress about everyday reminders of HIV appears to be associated with ineffective coping strategies i.e. the individuals who reported being distressed by reminders of HIV used most of the coping strategies more often than the non-distressed group, although ineffective strategies like to cope by thinking about sex, engaging in risky behaviors, or using alcohol and drugs was chosen. One such research review by A. Forsyth, A. Iorio, et al., (2011) on 'Psychosocial aspects of haemophilia' was conducted with the objective of analyzing the current literature on psychosocial aspects of haemophilia. The studies indicated that the quality of life is low in persons with haemophilia, with a potential impact on education and employment. Another important cross sectional study conducted by Masoume Rambod, Farkhondeh Sharif, et al., (2018) on 'Health-Related Quality of Life and Psychological Aspects of Adults With Hemophilia in Iran'. Data were collected by 103 hemophilic patients using hemophilia-specific quality of life, Depression Anxiety Stress Scales, and pain visual analogue scales. The findings indicated that the hemophilic patients had mild to severe depression, anxiety, and stress. In addition, a significant relation was observed between HRQoL and depression, anxiety, and severity of pain.

Methodology:

Problem :

In the present investigation an attempt was made to study "The state of mental health and level of adjustment of HIV infected adolescent and Hemophilia infected adolescent".

Hypothesis :

In the present investigation following hypothesis was formulated:

- 1) There will be no difference in the state of mental health of adolescents in both the cases.
- 2) There will be no difference in the level of adjustment of adolescents in both the cases.

Research Design :

Independent Variable: HIV infected adolescents and Hemophilic adolescents. (14 to 18 years)

Dependent variable: level of adjustment and state of mental health of both HIV infected adolescents and Hemophilic adolescents.

Sample

A total sample of 40 adolescents were taken which were further equally divided into sub-categories according to their type of disease i.e. 20-HIV infected and 20-Hemophilia infected children for this purpose. Random Purposive Sampling technique was used for the selection of the sample.

Control:

- Sample was collected from an institution where children live in same condition.
- The test was given individually by researcher.
- Equal number of infected children suffering from both the diseases were taken across the age group.

Test:

- 1) Mental Health Inventory is used to measure the mental health among HIV infected and Hemophilia infected adolescents standardized by Dr. Jagdish and Dr. A.K. Srivastav.
- 2) Adjustment Inventory is used to find the level of adjustment among HIV infected and Hemophilic infected adolescents standardized by H.S. Asthana.

Result Table:

	Mean	SD	SED	t-score
HIV infected Adolescents	15.2	6.08	1.58	1.07**
Hemophilia infected Adolescents	13.45	3.36		

Result table 1. showing the state of mental health.

(**Significant at both 0.01 and 0.05 level)

	Mean	SD	SED	t-score
HIV infected Adolescents	148.55	15.55	4.76	5.25
Hemophilia infected Adolescents	123.55	13.76		

Result table 2. showing the adjustment level.

Discussion:

The above result table indicate that hemophiliacs have a poor mental health in respect to HIV patients. The hemophiliacs normally experience joint pain that affects their quality of life, anxiety, depression and other mental health problems. Researches found links between levels of patient's pain and their use of opioids and anxiolytics. Similar research findings were found by a team of health experts in their study. According to them hemophilia hurts patients work life, ability to obtain education and ability to participate in recreational activities. Caregivers of hemophilia patients reported that sometimes their children's conditions made it harder for them or their partners to function properly which effects the mental health of the patients. As the severity of the disease increases the patient could be engaged in disease management than those with moderate hemophilia. Other findings reported that hemophilic women have poor mental health as compared to the male counterpart. Additional findings suggest that mild or worse depression occur in hemophilia. These data reinforce the need for formal depression screening in the individuals with hemophilia. In comparison to hemophiliacs, HIV adolescents have a good mental health. There maybe quite a many reasons for this because one living with HIV, maybe given a plenty of guidance and treatment on not only how to look after their physical health but also looking after their emotional and mental health as well. As the adolescents in the study have been infected with HIV since their early childhood, they have learnt to LIVE WITH HIV. Sharing the facts about how treatment has now made HIV a manageable and even non-transferable condition which can help to dispel some of the common HIV myths and assumptions that people used to have in the past. According to Benoit, "it becomes easier as the time pass to explain the patient that he's doing well in medicines." As the HIV patients included in the sample are living in an institution where their fellow beings suffer from same disease. The health care professionals in the institution not only give them treatment and check on their viral load, they also keep a check on their overall health such as mental health problems. In the institution these adolescents are motivated to take exercise properly and nutrition which is important for a healthy mind.

There is no significant difference on the adjustment scale. Both the (HIV and hemophilia)show positive adjustment to life situations. This can be thought of in normative developmental terms as the maintenance of positive emotional well-being, age appropriate behavior and developmentally appropriate self-esteem, self-worth at the same time as precisely following complex medical regimens. Coping with such fatal disease involves implementing effective strategies that involve assessing what we think about the event and then considering what we do about it. These people have shown good adjustments as according to them the medication is minimizing the negative consequences and boost their adaptation. When families and institutions start to build a new world around them that incorporate the illness, they make physical and

emotional adaptations and constantly revise their assumptions of the world. Lowes et.al., 2005 found that for families living with any fatal disease the longer the time after diagnosis the better the adjustment to normal life. The result of the study is also supported by 'Risk-Resistance Adaptation Model', which determine a child's physical, neurocognitive and psychological adaptation (Wallander et.al., 1989). More the resistance factor i.e. intrapersonal, socio-ecological, stress processing are high, the better is the emotional, physical, psychological function and adaptation (Brown et.al., 1993).

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