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SELF ESTEEM, QUALITY OF LIFE AND PSYCHIATRIC DISTURBANCES IN HIV POSITIVE DRUG DEPENDENTS ADMITTED AT A TERTIARY CARE HOSPITAL IN PAKISTAN

# SAMREEN AFZAL', CULL ZAREEN', IMTIAZ AHMAD DOCAR', MUHAMMAD WAQAR AZEEM4, SABA SEHAR'

'MS(C.Psych), Department of Psychiatry & Behavioral Sciences Faisalabad Medical University, Faisalabad, Pakistan. 'MPhil (Psych), Welcare Foundation (Reg.) Faisalabad.

'FCPS, Faisalabad Medical University, Department of Psychiatry & Behavioral Sciences, District Headquarters Hospital, Faisalabad, Pakistan. 'MD, Sidra Medical & Research Center, Department of Psychiatry, Weill Cornell Medical College. Doha, Qatar.

'MS(C.Psych), Department ofpsychiatry & Behavioral Sciences, District Headquarters Hospital, Faisalabad, Pakistan.

**CORRESPONDENCE: SAMREEN AFZAL,** E-mail: [afzal.samreen@gmail.com](mailto:afzal.samreen@gmail.com)

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# ABSTRACT

###### OBJECTIVE

Toexaminethe self-esteem, quality of Lifeandpsychiatric disturbonces in HIV positiveDrugdependents in Pakistan.

# STUDY DESIGN

Cross-sectional design.

#### PLACE AND DURATION OF STUDY

Thestudy wasconducted,in Model DrugAbuse;Treatment CenterDHQ Hospital,Faisalabad.Pakistan fromFebruary 2016 to February 2017.

#### SUBJECTS AND METHODS

114 HIV positive drug dependents participated in the study through non-probability consecutive sampling, Demographic variable Proforma,Rosenberg SelfEsteem Scale, WHO QOLBREF and SelfReport Questionnaire-24 wereadministered.

###### RESULTS

Results showedthat about halfof thesample lived in urban areas, was married and started abusing drugs on peer pressure and there was significantly positive correlation among all four domains of QOL. One samplet-test confirmed that majorityof samplehad low self-esteem (M

= 11.25, SD = 4.32), t(l 13) = -9.26, p = 0.00 and high psychiatric symptomatology(M.a 14,SD.c4.4),t(l 13)"'23.1,p.a0.00.

###### CONCLUSION

HIV positive drugabusers belonged to specialpopulation segments like youngmales, uneducated daily wagers or unemployed.Mostof the HIV positive drug abusers had low self-esteem and high psychiatric disturbances.

#### KEYWORDS

Psychiatric symptomatology,psychiatric co morbidity,mental health of HIV positive.

###### INTRODUCTION

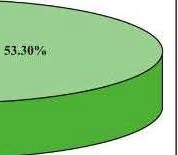
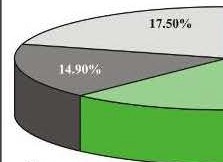
In the form of HIV/AIDS, Pakistan is experiencing one of the foremost health dilemmas. Predominance of HIV is growing speedily,and people are subjecting to countless illnesses related to HIV/AIDS'. As in Pakistan relatively low number of HIV cases among general population are reported, UNAIDS identified Pakistan as a country of 'high-risk/low-prevalence. This conclusion is in line with most of the researches emphasizing susceptible population such as sex workers, people in need of treatment for sexuallytransmitted diseases and truckdrivers'.

HIV is transmitted via diffusion of infected body fluids such as semen, vaginal secretions and blood into the body of another person; this could happen either because of broken skin or mucous membranes, sexual activity, and use of contaminated toolssuchassyringes,non sterilized surgicaland dentaltoolsand other sharpinstruments'.

The risk of HIV/AID is amplified due to lack of awareness, limited access to information and treatment because of the stigma and social pressure is associated with it. Regardless of counseling many HIV+ patients belonging to conservative background do not revealtheir illness withtheir family members and significant others. Asa result in Pakistan majority of infants and adolescents were identified with HIV+ because of their infected mother or from infected blood transfusion'. Extensive studies show that individuals withdrug dependence/substanceusedisorder areat the verge of indulging in risk behavior, thus drug use cancause the diffusion of HIV and other blood-borne pathogens through direct and indirect way' . Direct method includes use of contaminated syringes and needle sharing. The indirect methods include the cottonthatisusedto straindrug solutionor the cooker which is usedto melt or heat the drugs, use of single syringe to divide the solution among each injector can also transfer HIV'.



The stigmatization and misconceptions associated with HIV/AIDS hasimplications for the mentalhealth of peopleliving with HIV/AIDS



**Reason of Dru Alm e**

**Sodal Problem**

**Peer Presimre**

{PLWHA} '. For the comprehension and management of AIDS. psychosocial research is crucial'. Given the persistent and critical nature of thisdisease and the socialstigma associated to it, quality of life (QOL) related to health, in addition to biological aspects, is a significant aspect of patients' well-being as it provides better perceptive of treatment efficacy and factors influencing considerable facets of patient'slife,'.

In relation to quality of life, self-esteem is a critical element in developing and sustaining optimism and wellbeing in patients with HIV/AIDS. Ample researd1es assert that low self-esteem can avert people withHIV/AIDS fromprogressing towards healing, takingcare of themselves, thus developing feeling of hopelessness and doomed asthey assume that they will die shortly". Their feelings of anguish are escalated by the stigma. unawareness and often violence which may lead to social withdrawal or in some cases high risk sexual behavior- ".

Numerous studies of individuals under treatment assert that major mental disorders (such as depression. mania, psychosis and many more} predominantly with comorbid substance use disorders, may be a significant risk factor for risk behavior in various HIV-AIDS patients".The association between other factors including coping mechanism, tendencies for depression, quality of life, anxiety, and

distress was alsoevident in several researches among patients with HIV-AIDS. ".

Thecurrent study focuses on measuring the self-esteem, psychiatric disturbances and QOL of PLWHA . ihe research will emphasize the effects of demographic characteristics (gender, age and qualification} on QOL. self-esteem and psychiatric symptomatology. Such data are required to help plan awareness and intervention programsagainst HIV.

## SUBJECTS ANDMETHODS

### Participants

114 patients dependent on drugs. already diagnosed **with** HIV/AIDS were selected through non-probability consecutive sampling technique from the inpatient facility of model drug abuse and treatmentcenter of Department of Psychiatry & Behavioral Sciences, DHQHospital,FaisalabadPakistan.

### Instruments

Informed consent form was devised by researchers. Demographk sheet was used to record demographic variables. Further data were collected,on following scales.

##### *Rosenberg Self-Esteem Scale*

This is a 10-item scale developed by Rosenberg", it has a 4-point Likert type ranged from O (strongly disagree} to 3 (strongly agree). Itemnumbers 2,5, 6, 8 and 9 were scoredin reverse.Scores between 15 to 25 indicate normal self-esteem;however a score of lessthan15 suggests low self-esteem while score more than 25 hints high self esteem.

##### *WHOQOL-BREF*

Tomeasure the quality of lifeamongsample, self-administered tool, WHO QOL-BREF" was used. The scale has 26 items and assesses quality of life in fourdomains i.e.psychological health, environment, physical health and social relationship. WHO QOL-BREFhas 5-point Liken type scale, diverse response measures are used across the different domains.

##### *Self-Report Questionnaire*

Self-Report Questionnaire" consists of 24 items.The first 20itemsare aimed to identify non-psychotic disorders, and the remaining four tend to screen psychotic disturbance. A score of 7 was set as cut off score.

### Procedure

After the approval of research proposal from Ethical Review Committee of Faisalabad Medical University Faisalabad, Pakistan, Psychologists were selected and trained regarding administration of these tools on patients. Raw data were entered on SPSS 23 and analyzed through Pearson product moment correlation and single sample t-test.

## RESULTS

Results showed that the patients' age ranged from 11 to 60 years (M=32.59. 50=7.79). Out of 114 patients,113 were male, 52 (45.6 %) wereunmarried. 67 (58.8%} patientsbelonged to lower middleclass. 60 (52.6%} lived in urban areas and 85(74%) patients had their own placeto live. 39(34.2%) patients wereunemployed, whereas 25 (21.9

%) were skilled laborers (seetable1).Further datashowed thatabout half of the patients (53%} started drug use under peer pressure (figure1).

Results depict that majority of the HIV positive drug dependents

{82.5%} scored below normal range on the scale of Self-Esteem indicating low self-esteem and 94.7% HIV positive drug dependents scored above cut off on the Self-Report Questionnaire showing high rates of psychiatric disturbances.The results wereconfirmed by one samplet-test(seetable 2).

Figure. I

**Fun**

Mean of quality of life (QOL) of HIV positive drug dependents on physical health domain was16.02 with SD of 3.92, psychological

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'l•ble I

Dernographic Oetails of the Sample

Table 3

Mean ;rn<l Standard r>evbtion of four componenrs of'\VHO QOL-BREF Sc.ale

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Component, of**  **WHO QOI.-BRF.F Sule** | **N** | **Mlnimum** | **\.faximum** | **Mean** | **Std.**  **De,·iation** |
| Physical I lealllt | 114 | 8.00 | 26.UO | L6.Y2 | 3.92 |
| J>sychological health | 114 | 700 | 28.00 | li.58 | 4.13 |
| Social Rl.ilatiouship | 113 | 3.00 | 15.00 | 8.72 | 2.89 |
| Envlronme11l | 114 | 10.00 | 38.00 | 22.75 | 5.52 |
| Valid N (listwisc) | 113 |  |  |  |  |

**Table4**

Correlation Matrix for all the Var1ahles Use<l in 1he Sn1rly (N- I14)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Variables** |  | **2** | **3** | **4** | **5** | **6** |
| I |  | -.08 | ·.11 | ·.08 | -.03 | -.05 |
| 2 |  |  | ·, 15\*\* | .03 | -.04 | ·.10 |
| 3 |  |  |  | .45•• | .47\*\* | .56\*\* |
| 4 |  |  |  |  | .37\*\* | .55\*\* |
| 5 |  |  |  |  |  | .50\*\* |

*i"lnte. I* <::.; *Selj'c-.1eem; 2* .= *Sef/ rep,>ned sco.le · } Phy icol Stole: 4=P.,yclwlogical.*

*5=Sociol.6=£m·i.Jvnme11wl \*p < .05, \*\*p* < *.OJ.\*\*\*p <, .001*

TableS

MuhivariateAtialysis of Vari nC\i of D\in10graphic Varii1bkson Quality Of Lill'

**S'6**

Physical I leaJth

Environment

Social Relationship

Psychological Health

Physical Health

Enviromnem

Social Rdationship

P ychological Healrh

Physical ILeallJt

**Dependont Variable**

Age Group

**Source**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Variables-** |  | **Frequeo y** | | | | **Percentages**  99\_1  .9 |
| Gender | Male |  | ll3 | | |
|  |  |  | | |  |
| Age Goo11p | 11-20 |  | | | | 4.4 |
|  | 21-25 |  | | 21  29  25  15  JO  6  3  52  56 | | 18.4  25.4  21.9  13.2  8.8  5.3  2.6  45.6  49.1  4.4 |
|  | 26-30 |  | |
|  | 31-35 |  | |
|  | 36-40 |  | |
|  | 41-45 |  | |
|  | 46-50 |  | |
|  | 51-55 |  | |
| Marital Status | Single |  | |
|  | tarrie<I |  | |
|  | Divorced |  | |
|  | Separated |  | | 60  54  iO 29  40  12 | | .9  52.6  47.4  17.5  25.4  35.1  10.5  7.0 |
| Re. idential Area | Urban |  | |
|  | Rural |  | |
| Edocaliooal Siarus | 111,i,,rate |  | |
|  | Primary |  | |
|  | Middle |  | |
|  | Metric |  | |
|  | Ln1cm1cdiatc |  | |
|  | Graciua1e |  | | | | .9 |
|  | Profes ional |  | | 4  39  II 25  13  12  4  36-  67  II | | 3.5  34.2  9.6  21.9  11.4  10.5  .9  3.5  7.9  31.6  *SU*  9.6 |
| Profession | Unemployed |  | |
|  | Unskilled |  | |
|  |  |  | |
|  | Shopkeeper |  | |
|  | Fa1mcr |  | |
|  | Student |  | |
|  | Business |  | |
|  | Olbcrs |  | |
| SociQeoonomic S1aius: | Lower |  | |
|  | Lower Middle |  | |
|  | l)pper Middle |  | |

58.138

115 880

54.79

224.790

49.154

.Resident

I' ***p***

.662 :702

8.305

16.554

**df**

7

1.635 .164

.756 .628

32.113

7.022

1.521 .198

4.37 .045\*

121.73

54.79

12.03 .002°

4.45 ,043\*

41.]4

41.34

Tuhlc 2

One-sample t-test on Self-Esteem and SclfRcponing Questionnaire Score£

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Variables** | **M** | **SD** | **D** | **Comparl5on**  **Value** | **95% Cl for**  **Mean**  **Difference** |  |
| Self Esteem  Scale | 11.25 | 4.32 | 114 | -2.75 | -3.55,-1.94 | -6.788\*\*\* |
| Self-Report  Questionnaire | 14.45 | 4.37 | 114 | 7.45 | 6.64,8.26 | 1 .21•0 |

*,11./ntf'. Tf,s,Value fr,,· kn.r;e11he,r,:StlfF,s,eem Scalewas 14 and Teu Vfllllefor S(,lf­ R,•porr Ques1in1111airewt1s "!.*

Marital St lu>

Profussion

**Table6**

49.397

14.793 3

Psychological Health

49.397 2.339 .137

4.931 .393 .759

8.750 .864 .470

3.222 .347 .792

17.749 .841 .482

5.631 .449 .863

121.73

26.249 3 9.667

Environment

Social Rda1iut15hip

51.246 3

39.420 7 159.698 40.663 7

Social Relationship

22.814 2.254 .057

5.809 .625 .731

Psychological Ileallh

health domain of QOL had a mean of 17.58 with SD of 4.13, social relationship domain of QOL had a mean of 8.72 with SD of 2.89 and environment domain of QOLhada meanof 22.75 with SDof 5.52 (see table 3).Pearson product moment correlation analyses showed that

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**Domains of Quallt ·of 1..ifc**

**Physical Health**

**Psyrbologic,ol**

**Health**

**ijodal**

**Relationship**

**Environm,nl**

there wassignificant positive relationship between all four domains of quality of life i.e.physical, psychological,socialand environmental. Self-report questionnaire was found to be significantly negatively

8.48

f

8.98

15.6

+ +

Rural

Vrban R.esidetu t

17.9

17.9

f

19.9

22.5

1

22.8

associated withonly one domainof quality of life i.e.physical health.



Howeverno significant relationship was found between self-esteem and qualityoflife(see table **4).**

Multivariate analysis of variance (MANOVA) has showed significant

statistical difference on three domains of quality of life i.e. physical health, psychological health and social relationship, as per type of





resident (see table 5). HIV positive drug dependents living in rural areas had significantly better quality of life on physical health, psychological health and social relationship domains (see table 6). However MANOVA has failed to establish enough evidence to establish the effect of age group, marital status and profession on qualityof life of HIVpositive drugdependents(see table 5).

## DISCUSSION

Results of the current study 114HIV positive dug dependents were admitted in the model drug abuse and treatment center during the period of study.Demographic analysisshowedthat majority of these patients were males, in their early adulthood, married, had none or low education and belonged to lower middle class which is consistent with the literature that asserts that male gender in their young age,unemployed and with low education areassociated with alcohol and drug dependence".There are multiple reasons that can hook a person on drugs, such as illiteracy, unemployment, low education, poor coping strategies. interpersonal issues and so on; amongst these peer influence is considered as one of the strongest elements of adolescent substance use. A generally held view is that social pressure from friends to use drugs and alcohol is a major contributor to substance use" which was also proved by the results of current studyalong with other factors suchassocial problemsand fun seeking.

Qualityoflife(QOL) amongPLWHA isa majorissue.People living with HIV and AIDS (PLWHA) experience considerable decline in health­ related quality of life throughout the course of the ailment. The qualityof life for PLWHA is compressed physically, mentally, socially and environmentally on all the four domaim recognized by the World Health Organization". The findings of the current research showed that patients with HIV/AIDS exhibited low self-esteem and poor quality of lite. These findings are in line with other researches which asserted that physical attributes such as pain, low energy because of recurrent fatigue, inability to do daily activities and failure to sleep or maintain sleep had great influenceon physicalhealth and overall QOL". Similarly factors such as cognition, body image and negative feelings about selfand self-esteem had hugeimpact on the psychological well-being of PLWHA and this further had effect on their quality of life"". The social interactions of PLWHA are effected by the level of acceptance in the home and community along with social support, personal relations with family/ friends and sexual relations". Environmental factors for instance safety and security, finance, home environment and social care also affects the QOL of PLWHA". Another factor Identified in current study is that people living in rural areas seem to have better quality of life in terms of physical health, psychological health and soci.al relationship, this

finding is also consistent with previous researches asserting that sociodemographiccharacteristicssuch*os*male gender,younger age, low socioeconomic status, residence area and unemployment

significantly influenceQOL".

An individual'swell-being is not only influenced by his or her health status and response to treatment but also by psychosocial and environmental factors. Hence, the identification of factors that mark QOL is very significant. This helps in developing better healthcare and social services to PLWHA to enhance their functioning and overall well-being. Likewise, the identification of adjustable factors influencing QOL could help with the recognition of people with

special needs to improve their QOL"'. It has been recognized that patients with a good QOL at the beginning of treatment have l"iealthierprognosisthan those withapoorQOL".

In addition to showing high rate of psychiatric symptomatology, meaning there is a high possibility that sooner or later patients may develop psychiatric disorder; results also revealed these psychiatric disturbances seem to be associated with physical health domain of QOL of HIV positive drugdependents which in turn can intensify the psychiatric symptoms and affect the overall quality of life. Previous researches emphasized thatPLWHA along withsubstance abuse are at the high verge of developing psychiatric disorders such as depression, anxiety, panic attacks, dysthymia and much more which directly or indirectly haveadverse effecton theirquality oflife"".

Thus psychiatric and substance abuse disorder among PLWHA may damage the quality of life, adversely affect the useof health services, influence health consequences and compromise adherence with complexmedicationregiments".

## CONCLUSION

Resultshaveexposed alarming rate of HIV prevalence among young males, who are married and have low education. Subsequently findings suggest that HIV positive drug dependents had low self­ esteem, overall poor quality of life and vulnerability towards developing psychiatric disorders, hence the current research emphasizes the need for psychiatric attention for suchpatients. HIV positive drug dependents are already suffering and the stigma associated with it worsens the condition; it not only affects overall quality of life of patients and reduces the effect of treatment being provided. So there is a dire need to provide psychiatric attention to such patients and future researches should investigate the mechanism of development and maintenance of mental health issues among HIV positive drug dependents so that effective awareness and intervention programs can be employed and experimentally tested to reduce the chances of developing AIDS, associated mental disorders and enhance quality of life.

## REFERENCES

1. Zafar **T,** Brahmbhatt H, Imam G, Hassan S, Strathdee S. HIV Knowledge and Risk Behaviors Among Pakistani and Afghani Drug Users in Quetta, Pakistan. JAIDS Journal of Acquired Immune DeficiencySyndromes.2003;32:394-39.
2. Haque N, ZafarT, Brahmbhatt H, ImamG,Hassan S.Strathdee S. High-risk sexual behaviours among drug users in Pakistan: implications for prevention ofSTDs and HIV/AIDS. International Journal ofSTD&AIDS. 2004;15:601-607.
3. Manhas C. Self-esteem and quality of life of people living with

HIV/AIDS. Journal of Health Psychology. 2014; 19(11): 1471-1479.doi:10.1177/135910S313493812

1. National AIDS Control Programme, HIV/AIDS Surveillance

Project. HIV/AIDS Surveillance Project of Pakistan: Round 2. 2007.

1. Metzger DS, Navaline H, Woody GE. Drug Abuse Treatment as AIDSPrevention.Public HealthReports.1998;113(1).97-106.
2. Campbell AC. Tross S, CalsynDA.Substance Use Disorders and

HIV/AIDSPrevention and Treatment Intervention:Research and Practice Considerations. Social Work in Public Health. 2013;



28(3-4):333-348doi:10.1080/19371918.2013.774665



1. Koester S, Hoffer L.Indirect sharing: additional risks associated withdruginjection.AIDSPublic Policy.1994;9(2):100-5.
2. Coates TJ, Temeshok L, Mandel J. Psychosocial research is essential to understanding and treating AIDS. American Psychologist. 1984;39(11): 1309-1314.
3. Andrinopoulos K, Clum G, Murphy DA, et al. Health related quality of life andpsychosocial correlates among HIV-infected adolescent and young adult women in the US.AIDS Education and Prevention.2011; 23(4):367-381
4. UNAIDS Report on the Global AIDS Epidemic.Geneva: UNAIDS.

2010.

1. UNAIDS. A Conceptual Framework and Basis for Action: HIV/AIDSStigma and Discrimination.Geneva:UNAIDS.2002.
2. Fieldblum P, Fortney J. Condoms, spermicides and the

transmission of humanimmunodeficiency virus:A reviewof the literature.AmericanJournal of Public Health.1988;78(1): 52-54

1. Preston-Whyte GM, Brown MA. Contexts of vulnerability: Sex, secrecy and HIV/ AIDS. African Journal of AIDS Research. 2003; 2(2):89-94
2. Herek GK,Glunt KG. An epidemic of stigma. Public reactions to AIDS.AmericanPsychologist.1988;43(11):889-891.
3. Teplin L, Elkington S, McClelland GM, Abram KM, Mericle A,

Washburn JJ.Major Mental Disorders, Substance UseDisorders, Comorbidity,andHIV-AIDSRiskBehaviors in JuvenileDetainees. Psychiatr Serv.2005;56(7):823-828.

1. Bankoff SM, McCullough MB, Pantalone DW. Patient-provider relationship predicts mental and physical health indicators for HIV positive men who have sex with men. Journal of Health Psychology.2013;18(6):762-772.
2. Gore-Felton C, Koopman C, Spiegel D, Vosvick M, Brondino M,

Winningham A. Effects of quality of life and coping on depressionamongaduItsliving withHIV/AIDS.Journalof Health Psychology.2006;11:711-729.

1. Veek SMC, Kraaij V, Koppen WV, Garnefski N, Joekes K. Goal

disturbance, cognitive coping and psychological distress in HIVinfected persons. Journal of Health Psychology. 2007; 12(2): 225-230.

1. Rosenberg M. Society and the adolescent self-image.Princeton, NJ:PrincetonUniversity Press.1965.
2. World Health Organization (WHO). WHOQOL-BREF:

Introduction, Administration, Scoring and Generic Version of the Assessment: Field Trial Version. World Health Organization, Geneva. 1996. Available at: <http://www.who.int/> mental\_ hea)th/media/en/76.pdf

1. Harding TW, de Arango MV, Baltazar J, Climent CE,Ibrahim HH,

Ladrido-lgnacio L, Murthy RS, Wig NN. Mental Disorders In Primary Health Care: A Study OfTheir Frequency And Diagnosis In Four Developing Countries.Psychological Medicine.1980; 10 (2):231-241.

1. ME. Wightman P. Schoeni R.F. Schulenberg J. Socioeconomic Status and Substance Use Among Young Adults: A Comparison Across Constructsand Drugs.J Stud Alcohol Dtugs. 2012; 73(5): 772-782.
2. Reed MD, Rountree PW. Peer Pressure and Adolescent

Substance Use.Journal of Quantitative Criminology.1997;13(2), 143·180.

1. Duracinsky M, Herrmann S,Berzins B, Armstrong AR, KohliR,le

Coeur S, Diouf A, Fournier I, Schechter M, Chassany 0. The Development of PROQOL-HIV: An International Instrument to

Assess the Health-Related Quality of Lifeof Persons Living With HIV/AIDS.J Acquir lmmuneDeficSyndr.2012; 59(5):498-505.

1. Tanaka LF,LatorreMDRDDO, daSilva **AM,**KonstantynerTCRDO,

Peres SV.Marques HHDS. High prevalence of physical inactivity among adolescents living with HIV/AIDS. Revista P-aulista de Pediatria (English Edition). 2015; 33(3), 326-331. <http://doi.org/10.1016/j.rppede.2015.06.003>

1. Parker R,Stein OJ,JelsmaJ. Pain in peoplelivingwithHIV/AIDS: a

systematic review. Journal of the lntern,nional AIDS Society. 2014;17:18719.

1. Gaudine A, Gien L, Thuan TT, Dung DV. Perspectives of HIV­

related stigma in a community in Vietnam: a qualitative study. International Journal of Nursing Studies. 2010; 47(1): 38-48. <http://doi.org/10.10l>6/j.ijnurstu.2009.06.004

1. Prachakul W, Grant JS, Keltner NL. Relationships Among Functional Social Support, HIV-Related Stigma, Social Problem Solving, and Depressive Symptoms in People Living With HIV: A Pilot Study. Journal of the Association of Nurses in AIDS Care. 2007:18(6):67-76.<http://doi.org/10.10l>6/j.jana.2007.08.002
2. FerransCE, Zerwic JJ, Wilbur JE,Larson JL. Conceptual modelof health-related quality of life.Journal of Nursing Scholarship: An Official Publication of Sigma Theta Tau International Honor Society of Nursing / Sigma Theta Tau. 2005; 37(4): 336-342. http://doi.org/<http://dx.doi.org/10.1111/j.1547-> 5069.2005.00058.x
3. Khumsaen N, Aoup-por W,Thammachak P.Factors Influencing Quality of Life Among People Living With HIV (PLWH) in Suphanburi Province, Thailand. Journal of the Association of Nurses in AIDS Care.2012; 23(1): 63-72. <http://doi.org/> 10.1016/j.jana.2011.01.003
4. Hughes J, lsma J, Maclean E, Darder M, Tinise X. The health­

related quality of life of people living with HIV/AIDS. Disabil Rehabil.2004; 26(6):371-6.

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| --- | --- | --- | --- | --- |
| **Sr.#** | **Author Name** | **Alfiliation atAuthor** | **Contribution** | **Signature** |
| 1 | Ms Samreen Alzal | FMC | Data Collectlon, Paper wrilifl1l |  |
| **2** | Ms Gull Zareen | **Welcarer-oundation** ® | Paper Writing | ¥ |
| **3** | Prof. Or.lmtiaz Ahmad  **Cogar** | FMU | Conceptualizatirm  Of $\Udy  **Su rvi:sion** | ½i |
| **4** | Dr.Muhammad Waqar  **Azeem** | SIORAInternational Qatar | Data Analysis | *,j.il-·* |
| **5** | **Ms Saba Saher** | Rehab Horne | o.ia Collection | *,7 ,p* |