Impact of social support on quality of life of HIV/AIDS patients

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Abstract

People living with AIDS have an HIV virus but it does not mean that people with HIV have AIDS. HIV is a virus which is harmful to human being. Sometimes this virus does not indicate the symptoms of HIV, thus unawareness enhance their problems due to disease and causes damage to their health and life both, otherwise if they were aware of this, they would have option for treatment for better life. HIV is a communicable disease and without having any kind of treatment virus can be spread into the bloodstream which influence the individual's immune system results in people become unable to fight with another disease. HIV virus attacks CD4 T-helper cell that helps to manage our immune system and this kind of cell was presented into the blood. Hence, it is important to take care of this for their safety. A person with no intervention goes to the last stage of HIV virus that is AIDS (ACQUIRED IMMUNODEFICIENCY SYNDROME). The aim of the present study is to examine the impact of social support on quality of life of HIV/AIDS patients. Data was collected from Jawahar Lal Nehru Medical College AMU Aligarh. With the help of purposive sampling Regression analyses was used to analyze the data by using social support scale developed by Pierce, Frone, Russell and Cooper (1996) including 40 items which is the short version of Interpersonal Support Evaluation List having 15 items developed by Cohen, Mermelstein, Kamarck, and Hoberman (1985) and quality of life scale developed by WHOQOL group viz., Orley & Kuyken, 1994; Szabo, 1996; WHOQOL Group 1994a, 1994b, 1995.WHOQOL consists of 26 items. Result of the present study revealed that social support significantly influence on quality of life of HIV/AIDS patients.

Keywords: Social Support, Quality of Life.

Introduction

According to Green (2007) HIV/AIDS was first identified by homophile people who got infected and it was found that most of them were infected with HIV and this numbers was increasing day by day. At initial stage they did not had knowledge about it, and did not find any support from anywhere. This is a fatal disease caused by retrovirus. This type of retrovirus is often termed as HUMAN

IMMUNODEFICIENCY VIRUS and was later recognized as a federal agent by whom it becomes one of the most crushing infections or disease. HIV infection existing everywhere means in almost all the country there is a case of AIDS all over the world. According to the United Nation Programme and HIV/AIDS (UNAIDS) in December (1999) 33 million people were affected by HIV whereas 95% in developing countries where 16 million have died. Affected one becomes unable to fight not only with the disease rather they became more susceptible to other disease as once the immune system damaged, there will be greater chance for developing other disease and illness like diarrhea and pneumonia. This virus gets transmitted through sexual contact, blood transfusion, sharing needles, contaminated needles, breastfeeding, vaginal or oral sex. Thus, there is pressing need to enhance awareness level and hence, the present investigation was under taken to explore predictive relationship of attribution style and social support with quality of life among HIV/AIDS patients.

Changes in values and adoption of western culture in Indian families make a motion towards nuclear family and keep prevailing factors in their life and community (Muttati, 1992) which is again important in lowering social support especially family support. According to the researches psychological wellbeing can assist perceived support better than the received support (Cohen et al, 2000; Gallagher & Vellabrodrick, 2008). Social support can influence the wellbeing of human by altering the affects of life events and stressful events (Pugliesi & ShooK, 1998; Southwick; Vythilingam & Cherney, 2005). Social interaction is connected to the length of services, seniority, level of stress and it helps to enhance the wellbeing of the human. Dollete, Steese, Philips and Matthews (2004) said that social support as facets helps in protecting the individual from stressors and develops their health and wellbeing. It also maintains the connection between violence and psychological distress (Herman –Stahl and Petersen, 1996). It develops health in a positive way and less support leads to poor health and neglectful behavior (Cohen & Wills, 1985). According to Geuzaine, Debry and Liesens, (2000)., Mizell, (1999) perceived social support predicts the advanced stage of behavior and level of adjustments in the adolescents. According to Colarossi (2001) social support has multiple attribute and dimension that involves disaccumulation and stipulation crosswise

morphological and operational or running attributes and facets. Research by colarossi (2001) explained that sex differences among adolescents revealed that intensity of social support is similar among parents, classmates, peer groups and others. He said that female adolescents become more engaged in getting support from peer groups and have a feeling of satisfaction with that than male adolescents. There are five types of social support viz emotional support, Esteem support, Informational support, Tangible social support, Network support. Emotional support is related to the emotions of the people which is related to the sympathy, care, comfort, providing love, holding a child concern, providing satisfaction. Esteem support is partially like an emotional social support. According to Cobb 1976 esteem support is to have a knowledge or power to develop their effectiveness. It can be developed by having compliments, positively compared with others to improve their self esteem. Informational support involves the knowledge about the surrounding like advices given by either the family or others, feedback from others, suggestions for their decisions, awareness and knowledge about the illness and its treatment. Guidance, appraisal and cognitive restricting also involves in the informational support (Cohen & Wills, 1985). Tangible support termed as instrumental and material support which includes resources that are necessary in dealing with the problems in difficult situations (Cutrona & Russell, 1990). Cohen and Wills, (1985) called tangible support as instrumental linked with the money, substantial, materials & other services which are required in the needed time. . According to Cutrona and Russell, (1990) network support also termed as social integration linked with the feeling of interest and concern in a group.

Concept of QOL adopt from three main branches of science, economics, medicine, and social science. All these branches have different views to describe the concept of QOL (Cummins et al., & Michalos, 2004). Rational disability model adopt the opinion of social science research that rule out the view of medical model because their focus is to develop the QOL and to achieve this goal we should turn to social perspective and individual from the influence of medicine which can harm the individual health and cognition (Russell, 2003 & Kaheman et.al, 1999). According to the Diener, Suh, Lucas, and Smith (1999), individual describes multiple aspects of their life including personal creations, emotional

way, life expectancies, experiences, satisfaction, social relationship, family, peer relationships and work life. However, QOL is considered as a well being related to every aspects of human being. QOL consists of two important features one is objective in which QOL can be evaluated and calculated with the help of public's knowledge or by understanding the individual manner and other is subjective where QOL can be measured personally by the individual, social and interpersonal relationship with the responses of persons that were in a repeated form however there is a need to examine both subjective and objective way of individual. Both subjective and objective concept of life should be taken at the global level. QOL is not only confined to objective aspect but also count in subjective area of human life.

Review of literature

Weiss (1983) studied the influence of social support and work stress among the information system manager and found that stress of job among these managers were positively related to physiological and psychological strain. Some stressors have strong effect and some are more predominant than other stressors.

Lifson et.al (2015) enumerated on the basis of the research studies that perceived social support among patients having HIV virus who were recently enrolled in the care of HIV in rural Ethiopia found control and different level of perceived social support & they may become weak and could be easily affected where social support offer profit or do good for enhancing the best in physical, emotional & functional aspects of quality of life for those who are living with HIV/AIDS.

Pedrosa et.al (2016) reported emotional and instrumental support was found to be satisfactory and which was not affected by the sex, academics, marital status. On the other hand people who were diagnosed less than three years were found to recieve more instrumental support than the people who were diagnosed HIV more than three years, these patients who were suffering with HIV more than three years received required social support from friends and family.

Kassile, Anicetus, Kukula and Bando (2014) examined the services which were given by the employers to the employees living with HIV/AIDS in Tanzania. By using cross sectional study they

reported that perceived work pressure can be reduced by given treatment and nutrition support to the infected employees.

Phillips (2007) examined the relationship within the social support, coping and medicament attachment among women living with HIV/AIDS by taking the sample having 224 women who received treatment of ART from rural areas of the southeastern United States. Research findings showed that the implications for scheming enforced and examined interferences on social support and header theories for accomplished good adhesiveness to HIV medicament.

Marashi, Garg, Gupta, Singh, Pragya, Dewan , Ingle and Jiloha (2009) examined the appraisal of quality of life among the people living with HIV/AIDS. They found that women have high score in all domains of quality of life than male except psychological domain of quality of life. It was also found that the domain of quality of life is positively correlated with the level of education among the young people who showed poor quality of life.

Nojomi and Ranjbar (2008) studied health related quality of life among the pople living with HIV/AIDS. On the basis of the research finding they said that women have poor quality of life who were found to be separated and they had less CD4 cells as well as they were more secured with regard to development of this disease.

Kumar, Girish, Nawaz, Bahi and Kumar (2014) try to examine the causal factor of quality of life with the HIV/AIDS people in central Karnataka. They suggested that quality of life was high on environmental domain of social relationship. They also said that many of the social demographic variables influenced the quality of life which should be deliberated in the provision of care for the people living with HIV/AIDS.

Costa, Oliveira, Games and Formozo (2014) studied the association between the socio-demographic factors and aspects of health for the quality of life among the HIV/AIDS patients. Significant difference were found among the different dimensions of quality of life which involves perception of sickness,

academics, gender, income, clinical situation etc. which results that nursing health care professionals & public policies should play a role to enhance the quality of life.

Hipolite et.al (2017) examines the quality of life of the people living with HIV/AIDS with reference to socio-demographic factors, temporal and health satisfaction. By taking 100 people with HIV/AIDS they reported that the health satisfaction of HIV/AIDS patients were average on all domains of quality of life whereas significant difference has also been found in all dimensions. It also revealed that spiritual factors and social relationships may help in assessing the coping strategies among the people living with HIV/AIDS.

Rationale of the study

There are many diseases which are communicable and non communicable disease. People seem to be unaware about some of the diseases like HIV/ AIDS. There is a misconception about the HIV/AIDS that this is the communicable disease which spread through kissing, shaking hand, touching etc. Most of the researches were conducted to wipe out there type of misconception and to make people aware about actual causes. The present study showed that there is a need to enhance level of quality of life of the people living with HIV/AIDS. Social support helps to increase the mental health of the people as well as it also enhances and maintain the individual's social and interpersonal relationships.

Objectives of the study

To examine the impact of social support and its facets on quality of life of HIV/AIDS patients.

Hypothesis

1. $\mathbf{H_{A1}}$: Social Support will predict quality of life of HIV/AIDS patients.
2. $\mathbf{H_{A2}}$: Tangible, appraisal and belonging support will predict the physical health, a facet of quality of life of HIV/AIDS patients.
3. $\mathbf{H_{A3}}$: Tangible, appraisal and belonging support will predict psychological health, a facet of quality of life of HIV/AIDS patients.

4. **H_{A4}:** Tangible, appraisal and belonging support will predict the social health, a facet of quality of life of HIV/AIDS patients.
5. **H_{A5}:** Tangible, appraisal and belonging support will predict the environmental health, a facet of quality of life of HIV/AIDS patients.

Methodology

Sample

For investigation 50 HIV/AIDS patients of those who are taking the treatment from the department of ART of Jawahar Lal Medical College (JNMC) were taken. In the present study predictive correlational research design was used and to analyze the data Stepwise Multiple Regression was used.

Tools

Social support scale

The social support of the participants was measured by administering Cohen, Mermelstein, Kamarck, and Hoberman (1985) consisting of 15 items which is the short version of the evaluation list of interpersonal support having 40 items developed by Pierce, Frone, Russell and Cooper (1996) were used in the study. This scale comprised of three dimensions like. Tangible support, appraisal support, and belonging support. The reliability of Social support scale on the participants is .875.

Quality of life scale

The quality of life scale was used to assess the quality of the life of the participants. This scale is a short version of 100 items scale. Quality of life scale was developed by WHOQOL group viz., Orley and Kuyken, 1994; Szabo, 1996; WHOQOL Group 1994a, 1994b, 1995.WHOQOL consists of 26 items with four dimensions viz: physical health, psychological, social relationship and environment. The reliability of quality of life scale on the participants is .868.

Result and Discussion

To examine the impact of social support on quality of life of HIV/AIDS patients regression analyses was used.

Table 1: Showing the influence of social support on quality of life of HIV/AIDS patients.

Model	R	R^2	Adjusted R	F	Sig
1	.759	.576	.567	65.27	.000

a. Dependent Variable.QOL

b. Predictor (constant).Social Support

Model	Standardized β	T	Sig
Social support	.759	8.076	.000

a. Dependent Variable. QOL

Above table shows that the value of R^2 is .576 which indicates 57% influence of social support on the quality of life of HIV/AIDS patients and this influence has been found significant at .000 level of significant. The coefficient table shows that 75% increment of social support will lead to 1 degree enhancement on quality of life of HIV patient which is found significant.

Table 2: Showing influence of the dimension of quality of life i:e physical health on the dimension of social support i:e tangible, appraisal, belonging of HIV/AIDS patients.

Model	R	R^2	Adjusted R	F	Sig
1	.685	.469	.435	13.569	.000

a. Predictor (constant). Belonging, Appraisal, Tangible

Model	Standardized β	T	Sig
Tangible	.356	1.734	.090
Appraisal	.490	3.282	.002
Belonging	.124	.641	.525

a. Dependent Variable. Physical Health

It is clear from above table that the value of R^2 is .469 which indicates that tangible, appraisal and belonging support have collective contribution of 46% on physical health (dimension of QOL). And this contribution has been found significant at .000 level.

The coefficient table showed that 35% increment of tangible support will lead to 1 degree enhancement on the physical dimension of quality of life of HIV patient which is found significant. Similarly 49% increment of appraisal support will lead to 1 degree enhancement on the dimension of physical health of quality of life which is significant whereas 12% increment of belonging support will lead to 1 degree enhancement on the dimension of physical health of quality of life which is significant.

Table 3: Showing influence of the dimension of quality of life i:e psychological health on the dimension of social support i:e tangible, appraisal, belonging of HIV/AIDS patients.

Model	R	R^2	Adjusted R	F	Sig
1	.421	.178	.124	3.312	.028

a. Predictor (constant). Belonging, Appraisal, Tangible

Model	Standardized β	T	Sig
Tangible	.299	1.171	.248
Appraisal	.236	1.272	.210
Belonging	-.091	-.378	.707

a. Dependent Variable. Psychological Health

Table 3 shows the value of R^2 is .178 which indicates that tangible, appraisal and belonging support have collective contribution of 17% on psychological health (dimension of QOL). And this contribution has been emerged significant at .028 levels.

The coefficient table shows that 29% increment of tangible support will lead to 1 degree enhancement on the psychological dimension of quality of life of HIV patient which is found insignificant. Similarly 23% increment of appraisal support will lead to 1 degree enhancement on the dimension of psychological health of quality of life which is insignificant whereas -.09% increment of belonging support will lead to 1 degree decrement on the dimension of psychological health of quality of life

which is insignificant because as the patient had high belonging support, he feels ashamed, nervousness, insecure about their image which affect the mental health of the patient by which there is a one degree decrement of their quality of life.

Table 4: Showing influence of the dimension of quality of life i:e social on the dimension of social support i:e tangible, appraisal, belonging of HIV/AIDS patients.

Model	R	R^2	Adjusted R	F	Sig
1	.826	.682	.661	32.907	.000

a. Predictor (constant). Belonging, Appraisal, Tangible

Model	Standardized β	T	Sig
Tangible	.563	3.541	.001
Appraisal	.201	1.738	.089
Belonging	.130	.864	.392

a. Dependent Variable. Social Health

Above table depicts that the value of R^2 is .682 which indicates that tangible, appraisal and belonging support have collective contribution of 68% on social health (dimension of QOL). And this contribution has been emerged significant at .000 levels.

The coefficient table shows that 56% increment of tangible support will lead to 1 degree enhancement on the social dimension of quality of life of HIV patient which is found significant. Similarly 20% increment of appraisal support will lead to 1 degree enhancement on the dimension of social of quality of life which is insignificant whereas 13% increment of belonging support will lead to 1 degree enhancement on the social health which is the dimension of quality of life which is insignificant.

Table 5: Showing influence of the dimension of quality of life i:e environmental on the dimension of social support i:e tangible, appraisal, belonging of HIV/AIDS patients.

Model	R	R^2	Adjusted R	F	Sig
1	.711	.506	.474	15.69	.000

a. Predictor (constant). Belonging, Appraisal, Tangible

Model	Standardized β	T	Sig
Tangible	.123	.618	.539
Appraisal	.259	1.798	.079
Belonging	.406	2.164	.036

a. Dependent Variable. Environmental Health

Table 5 depicts that the value of R^2 is .506 which indicates that tangible, appraisal and belonging support have collective contribution of 50% on environmental (dimension of QOL). And this contribution has been emerged significant at .000 levels.

The coefficient table shows that 12% increment of tangible support will lead to 1 degree enhancement on the environmental dimension of quality of life of HIV patient which is found insignificant. Similarly 25% increment of appraisal support will lead to 1 degree enhancement on the environmental dimension of quality of life which is insignificant whereas 40% increment of belonging support will lead to 1 degree enhancement on the environmental dimension of quality of life which is significant.

On the basis of the results social support emerged as one of the predictor of quality of life of HIV/AIDS patients. While measuring the dimension of social support as tangible, appraisal and belonging support as influencing factor on the dimension of quality of life as physical, psychological, social and environmental health, it was found that physical health have positive influence on appraisal and belonging whereas social health is influenced by tangible support on the other hand environmental health is influenced by belonging support only.

The result of this investigation are quite justified as social support is one of the key aspects of one's life which plays an important role in making an individual comfortable, confident, relaxed, happy and satisfied. As we all have been reared in such a way that social aspects become an implicit system or a

part of our life. Every moment when we are involved in one and other aspects we always remain conscious about social acceptance and approval along with social support and in the absence of this social acceptance and support or fear of social rejection shattered us and we develop feeling of loneliness. Hence, social support is one of the important predictor which plays an instrumental role in enhancing the perception of individual towards his quality of life. All four dimensions of quality of life which will taken into consideration while empirically testing the hypotheses viz: physical which refers to the state of being free from illness or injury. It can cover a wide range of areas including health diet, healthy weight, dental health, personal hygiene and sleep, psychological health which includes individual comfort mental and cognitive level, environmental health addresses all the physical, chemical and biological factors external to a person, and all the related factors impacting behaviours and social aspects which refers to the relationship, attachments, emotional connects etc. It was found that all aspects of social support viz: appraisal, belongingness and tangible support is very important in enhancing perception of individual with regard to his quality of life as is a human tendency to feel strengthen and satisfied after having appreciation or getting some praise or reward. It is also important for every individual to feel strengthen, strong and confident if they have strong bonding with their social members. Further of we have some tangible support from social set up, it elevates our perception with regard to quality of life and make every individual happy and satisfied.

Refrences

AIDS retrieved from Centers for Disease Control and Prevention: HIV/AIDS Surveillance Report 1999; 1(11) [G]

Cobb, S. (1976). Social support as a moderator of life stress. Psychosomatic Medicine, 38(5). 300-314.

Cohen, S & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. Psychological Bulletin, 98, 310-357.

Cohen, S., Underwood, L., & Gottlieb, B. (2000). Social Support Measurement and Intervention: A Guide for Health and Social Scientists. New York: Oxford University Press.

Colarossi, L. G. (2001). Adolescent gender differences in social support: Structure, function, and provider type. Social Work Research, 25(4), 233..

Cummins R. A., Eckersley R., Lo S. K., Okerstrom E.,Hunter B. & Davern M. (2004).Australian Unity Wellbeing.Index: Cumulative Psychometric Record. Australian Centre on Quality of Life, School of Psychology, Deakin.University, Melbourne

Cutrona , C. E. & Russell, D. W. (1990). Type of social support and specific stress: Toward a theory of optimal matching. In B. R Sarason, I. G. Sarason, & G. R Pierce (Eds). Social support: An interactional view (pp. 319-366). New York: Wiley.

Diener, E., Suh, E. M., Lucas, R. E. & Smith, H. L. (1999). Subjective Well-Being: Three Decades of Progress. Psychological Bulletin, 125(2), 276-302.

Dollete, M., Steese, S., Phillips,W & Matthews, G. (2004). Understanding girls' circle as an intervention on perceived social support, body image, self-efficacy, locus of control and self-esteem. *The Journal of Psychology*, 90,2, 204 –215.

Gallagher, E. N., & Vella-Brodrick, D. A. (2008). Social Support and Emotional Intelligence as Predictors of Subjective Well-Being. Personality and Individual Differences, 44, 15511561. http://dx.doi.org/10.1016/j.paid.2008.01.011

Geuzaine, C., Debry, M., & Leissen, V. (2000). Separation from parents in late adolescence: The same for boys and girls? *Journal of Youth and Adolescence*, 29, 79-91.

Greene, W. C. (2007). A history of AIDS: looking back to see ahead. *European journal of immunology*, *37*(S1), S94-S102.

Herman-Stahl, M., & Pertersen, A. C. (1996). A protective role of coping and social resources for depressive symptoms among young adolescents. *Journal of Youth and Adolescence*, 25, 733-753.

Hipolito, R. L., Oliveira, D. C. D., Costa, T., L., D., C., Marques, S. C., Pereir, E., R., Gomes, A. M. T. (2017). Quality of life of people living with HIV/AIDS: temporal. Socio-demographic and perceived health relationship, Rev. Latino-Am. Enfermagem. 2017;25:e2874, DOI: 10.1590/1518-8345.1258.2874.

Kahneman D., Diener E. & Schwarz N. (eds) (1999) Wellbeing:The foundations of hedonic psychology. Russell Sage Foundation, New York.

Kassile, T., Anicetus, H., Kukula, R., & Bando, B. P. M. (2014). Health and social support services to HIV/AIDS infected individuals in Tanzania: employees Kassile et al. BMC Public Health 2014. 14:630. http://www.biomedcentral.com/1471-2458/14/630.

Kumar, A., Girish, H. O. Nawaz, A. S., Bahi, D. S & Kumar, B. J. (2014). Determinants of Quality Of Life among People Living With Hiv/Aids: A Cross Sectional Study In Central Karnataka. India. *International Journal of Medical Science and Public Health* | 2014 | Vol 3 | Issue 11.

Lifson. A. R., Workneh. S., Hailemichael. A., Demissie. W., Slater. L and Shenie. T. (2015).Perceived social support among HIV patients newly enrolled in care in rural Ethiopia. 1360-0451. *Journal homepage: http://www.tandfonline.com/loi/caic20*. VOL. 27, NO. 11. 1382–1386. ISSN: 0954-0121.

Marashi, T., Garg, S., Gupta V. K., Singh, M., Pragya,S., Dewan, R., Ingle, GK, Jiloha, R.C. (2009). Assessment of Quality of Life among HIV Positive People Attending Tertiary Hospital of Delhi. India , J. Commun. Dis. 41 (2) 2009 : 101-108.

Michalos A. C. (2004). Social indicators research and health-related quality of life research. *Social Indicators Research.* **65,** 27–72.

Mizell, C. A. (1999). African American men's personal sense of mastery: The consequences of the adolescent environment, self-concept, and adult achievement. *Journal of Black Psychology*, 25, 210-230

Mullatti, l. (1992). Changing Profile of The Indian Family. In The Changing Family In Asia: Bangladesh, India, Japan, Philippines, and Thailand, Ed. UNESCO. Bangkok: Principal Regional Office for Asia and The Pacific.

Nojomi, M., Ranjbar, K. M. R. (2008). Health-Related Quality of Life in Patients with HIV/AIDS. Archives of Iranian Medicine.Vol11.Number 6. November 2008.

Pedrosa, C. S., Fiuza, M. L. T., Cunha, G. H. D., Reis, R. K., Gir, E., Galvão, M. T. G., Carvalho, A. F. (2016). Social Support For People Living With Acquired Immunodeficiency Syndrome. Texto Contexto Enferm, 2016; 25(4):e2030015. http://dx.doi.org/10.1590/0104-07072016002030015.

Phillips, K. D.(2007). Social Support, Coping, and Medication Adherence Among HIV-Positive Women with Depression Living in Rural Areas of the Southeastern United States. AIDS PATIENT CARE and STDs, Vol 21. Number 9, 2007.© Mary Ann Liebert. Inc, DOI: 10.1089/apc.2006.0131.

Pugliesi, K., & Shook, S. L. (1998). Gender, Ethnicity, and Network characteristics: variation in social support resources. Sex Roles, 38, 215-238.

Russell J. A. (2003) Core affect and the psychological construction of emotion. Psychological Review **110,** 145–72.

Sarason, B. R., Sarason, I. G., & Gurung, R. A. R. (2001). Close personal relationships and health outcomes: A key to the role of social support. In B. R. Sarason, & S. W. Duck (Eds.), Personal relationships: Implications for clinical and community psychology. United Kingdom: Wiley & Sons

Southwick, S.M., Vythilingam, M & Charney, D.S. (2005). The psychobiology of depression and resilience to stress: Implications for prevention and treatment. Annual Review of Clinical Psychology, 1, 255-91.

Weiss, M. (1983).Effects of Work Stress and Social Support on Information Systems Managers.best dissertation of 1982 by the National Association of Schools of Public Affairs and Administration.