RELATIONSHIP BETWEEN PERCEIVED SOCIAL SUPPORT, QUALITY OF LIFE, AND PSYCHIATRIC SYMPTOMS AMONG HIV TESTED AND NON-TESTED INJECTING DRUG USERS

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ABSTRACT

Present study was aimed of investigating the relationship between perceived social support, quality of life, depression, and anxiety among HIV Positive, HIV negative and HIV Non tested injecting drug users (IDUs). Sample was composed of HIV positive IDUs (n = 40), HIV negative IDUs (n = 40) and HIV never tested IDUs (n = 40). Urdu versions of Multidimensional Scale of Perceived Social Support (MSPSS: Zimet et al., 1988), WHOQOL-BREF (WHOQOL, Group), and two subscales of Depression, Anxiety and Stress Scale (DASS: Lovibond, 1995) were used in the present study. Results indicated that social support was positively correlated with quality of life, whereas perceived social support and quality of life were negatively correlated with anxiety and depression among injecting drug users (IDUs). Regression analyses yielded quality of life and social support as significant negative predictors of depression and anxiety among IDUs. Moreover, present study explored differences between HIV infected IDUs, HIV non-infected IDUs and HIV never tested IDUs on perceived social support, quality of life, depression and anxiety. Limitation, Suggestions and practical implications of the present study have also been discussed.

Keywords**:** *Injecting drug users (IDUs); HIV; Social support; Quality of life.*

INTRODUCTION

Injecting drug users are high risk population for HIV-AIDS. HIV-AIDS patients are highly ignored, stigmatized, and vulnerable than the general population in Pakistan. HIV/AIDS adversely impact not only psychological / physical health, social / work life and adherence to medical care, but also perhaps diminishes the chances of survival (UNODC, 2013). Psychological impairment in form of many psychological problems and deficiencies has been found to be linked with mental suffering, physical disability and morbidity among IDUs (Lyketsos et al., 2002). Individuals with high deficits on social support have high levels of depression (Costa, Pinto, & Gouveia, 2013). There are various factors that increased the risk of injecting drug use and HIV infected syringes sharing practices e.g., difficulty in getting daily new syringes, lack of awareness about HIV transmission, poor social support, and quick withdrawal management (Ahmed, Long, Huong,& Stewart, 2015). This critical issue has yet not got considerable attention of research scholars in indigenous settings. There is need of serious attention to be paid to this issue so as to have empirical understanding about challenges related to HIV/AIDS and its adverse impacts on individuals as well as society.

HIV AIDS prevalence around the globe is high among IUD's especially in Central Asia and Eastern Europe (WHO,2005).Major concerns and apprehensions among clinical and health psychologists is to fight against AIDS due to its devastating effects on the mental health of a person. HIV positive people are not aware of their HIV status. Moreover, street based IDUs receive less social support and yet they contribute to the rapid rise in HIV prevalence among IDUs (Punjab AIDS Control Program, 2008). Along with many other problems, quality of life of HIV-AIDS patients has numerous vulnerabilities. Quality of life refers to ones perception about his/her place in life with reference to their goals, standards, expectations, and concerns paved by their value system and cultural context (WHO, 1998).Quality of life covered many aspects of individual life e.g., perception about his/her wellbeing and quality of health related facilities (Ruggeri, Gater, Bisoffi, Barbui,& Tansella, 2002).

According to World Health Organization imperative considerations should be sought while designing and delivering HIV/AIDS care as it is directly linked with the multiple common psychiatric, medical, and social problems among IDUs (WHO, 2004). People who inject drugs are at high risk of incepting HIV AIDs and other psychological and social health issues (Potvin, Sepehry, & Stip, 2006). Psychological factors e.g. depression, anxiety increase individuals' vulnerability for developing HIV infection which makes it hard and adverse for HIV infected individuals to manage the disease (Johnson, Cunningham, Williams, & Cottler, 2003). In such situation social support in among those factors that are supposed to help individual to tackle the disease more efficiently and confidently.

Social support is an important mechanism to prevent HIV infected from psychological problems and to enhance their quality of life. Social support has been defined as the assistance and protection given to others. It is essential for those individuals, who are experiencing distress, to enable them to share their problem with the group. Social support refers to the availability of interpersonal resources (Tan & Karabulutlu, 2005). Emotional support is sought from certain sources and among those family, friends, and peers are three basic sources. It can also arise from social interactions in which an individual exists (Greenberger & Don, 2000). At the time of conflict and crisis the most significant factor of psychological functioning is the family support (Crystal & Kersting, 1998).Family friend's social support played a primary role in minimizing psychological distress and enhancement the quality of life (Rueda et al., 2011).

Research witnesses the fact that IDUs are more prone to develop psychological symptoms and problems. For example, individuals who tend to inject drugs are most vulnerable to HIV positive and they, as compare to general population, have the higher chances of having mental health problem (Buckingham& Cournos, 2013).

Higher Social support decreases psychological distress and depressive symptoms by improving quality of life among male injectors with HIV infection **(**Jia, Reid, Findley, Duncan, 2004). Social support displays significant negative correlation with anxiety and depression

(Ingram, Jones, Fass, Neidig & Song, 1999).The HIV affected adolescents face multiple challenges e.g. injecting drug use, social discrimination, stigma, and poor quality of life (Cohen, Gottlieb, &Underwood, 2000). HIV population also showed significant link between their health in general, work and physical performance, and psychiatric disorders like anxiety, stress and depression (Orland, Tucker, Sherbourne, &Burnam, 2005). Empirical evidences yield these psychological problems to be more frequent among HIV/AIDS infected (Komiti et al., 2003) and negatively impact the overall quality of life among Injecting Drug Users (Kaplan et al., 1995).

Persons diagnosed with HIV or AIDS often react in an emotional mix of initial shock, fear and anger, hopelessness, grief, and acute depression (Fleishman & Vogel 1994). Similarly, anxiety disorder has been found as more prevalent among people living with HIV (PLHIV) than people of HIV Negative though anxiety is also linked with depressive symptoms (Burnam, Longshore, Fleishman, Sherbourne & Turner, 2001).On the other hand Social support as coping strategy has been found as positive element among HIV infected IUDs as it buffers their psychological health in order to fight adverse impacts of depression and anxiety related to disease (Premika, 2015). In case of lack of support and high perceived stigmatization HIV-positive has been found to be severely suffered from acute depression and high anxiety which in turns increases the chances of their maladjustment in given environment (Alpana, 2010). It seems logical and safe to infer that the presence of social support and quality of life (QOL) are factors that may not only reduce the symptoms of psychological problems but also may help in reducing the vulnerability among HIV infect IUDs.

It is assumed that present study will provide enrich and valuable findings that may be of serious focus of practitioner and family members of HIV infected IUDs. Present study intended to empirically examine the predictive role of social support and QOL for psychiatric symptoms among HIV infected IUDs. On the base of aforementioned discourse literature, it was hypothesized that (1) Social support and quality of life will negatively predict depression and anxiety among Injecting Drug Users, (2) Level of psychological distress would be higher

among HIV positive IDUs as compare to their counterparts and (3) Level of social support, quality of life would be higher among HIV positive IDUs as compare to their counterparts.

METHODS AND PROCEDURE

Participants:

Sample of the current study comprises of injecting drug users (*N*= 120) including three subgroups HIV positive IDUs (*n*=40), HIV negative IDUs (*n*= 40) and HIV not tested IDUs (*n*=40). HIV positive and negative sample is selected from different governmental and non-governmental organizations like Punjab Aids Control Program, AZM Addiction and Psychological Treatment Center, Naizindagi (Principle reception of Global Fund Round 9), who were working on Injecting drug use and HIV Aids in Sargodha region. Other non-tested sample selected from Instruments. Multidimensional Scales of Perceived Social Support (MPSS) initially, developed by Zimet, Dahlem and Farlay (1988) and consisted 12 items divided into three aspects of social support i.e. Special person, Family, and Friends. Response format is anchored on seven (7) point Likert type. Internal consistencies of the scales and subscales ranging from 0.79 to 0 .98 and test retest reliability ranging 0.72 to 0.85 (Zimet et al., 1988). In the present study Urdu version of MPSS (Batool, 2012) was used that α coefficient for MPSS total is 0 .78 for family subscale 0.78 for friend subscale and 0.62 for special person subscale (Batool, 2012).

Quality of Life Scale:

WHOQOL- BREF scale was developed by the WHOQOL Group (1998) and was used to measure quality of life. The Urdu version of the scale provided itself by WHO consisted twenty six items and comprised of four subscales measuring the following domains i.e. overall quality of life Physical health, psychological health, social relationship and environment. The questionnaire was 5- point rating scale. High scores indicated high quality of life and low scores showed low quality of life. Cronbach alpha values ranged between 0.66 and 0 .84 that in indicative of good internal consistency (WHO Group, 1998).

Depression Anxiety Stress scale (DASS-21):

Initially developed by Lovibond (1995) and consisted of 21 items divided into three subscales i.e., depression, anxiety and stress. In this study Depression and Anxiety subscales of DASS were used to measure the constructs. Response format of scale was 4- point Likert type ranging from 0 = does not apply at all to 3 = applies very strongly. DASS is reliable and construct valid instrument that demonstrated excellent internal consistency for depression ranged between .91 to .97 and anxiety .45 to .71.

PROCEDURE

After taking permissions from authors the scales were translated into Urdu through committee approach through translation guidelines recommended by European Social Survey (2012). After wards for the sample collection of 120 Injecting Drug Users from different Governmental, Non-governmental organizations and Drug Addiction Treatment centers. IDUs were approached personally and elucidated about research significance. Informed consent was taken after assuring confidentiality of data. They were instructed about the filling of questionnaires from demographic sheet to all research instruments and were requested for their honest and complete responses. Researcher provided them written instruction accompanied by oral feedback in case of any ambiguity in response statements. Participants were individually thanked by researcher at the end of data collection. Total of 120 questionnaires data were analyzed for hypotheses testing with the help of SPSS-23 IBM package. Results of analysis were discussed in further part.

Results

Table 1

Correlations, Descriptive Statistics and Alpha Reliabilities Computed for all Study Variables (N=120)

Variables	1	2	3	4	5	6	7	8	9	10	11	*M*	*SD*	A
Overall social support	-	.92**	.94**	.89**	.73**	.40**	.63**	.64**	.24**	-.76**	-.74**	27.7	10.7	.90
Significant other's support		-	.84**	.69**	.75**	.45**	.60**	.66**	.29**	-.73**	-.71**	9.11	3.86	.88
Family support			-	.75**	.71**	.38**	.63**	.64**	.19*	-.71**	-.70**	9.07	3.70	.82
Friends support				-	.57**	.29**	.51**	.49**	.19*	-.66**	-.63**	9.52	4.18	.64
Overall quality of life					-	.61**	.75**	.85**	.53**	-.65**	-.62**	56.29	9.37	.77
Physical health						-	.38**	.30**	.22*	-.22*	-.26**	16.37	2.70	.43
Psychological health							-	.50**	.23**	-.49**	-.56**	12.59	2.68	.61
Environment								-	.34**	-.67**	-.58**	15.34	4.13	.73
Social relationship									-	-.17	-.12	7.92	2.16	.51
Depression										-	.88**	13.56	4.61	.86
Anxiety											-	13.19	4.67	.87

*p< .05. **p< .01.

Table 1 depicts correlation among matrix, descriptive, and alpha coefficients for variables of current study. Correlation coefficients are in theoretically desired directions.

Table 2

Multiple Regression Analysis Showing the Effect of [1] Quality of Life and [2] Social Support on Depression and Anxiety (N=120)

Sr.	Predictors	Outcome: Depression		Outcome: Anxiety	
		β	R^2	B	R^2
[1]	Overall QOL	-.43***		-.41***	
	Physical health	.01		-.04	
	Psychological health	-.07	.58	-.25**	.39
	Environmental health	-.37***		-.21*	
	Social health	.05		.09	
[2]	Overall social support	-.76***		-.69***	
	Significant other's support	-.40***	.53	-.41***	.35
	Family support	.34***		-.23*	
	Friends' support	-.30**		-.25**	

*p<.05. **p<.01.***p<.001.

Multiple regression analysis is computed with quality of life and its facets i.e. physical health, psychological health, environmental health, and social health as predictor variables for depression and anxiety. The "R2" value of .58 indicates that 58 % variance in the depression can be accounted for, by the predictors with {F (5, 114) = 33.10, p<.001}. The findings further indicate that overall quality of life and environmental health were significant negative predictors of depression, whereas overall quality of life, psychological health, and environmental health were significant negative predictors of anxiety. [2] Multiple regressions for social support and its facets i.e. physical health, psychological health, environmental health, and social health as predictor variables for depression and anxiety. The "R^2" value of .58 indicates that 58 % variance in the depression can be accounted for, by the predictors with {F (5, 114) = 33.10, p <.001}. The findings further indicate that overall quality of life and environmental health were significant negative predictors of depression, whereas overall quality of life, psychological health, and environmental health were significant negative predictors of anxiety.

Table 3

Mean, Standard Deviation and F-values for HIV Positive, HIV Negative and HIV Never tested on MSPSS (N = 120)

Variables	HIV Positive (n = 40)		HIV Negative (n = 40)		HIV Never tested (n = 40)				Post-Hoc
	M	*SD*	*M*	*SD*	*M*	*SD*	*F*	η^2	
Overall social support	17.58	3.92	31.30	10.33	34.22	8.26	49.85***	.46	3 >2> 1
Significant other's support	5.73	1.63	9.98	3.42	11.63	3.48	42.09***	.41	3 >2> 1
Family support	5.80	1.56	10.15	3.55	11.25	3.09	40.62***	.41	3 >2> 1
Friends' support	6.05	1.66	11.18	4.84	11.35	2.91	31.41***	.35	3 >2> 1
Overall QOL	48.98	7.13	59.10	8.56	60.78	7.74	26.58***	.31	3 >2> 1
Physical health	15.73	2.24	17.05	2.84	16.33	2.85	2.49	.04	2 > 3 > 1
Psychological health	11.28	1.99	12.73	2.76	13.75	2.66	9.92*	.14	3 >2> 1
Environmental health	11.75	3.24	16.80	3.54	17.48	2.99	36.71***	.38	3 >2> 1
Social health	7.40	2.20	8.05	2.11	8.33	2.10	1.97	.03	3 >2> 1
Anxiety	18.10	2.2	12.62	3.43	9.92	3.52	70.62***	.56	1 >2> 3
Depression	17.96	2.64	11.98	3.49	9.66	3.07	77.37***	.57	1 >2> 3

*p < .05. ***p < .001.

Table 3 demonstrates mean, standard deviation and *F*-values for HIV positive, HIV negative and HIV never tested on all study variables. Results indicate significant mean differences on perceived social support, quality of life, depression, and anxiety except two constructs of quality of life i.e. physical health and social health.

DISCUSSION

Injecting drug use and HIV aids has become the general health problem all over the world. Injecting drug use has created major international public-health problems like HIV/AIDS. Pakistan is one among those countries, where HIV prevalence is higher among injecting drugs users. People suffering with IDUs and HIV/AIDS are highly vulnerable to face the severe problems e.g. depression, anxiety, low quality of life, and lack of social support. HIV virus transfers through infected syringes that IDUs shared. A lot of research evidences indicate that psychological distress, low quality of life and lack of social support are the major concerns for IDUs. The present study has tested certain hypotheses.

Present study was hypothesized that perceived social support and quality of life would negatively predict with psychological distress (depression and anxiety). Results of the present study supported that quality of life and its sub domains i.e., overall quality of life, psychological health, physical health, environment related quality of life and social life related quality of life were significant negative predictors of depression and anxiety among IDUs (see Table 2) moreover, results confirmed that social support and its sub domains i.e. significant other's support, family support and friends support were significant negative predictors of depression and anxiety among IDUs i.e. HIV infected/non-infected and never tested injecting drug users (see Table 2). A possible explanation of present might be that IDUs are ignored by the society or negatively stigmatized which results in decrease in social support from others and deterioration of quality of life ultimately. IDUs are resistant to obey others therefore, their family members and other close persons gradually withdraw their support to IDUs. In such situation IDUs are surmised to be vulnerable to psychological distress and their anxiety and depression level is escalated.

There is empirical evidence that both social support and quality of life are inversely correlated with depression and anxiety. For example, Strine, Chapman, Balluz, and Mokdad (2008) found that social support and quality relationship were significantly and negatively correlated with

psychological distress. IDUs in a society find, no approval for their behavior thus, they face many severe challenges in their course of life. Previous literature also suggests that HIV-affected IDUs experience certain multiple challenges e.g., injecting drug use, social discrimination, stigma, poor quality of life (e.g. Bal, 2003). There is further empirical evidence which support current findings i.e. less or absence of social support enlarged the risk of psychological distress among IDUs (*e.g. Solomon, Tesfaye,& Girma*, 2014).

Social support is an effective tool and work as shield against low self-esteem, low mood, and poor wellbeing. HIV affected individual, is necessarily in need of support and company in form of emotional support. It is therefore, consistent family support might be useful for HIV-positive IDUs to help them in reducing their psychological distress and other behavioral problems (Mizuno, Purcell, &Dawson, 2003). Social support is widely considered to be protective against depression and anxiety (Costa & Gouveia, 2013) and utilizing it as coping mechanism has been found to be significant due to its adverse relation with anxiety and depression among IUD's. This indicates that more a person uses social support as coping strategy, the lesser would be the anxiety and depression (Premika, 2015). It is, further argued that IDUs are supposed to live in an environment that is not appropriate for better quality of life, especially in Pakistan IDUs are mostly with poor financial background and their fellow IDUs are generally illiterate. Keeping in view this context it can be safely assumed that IDUs whether HIV/AIDS positive or negative suffer from poor life quality and mental health as well. Present findings are empirically supported by the findings of previous studies which revealed that psychological distress is negatively associated with quality of life related to physical and mental health among Injecting Drug Users (Preau, 2007).

One way ANOVA analysis carried out is to examine the impact of HIV Positive, HIV negative and HIV never tested injecting drug users on social support, quality of life, depression, and anxiety (See table 4). It was also hypothesized in current study that level of psychological distress would be higher among HIV positive IDUs as compare to HIV negative IDUs and never tested IDUs. In this study findings supported that psychological distress was higher

among HIV positive IDUs and Compare to their counterparts. In favor of our findings it is argued that HIV infected IDUs cannot manage their disease and because of AIDS as negative social stigma they are much prone to experience the high level of depression and anxiety poor life quality and less or absence of social support at the same time.

Findings of present study showed that social support, quality of life and psychological distress differs significantly among HIV Infected/Non infected Injecting Drug Users. These findings are in line with the findings of Premika (2015) who conducted a study on psychosocial conditions of individuals with HIV/Aids to explore relationship of anxiety, depression, and social support among HIV infected/non infected Injecting drug users and found significant differences among HIV/AIDS infected IDUs in terms of depression and anxiety. He also found a negative relationship of anxiety and depression with social support, which implies that the more the person obtain social support the lesser would be his/her anxiety and depression. This is plausible because social support works as coping strategy and is used overcome emerging psychological problems. Moreover, this supports when received from family, friends and other significant individuals help in decreasing the sense of being isolated to cope the problem. Another study revealed depression as most common and prevalent (up to 57 %) complication that is related to HIV-Positive IDUs, which has been reported 5 times greater in HIV infected IDUs than the general population(Valente, 2003).HIV-Positive IDUs have been found as impoverished vulnerable and isolated population whose lives are shaped by a significant level of psychosocial distress (Armstrong, 2013).

Roberts (2001) identified that, various psychological factors e.g., depression and anxiety enhance one's susceptibility for HIV infection and exert adversarial effect on the handling and management of HIV besides the advancement of disease among those individuals who are HIV infected. Moreover, these adverse factors harmfully impact upon vulnerability to HIV infection and further restrict the strategies of adaptive disease management. The incidence of distress or high anxiety might be contributor of poorer disease progression among those individuals having HIV. Furthermore, it is also acknowledged empirically that mental disorders

specifically major depression is almost double in frequency among HIV-positive individuals as compare to those of HIV-negative individuals (Bing, 2001; Burnam, 2001). Previous data reveals that the prevalence of depression varies from 30–50% inpatients that are under care and treatment of HIV in professional settings (Sherr, 2008) and this number is even greater for other psychological illnesses like psychological distress, psychopathology, and suicide (Perry et al., 1984; Dew et al., 1990). Stigma of psychiatric illness or psychological disorder place devastating impact on overall wellbeing and heath of HIV infected IDUs and this situation get worsen with the passage of time if social support is lessened of absent. Those infected individuals are more probably detested and forced to become isolated (Stall, 2003). In such situation the social support becomes an inevitable factor that provides immediate sense of protection to HIV affected individuals and thus escalate their sense of wellness and resilience as well.

Present findings have already mentioned that quality of life and its sub domains overall quality of life, physical health, psychological health, environment related quality of life and social life related quality of life are negative predictors of depression and anxiety. It is safe to conclude from aforementioned discussion that the quality of life and social support will be poor among HIV infected IDUs as compare to those HIV negative or not tested individuals. It does make sense to infer that high depression and anxiety level decreased the quality of life among HIV infected IDUs. Psychological impairment in form of Depression is strongly linked with extensive physical disability and morbidity, as well as mental suffering among IDUs (Lyketsos et al., 2002). Depression and anxiety are also related with failure to maintain physical health (i.e., proper diet and exercise) so their lower level of receiving social support and poor quality of life are quite comprehensible (Judith & Rabkin, 2008).

CONCLUSIONS

In conclusions, it is endorsed that social support and quality of life were negatively correlated with anxiety and depression among injecting drug users (IDUs). Regression analyses yielded

quality of life and social support as significant negative predictors of depression and anxiety among IDUs. HIV infected IDUs were found higher on depression and anxiety and perceived low social support and had poor quality of life than those of HIV non-infected IDUs and HIV never tested IDUs

LIMITATIONS AND SUGGESTIONS

There would be low generalization of the results on the whole population because of limited sample of 120 IDUs. To increase generalization further studies should increase the sample size. There are many gaps in this area of research future studies can be conducted in these areas among HIV infected and non-infected IDUs i.e., HIV/AIDS awareness, needs assessment, internalizing problems, stigma, life satisfaction, suicidal ideation, health related issues, HIV treatment, co morbid psychological disorders, substance abuse disorders and similar others are the core variables for conducting clinical researches.

Implications of the study

In Pakistan's context there is less literature on the relationship of all above mentioned variables among HIV infected and Non-infected Injecting drug users. Therefore, the findings of present study contribute a valuable knowledge theoretical framework for future studies in the area of research.

Findings of the present study could beneficial for measuring the psychosocial needs of HIV infected and non-infected IDUs. The study finding revealed that there is a need of creating awareness about HIV infection; HIV harm reductions and managing psychological distress e.g. depression and anxiety. Present study points out that providing better social support from family friends and other significant one can not only increase the quality of life but also decrease the psychological distress among HIV infected and Non-infected Injecting drug users. Moreover study explore HIV positive IDUs are more vulnerable and they want much attention from their family, society and also state because they are living a pathetic life with much

psychosocial problems i.e., poor social support, low quality of life and higher level of psychological distress .

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