

Death Anxiety, Social Support and Medication Adherence in People Living with HIV/AIDS in Pakistan

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The current study aims to explore death anxiety, social support and medication adherence in people living with HIV/AIDS. 150 HIV/AIDS people, including men and women with ages ranging from 20 to 55 ($M = 36.44$), made up the entire sample. Data was collected through purposive sampling strategy and Correlation research design applied. The following instruments were utilised in the current study: a demographic information sheet, the Death Anxiety Scale (Templer, 1970), the Multidisciplinary Scale of Social Support Scale (Zimet et al., 1988), and the Treatment Motivation Questionnaire (Plant et al., 1995). To interpret the research data, descriptive statistics, Pearson Product Moment Correlation Analysis, Mediation via Process Analysis, and Regression Analysis were used. The results showed a strong favorable association between social support and medicine adherence, but no significant relationship between social support and death anxiety. In Pakistan, the HIV epidemic is moving into a new stage, with the possibility that it will spread through generational transmission. At this point, social support and adherence to ARV treatment are vital for those living with HIV/AIDS.

Keywords. Death anxiety, social support, medication adherence, HIV/AIDS, PLWH

HIV/AIDS is a serious public health issue with worldwide consequences (Etiaba et al., 2016). It's been around since the early 1980s, when it was first discovered, the disease has claimed the lives of around 32 million people (World Health Organization, [WHO], 2019). One of the biggest causes of HIV/AIDS is injection drug users (IDU) and sexual transmission. Women are equally affected by this from their spouses and sexual partners and left great impact on their lives.

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Death Anxiety, Social Support and Medication Adherence in people living with HIV (PLWH) are interrelated to each other. There is ample evidence that AIDS patients experience a wide range of abstract emotions, including worry, death fear, sadness, discontent, self-destructive brooding, and blame (Berube, 1989; Baer & Lewitter, 1989). Naranjo (2004), explore numerous factors that influence the value of life for people suffering with HIV/AIDS in the United States, presented the complications of living with HIV as a never-ending challenge. Discouragement, disapproval, horror, substance use, death anxiety, cruel lead at home, and unmistakable segments that sway singular satisfaction were talked about. The researcher explored the framework using the Special Projects of National Significance of the Health Assets and Administrations Organization, which assess different aspects of person satisfaction for people suffering with HIV/AIDS and find difficulties posed by community insurance providers in the redemption of large sums of money. Despite the fact that individual satisfaction among PLWH has clearly increased since the introduction of anti-retro-viral (ARVs) treatment, the astringency of such medicines now effects unique contentment in innovative and difficult ways (Burgoyne & Tan, 2008). As ARV medications evolve and the endemic's whims vary, reviews continue to uncover individual satisfaction. In an instance of 116 HIV-infected patients Holmes et al. (2007) investigated the passive endowment of individual satisfaction to ARV drug duty. They explain that, aside from the financial delay, the HIV/AIDS Designated Quality of Life instrument discovered that individual contentment was a strong predictor of eventual adherence.

To assess the impact of injury, emotional prosperity, question, stigma and lack of social support among people suffering with HIV/AIDS, and the effect of these occurrences fruitful contemplation Whetten, et al, (2008) set the ground for the current investigation. Special Projects of National Importance of the Resources and Administrations Organization, which examined various elements of individual satisfaction for PLWH and consolidated the obstacles experienced by restorative administrations providers in the movement of significant worth consideration. Regardless of how much individual PLWH fulfillment has increased after the availability of Antiretroviral (ARVs) medication, toxic levels of these drugs are affecting individual fulfillment in different and difficult ways (Burgoyne & Tan, 2008). In general, audits have discovered that younger people, as well as those with a poor socioeconomic standing and a low level of education, less agree to reveal their HIV positive status. Women having long-term relationships are more likely to declare their status than those with a smaller range or who have had multiple sexual

assistants. Regardless, this isn't the case in most cases; according to another study, unmarried women are more hesitant to their sexual partners to reveal their status. Another study indicates that married women more agree to reveal their HIV positive status to husbands/sexual partners (78 percent stood out from 17 percent).

In an example of 200 persons suffering with HIV in Thailand, [Ichikawa et al. \(2006\)](#) discovered, a cooperative and supportive social atmosphere and general community recognition essentially associated to a higher quality of life. Adherence is essentially linked to social support, issue-centered coping, and dynamic conduct coping. It is noted that coping style and social support satisfaction were important determinants in ARVs medication adherence. [Koopman et al. \(2000\)](#) indicated the link between saw pressure and coping, connection, and social support, finding that apparent pressure was not essentially identified with seen social support; anyway saw pressure was altogether more prominent among with restless and/or low secure connection styles. Discovered by [Nicholas et al. \(2003\)](#) that higher level of support from social circle was linked to a higher quality of life in people surfing with HIV, those participated in conduct medication program.

According to [Bandura's in \(1997\)](#), social learning theory, evaluation maintenance, such as consolation, input, and avowing proclamations is considered to enhance individual's self-efficacy to follow, which is connected to antiretroviral medication adherence, as well as modeling from supportive people ([Gifford et al., 2000](#)). Prior researches indicated that anxiety is essential to research in an HIV-infected community. High levels of restless and anxiety symptoms in PLWH have a major role in self-care behaviors needed of an individual on ARVs, such as medication adherence ([Beusterien et al., 2008](#)). They investigate the facts in which social support system and negative impact develops are interrelated with ARVs medication adherence among those MSM who infected with HIV in the United States. It was concluded that instead of directly impacting medicine adherence, cognitive and emotional variables intercede in social support structures.

One common barrier that has been identified as having an impact adherence to ARVs drugs and healthcare outcome is a lack of social support. According to Burgoyne and Saunders, having a spouse and a larger number of close friends were related with higher social support ratings. Living with a chronic illness necessitates social support. Several studies have suggested that support by social network can improve life standards in people with chronic illnesses, especially those individuals living with HIV ([Ichikawa & Natpratan, 2006](#)). The

Health Convictions and mentalities of people living with HIV/AIDS with more adherence versus non-adherence is important factor. People with high adherence had higher faith in their suppliers, took prescriptions regardless of whether or not they were effectively using substances, having lower depression scores, about their HIV status were more open, and had huge support from social circle. Several researchers have found a link between support from social circle and medication adherence in people with a range of chronic conditions (Caplan et al., 1980)

It is a known fact that social support can help people overcome their dread of dying (Sadeghi et al., 2015). Nonetheless, the many of extant researches regard fear of death to be one-dimensional, and social support is frequently evaluated in this manner as well. According to Zimet et al. (1988) perspective, the participants' support comes from three sources: family, companions, and life partners regarding their examination. Despite the fact that these sources of support are extremely important, a few studies have revealed that companions were the most frequently sought after and the best at coping with stress or worries concerning mortality and dying, particularly among gay men HIV-positive in the United States (Pakenham, 1998), in Nigeria constantly sick patient (Awopetu et al., 2017) and an enormous example is American grown-ups (Chopik, 2017).

Social and psychological factors have an impact on ARVs adherence; create a multi-segment model that takes into account the complexities of these aspects. Previous research has connected HIV/AIDS-related stressors like anxiety and depression to decreased antiretroviral medication adherence (Safren et al., 2003; Alfonso et al., 2001), a theoretical model was proposed in which it was claimed that severe alexithymia is associated to non-adherence due to greater psychological suffering (McIntosh et al., 2016). From long-term intervention study, social support was found to increase positive thinking and coping techniques, which indicated adherence to medication (Godin et al., 2005). Cha et al., (2008) looked at the effect of apparent support by social circle, onerous signs, and self-efficacy regarding ARVs medication adherence in PLWHA, exploring the mediating roles of self-esteem and depression based on three mediation hypotheses. The most comprehensive and modern model for analyzing the association between ARVs medication adherence and psychological factors the Cha et al. model, has been modified and utilized in South Africa.

Two interfering factors, current burdensome and restless symptoms, which could have worked with a backhanded connection

between, Both [Simoni et al. \(2006\)](#) and [DiIorio et al. \(2009\)](#) recently indicated a relation between wide support provided by social circle and HIV drug adherence. The results of a test conducted on HIV-infected MSM in Seattle who were receiving full HIV care suggested that both onerous and restless symptoms contributed to the backward relationship between societal support and medication adherence. The discovery was modeled after prior dispersed explorations in the area. Lower levels of anxiety symptoms were interrelated to higher levels of social support. Furthermore, lower levels of bothersome symptoms were indicator for higher levels of adherence. Given that the existence of severe and debilitating symptoms may make it difficult for a person to stick to ARVs, having less burdensome. In this and prior cases, symptoms were linked to increased adherence (poor memory, low energy, and dubious thoughts about the future) may make it harder to take prescriptions now. Better levels of support provided by social circle were associated to greater levels of drug adherence via a convoluted route that included fewer unpleasant symptoms in this method.

Furthermore, HIV positive people with proper ARV medication adherence spoke had high confidence in their essential consideration suppliers; they believed ARVs medication adherence ratio should have been high for antiretroviral therapy efficiency; they share about their HIV status; they used ARVs medications even also using substances; and not depressed ([Malcolm et al., 2003](#)). Clinical professionals, companions, and kin were identified as the most consistent hotspots for help, while ordinary sexual partners, clinical professionals, and local area associations were found to be generally useful, according to [Reilly and Woo \(2004\)](#), who indicated support from social circle and more safe sexual activities in an example of HIV people. Influenced by positive social networks more secure sexual practices were founded.

Social support and coping methods have an impact on ARVs adherence regimens among rural women living with HIV/AIDS but just the availability of social support is not important for improved adherence, fulfillment of such support is also required. The best definite predictors of medication adherence is profound exercises and the impact of social support on medication adherence, fulfillment with accessible help, and coping by overseeing HIV infection ([Vyavaharkar et al., 2007](#)).

On the basis of literature data it was concluded that death anxiety and social support has been investigated in terms of relationship. Similarly social support in terms of fulfillment of actual support required for the medication adherence was explored. But mediating

role of social support between death anxiety and medical adherence is needed to be investigated.

Rationale of the Study

The patient suffering with HIV/AIDS have more death anxiety. The social networking can be recognized as an important part in HIV prevention. With the help of social support, we can down the death anxiety rate and increase the medication adherence in people living with HIV/AIDS and make their life better and healthier. There is a need to explore the association between social support, death anxiety and medication adherence in people living with HIV/AIDS in Pakistani culture. Whereas some researchers conducted research on findings the reasons of HIV/AIDS. In Pakistan, however, HIV infection has entered a new stage, and there is a chance that the pandemic will spread through generational transmission. At this point, social support and adherence to ART treatment are essential for those living with HIV/AIDS.

Objectives to Analyze

1. To study the relationship among death anxiety, social support and medical adherence in people living with HIV/AIDS.
2. To study the meditating role of social support between death anxiety and medication adherence in people living with HIV/AIDS.
3. To study the role of death anxiety and social support as predictors of medication adherence in people living with HIV/AIDS.
4. To explore the differences among demographic variables on death anxiety, social support and medication adherence in people living with HIV/AIDS.

Hypotheses

1. There is likely to be a positive relationship among death anxiety, social support and medication adherence in people living with HIV/AIDS.
2. Social support is likely to mediate between death anxiety and medication adherence in people living with HIV/AIDS.
3. Death anxiety and social support are likely to be the predictors of medication adherence in people living with HIV/AIDS.
4. Gender differences are likely to be found regarding death anxiety, social support and medication adherence among people living with HIV/AIDS.

5. Educational differences are likely to be found regarding death anxiety, social support and medication adherence among people living with HIV/AIDS.
6. Marital differences are likely to be found regarding death anxiety, social support and medication adherence among people living with HIV/AIDS.

Method

Research Design

Survey research design was applied to examine the relationship among Death Anxiety, Social Support and Medication Adherence in people living with HIV/AIDS. Purposive sampling strategy was used for data collection.

Sample

Sample size was determined by G-power analysis. A sample of 150 HIV positive people including both men and women, from cities of South Punjab included Multan, Dera Ghazi Khan and Muzaffargarh was collected from HIV Treatment Centers. Men (65.3%) and women (34.7%) participated in this research. Age ranged 20-55 years ($M = 36.44$, $SD = 8.90$), People living in nuclear and joint families have been included. Both Educated and uneducated people were included, participants who were unable to make a response ascribed to any difficulty i.e. language barrier, inability to comprehend, serious illness. People with physical disability were also excluded. Questionnaire was used in Urdu language.

Demographic sheet

Demographic sheet was designed which support the essential data of the participants. It comprised of age, gender, education, area, family system, and no. of siblings, monthly income, and age at the time of diagnosis, reason of deceleration of HIV positive, treatment duration and marital status.

Table 1
Demographic characteristics of sample (N=150)

Characteristics of Participants	<i>f</i>	%
Gender		
Male	98	65.3
Female	52	34.7
Education		
Educated	65	43.4
Uneducated	85	56.6
Marital status		
Single	15	10
Married	135	90
Family setup		
Nuclear	53	35.4
Joint	97	64.6

Note. *M* = Mean; *f* = Frequency; % = Percentage. Mean age of participants = 36.44; standard deviation of participants = 8.90.

Measures

Death Anxiety Scale (DAS) (Templer, 1970)

Anxiety related to the awareness of dying, death, anticipation and nonexistence is known as death anxiety (Barrett, 2013). The Templer Death Anxiety Scale (1970) was created by Donald I. Templer to assess an individual's level of death anxiety. DAS consisted of 15 items that respondents were asked to score on a true/false scale. The DAS (Urdu language version) was tested and retested after a three-week gap. The Likert scale ranges from 1 to 5, 1 means severe disagreement, 3 neutral, and 5 indicating strong agreement. 15-35 scores shows low level of death anxiety; 36-55 indicates moderate level death anxiety, 56-75 shows high level of death anxiety. As a result, a high score indicates a high level of death anxiety.

Multidimensional Scale of Social Support (MSSS; Zimet et al., 1988)

Social circle support is described as aid offered by one's social network rather than a professional in the case of HIV infection (Burgoyne & Saunders, 2000), it's also typically connected to better health care. Social Support (MSSS; Zimet et al., 1988) the 12-item Multidimensional Scale (Urdu language version), which examines the degree of social support from friends, family, colleagues and significant others in surrounding, will be used to measure social support. 7-point Likert scale was used for scoring, from 1 strongly disagree to 7 strongly agree. The aspects of MSSS focus on three distinct and independent dimensions for social support, according to

factor analysis, with coefficients of Cronbach's .85 (friends), .87 (family) and .91 (significant other), higher scores shows a higher level of social support.

Treatment Motivation Questionnaire (TMQ) (Plant et al., 1995)

Treatment Motivation Questionnaire (TMQ) Plant et al., (1995) will be used to gauge medical adherence. It contains 26 items, each of which has three possibilities (not at all, somewhat true, and extremely true), and patients are only allowed to select one option that is relevant to them. Urdu translation of Treatment Motivation Questionnaire was used for this research (Raza, 2018)

Procedure

First of all, ethical considerations were kept and maintained including approvals, permissions, confidentiality etc. Data was collected from three Districts (Dera Ghazi Khan, Muzaffargarh & Multan) of South Punjab's Voluntary Confidential Counseling and Testing Centers (VCCT). A sample included N=150 people both men & women having age range between 20-55 years (M=36.44 years) living with HIV/AIDS was assessed; A questionnaire consisting of consent form, demographic sheet, Death Anxiety Scale (Templer, 1970), Social Support (MSSS; Zimet et al., 1988) and Treatment Motivation Questionnaire (Plant et al., 1995) was filled by the participants at the VCCT centers. Translated versions of the scales were used to collect information from the participants. Researcher personally approached the centers with the help of some volunteers. Participants were approached through the VCCT centers on their appointment days. Researcher explained the objectives of the research and took their consent to participate in this study. The participants consumed 15-20 minutes to complete these questionnaires. Total duration of data collection was three month from May to July, 2021.

Results

Table 2
Psychometric properties of scale (N=150)

Scales	Kurtosis	Skewness	<i>k</i>	α	<i>M</i>	<i>SD</i>	Range	
							Actual	Potential
DAS	.98	.22	15	.75	52.80	10.31	34-74	75
MSSS	.93	.19	12	.85	54.13	14.67	13-76	84
TMQ	1.05	.62	26	.73	128.17	16.38	95-156	182

Note. *k* = Number of items; α = Coefficient of Cronbach alpha; *M* = Mean; *SD* = Standard Deviation; DAS = Death Anxiety Scale; MSSS = Multi-Dimensional Social Support Scale; TMQ = Treatment Motivation Questionnaire.

The coefficients were deemed acceptable, since they have exceeded the cutoff value of .70 as recommended by [George and Mallery \(2003\)](#). Cronbach's alpha was excellent for Multi-Dimensional Social Support Scale and good for Treatment Motivation Questionnaire Scale and Death Anxiety Scale values of skewness and kurtosis ranges from -1.54 and -.78 to 1.03 and 1.74 respectively which indicated that data was normally distributed and suitable for further parametric tests

Hypothesis 1: There is likely to be relationship among death anxiety, social support and medication adherence in people living with HIV/AIDS.

Table 3
Correlation among Death Anxiety, Social Support and Medication Adherence (N=150)

Scales	<i>M</i>	<i>SD</i>	1	2	3
1. Death Anxiety	52.80	10.31	-	.09	.51**
2. Social Support	54.13	14.67	-	-	.50**
3. Medication Adherence	128.17	16.38	-	-	-

Note. *M* = Mean; *SD* = Standard Deviation.

** $p > .01$.

Results elucidated that social support was positively significantly correlated with Medication Adherence, $p < .01$. No significant relation between death anxiety and social support was found.

Hypothesis 2: Social support is likely to mediate between death anxiety and medication adherence in people living with HIV/AIDS.

Table 4
Social Support as Mediator between Death Anxiety and Medication Adherence (N=150)

Total effect of Death Anxiety on Medication Adherence					
Effect	SE	<i>t</i>	<i>p</i>	LLCI	ULCI
.4674	.0648	7.2087	.0000	.3392	.5955
Direct effect of Death Anxiety on Medication Adherence					
Effect	SE	<i>t</i>	<i>p</i>	LLCI	ULCI
.4282	.0554	7.7252	.0000	.3187	.5377
In direct effect of Death Anxiety on Medication Adherence through social support					
Effect	BootSE	BootLLCI	BootULCI		
.0392	.0500	-.0214	.1043		

Note. S.E. = Standard Error; LLCI = Lower Limit of Confidence Interval; ULCI= Upper Limit of Confidence Interval.

The result showed that the effect of death anxiety on medication adherence is significant. Total effect of death anxiety on medication adherence ($b = .4674, t = 7.2087, p = .001$). Second, direct effect of death anxiety on medication adherence significant ($b = .4282, t = 7.7252, p = .001$). Furthermore, the indirect effect of death anxiety on medication adherence through social support is also significant as zero is within lower and upper 95% confidence interval limit ($LLCI = -.0214, ULCI = .1043$). Therefore, mediation result indicates that social support is mediating between death anxiety and medication adherence.

Hypothesis 3: Death Anxiety and Social Support are likely to be the predictors of medication adherence in people living with HIV/AIDS.

Table 5

Multiple Regression analysis of Medication Adherence on Death Anxiety & Social Support variables (N=150)

Variables	β	Medication Adherence	B	95% CL
Death Anxiety	.43***		.46	.280-1.09
Social Support	.24**		.46	-.451-.72
R^2		.47		
F		64.4		
ΔR^2		.46		
ΔF		64		

Note. C.I. = Confidence Interval; R^2 = Adjusted R square; ΔR^2 = R square change; ΔF = F change.

In regression analysis the medication adherence was entered as dependent variable, death anxiety as independent variable and social support as predictor variables. The Regression Analysis showed that due to the low social support the level of death anxiety increase. This shows that increase in death anxiety causes decrease in medication adherence. The predictor model was found to be significant ($F=64.4, p < .000$). The model explains of variance (Adjusted $R^2=.47$) in medication adherence. The value of R^2 change is .47 which explained 47% variance.

Hypothesis 4: Gender differences are likely to be found regarding Death Anxiety, social support and medication adherence among people living with HIV/AIDS.

Table 6

Gender Differences Regarding Death Anxiety, Social Support and Medication Adherence in HIV Patients (n=150).

Variable	Men (n=98)		Women (n=52)		t(150)	p	Cohen's d
	M	SD	M	SD			
DA	52.19	10.682	53.94	9.558	-.989	.308	0.17
SS	54.91	15.80	52.67	12.30	.887	.340	0.15
MA	128.84	16.48	126.90	16.27	.687	.492	0.11

Note. n = Number of participant; M = Mean; SD = Standard Deviation; DAS = Death Anxiety Scale; MSS = Multi-Dimensional Social Support; TMQ = Treatment Motivation Questionnaire.

Independent sample *t*-test performed to find the difference between gender and death anxiety, medication adherence and social support in people living with HIV/AIDS. The results indicate that men have slightly higher social support and medication adherence as compared to women. On the other hand, death anxiety of women was found slightly more than those of men, $t = -.989$.

Hypothesis 5: Educational differences are likely to be found regarding death anxiety, social support and medication adherence among people living with HIV/AIDS.

Table 7

Education Differences Regarding Death Anxiety, Social Support and Medication Adherence (N=150)

Variables	Educated (n=65)		Uneducated (n=85)		t(150)	p	Cohen's d
	M	SD	M	SD			
DA	51.95	10.283	53.45	10.34	.879	.381	0.14
SS	50.89	13.72	56.61	14.96	2.40	.016	0.39
MA	124.77	17.41	130.76	15.13	2.25	.029	0.36

Note. n = Number of participant; M = Mean; SD = Standard Deviation; DAS = Death Anxiety Scale; MSS = Multi-Dimensional Social Support; TMQ = Treatment Motivation Questionnaire.

Independent sample *t*-test performed to find the difference between educational statuses and death anxiety, medication adherence and social support in people living with HIV/AIDS. The results indicate that uneducated people have slightly higher Social Support and Medication adherence as compared to educated. On the other hand, Death anxiety of uneducated was found slightly more than those of educated, $t = .879$.

Hypothesis 6- Marital differences are likely to be found regarding death anxiety, social support and medication adherence among people living with HIV/AIDS.

Table 8

Marital Status Differences Regarding Death Anxiety, Social Support and Medication Adherence (N=150)

Variables	Married (n=135)		Single (n=15)		<i>t</i> (150)	<i>p</i>	<i>Cohen's d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
DA	53.77	10.28	44.07	5.16	-3.59	-	1.19
SS	54.92	14.84	47.07	11.02	-1.98	.02	0.06
MA	129.89	15.884	112.67	12.43	-4.05	-	1.21

Note. *n* = Number of participant; *M* = Mean; *SD* = Standard Deviation; DAS = Death Anxiety Scale; MSS = Multi-Dimensional Social Support; TMQ = Treatment Motivation Questionnaire.

Independent sample *t*-test was performed to find the difference between marital status and death anxiety, social support and medication adherence in people living with HIV/AIDS. The results indicate that married people have higher social support and medication adherence as compared to unmarried people. On the other hand, Death anxiety of married people was found slightly more, than those of unmarried, $t = -3.59$.

Discussion

The study was designed to explore the death anxiety, social support and medication adherence in people living with HIV/AIDS. HIV/AIDS is a serious public health issue with worldwide consequences. [Nicholas et al. \(2003\)](#) discovered that higher quality of life in people living with HIV based upon higher level of social circle support; those participated in a conduct medication program.

To assess the first hypothesis of relationship among death anxiety, social support and medication adherence in people living with HIV/AIDS, Pearson Product Moment Correlation Analysis was applied (see [Table 3](#)). Findings indicated that social support positively significantly correlated with medication adherence on the other hand no significant relation between death anxiety and social support were found. Previous researches also explained that psychological distress link between social support and medication adherence was interceded. Lower levels of bothersome symptoms were linked to higher levels of social support. Furthermore, lower levels of anxiety symptoms were

linked to higher levels of medication adherence (Cha, et al, 2008; Simoni, Kurth, Pearson, Pantalone, Merrill, & Frick 2006).

Whereas, Simoni et al. (2006) and DiIorio et al. (2009) expanding literature on HIV helped a lot in understanding the concepts. Each discovered a mental health route that enhanced adherence through social support. Researcher's objective was to re-create and expand these and more other such studies by (a) utilizing social-circle support measures that were more linked to HIV-positive persons and (b) attempting to check medication adherence by including a range of pill-taking behavior factors. They intended to broaden the scope of the research by looking at the aforementioned connections in a group of HIV-positive males who had sexual relations with other men (MSM). Goal was to repeat past discoveries. Depression and anxiety the link between social support and medicine adherence was interceded. Rather of looking at anxiety as the intermediate person in this relationship, a large amount of the surviving literature has focused on sadness. As a result, objective was to expand prior models by looking at depression and anxiety in order to find a possible way through which social circle support affected ARVs medication adherence.

The assumption of social support mediation between death anxiety and medication adherence in people living with HIV/AIDS was also explored. The result indicated that the effect of death anxiety on Medication adherence is significant. Previous researches provided evidence for the role of social support as a protective factor against death fear in patients (Sadeghi et al., 2015). It was hypothesized that death anxiety and social support would be the predictors of medication adherence in people living with HIV/AIDS. In regression analysis the medication adherence was entered as dependent variable, death anxiety as independent variable and social support as predictor variables. The regression analysis (see Table 5) showed that due to the low social support the level of death anxiety increased and intensification of death anxiety caused decrease in medication adherence. It has been suggested that couples with an HIV-infected male accessory had a significantly greater rate of disclosure. 65.3 percent men and 34.7 percent women taken for data collection, as main cause of HIV/AIDS are IDUs and sex workers, so there is great number of HIV positive men as compared to women. Women are much less likely to tell their friends or sexual acquaintances that they are HIV positive. According to all accounts, social support is a significant issue, as indicated by the fact that homosexual men with HIV are commonly abandoned by their life partners, including their families, as well as society (Berube, 1989). Exploration of gender differences regarding death anxiety, social support and medication

adherence among people living with HIV/AIDS indicated that men have slightly higher Social Support and Medication adherence as compared to women. On the other hand, death anxiety of women was found slightly more than those of men.

Educational differences found regarding death anxiety, social support and medication adherence among people living with HIV/AIDS. The results (see [Table 7](#)) indicate that uneducated people have slightly higher Social Support and Medication adherence as compared to educated. On the other hand, death anxiety of uneducated was found slightly more than those of educated.

HIV positive married people had slightly higher social support and medication adherence as compared to HIV positive unmarried people. On the other hand, death anxiety of HIV married people was found slightly more than those of HIV unmarried people (see [Table 8](#))

Conclusion

It was concluded from this study that the people with HIV/AIDS having death anxiety are more inclined to medication adherence, especially when they have more social support of their significant other. Social support facilitates between death anxiety and medication adherence in people living with HIV/AIDS. Social support and death anxiety were the indicators of medication adherence in people living with HIV/AIDS. Uneducated HIV positive people had slightly higher social support and medication adherence as compared to HIV positive educated people. On the other hand, death anxiety of uneducated HIV positive people was slightly more than those of HIV positive educated people.

Implication of the Study

The patient suffering with HIV/AIDS have more death anxiety. The social networking can be recognized as an important part in HIV prevention. With the help of social support, level of death anxiety can be reduced and medication adherence can be increased in people living with HIV/AIDS and make their life better and healthier. There were no findings in Pakistan culture on these variables; social support, death anxiety and medication adherence in people living with HIV/AIDS, whereas some researchers conducted research on findings the reasons of HIV/AIDS. However, the HIV pandemic in Pakistan has reached a new stage, and there is a possibility that it will spread through intergenerational transmission. For persons with HIV/AIDS at this point, social support and adherence to ART treatment are crucial.

Limitations and Suggestions

1. Limited sample size available because of COVID-19, Research must cover the diversity of patients.
2. With training before conducted research, we must increase the morale of patients for achieving better responses of data collection.
3. More studies must be conducted by exploring the effects of other variables on HIV.

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