■ *Original Article*

People Living with HIV: Perceived Stress, Coping mechanism and Quality of life

Binod Kumar Deo[1], M Pramod Shyangwa[1], Sarvagya N Shrestha[2], Jamnotri Singh[2], Maw Naing Amaya[3]
[1]Department of Psychiatry, B. P. Koirala Institute of Health Sciences, [2]Central Department of Psychology, Tribhuvan University, [3]World Health Organization, Nepal.

Abstract

Background: People living with HIV appraise life as stressful. Such perception leads to maladaptive coping mechanisms which affect quality of life. Nepal has entered the stage of a 'concentrated' HIV epidemic. **Objective**: To assess level of stress among HIV positive persons, to find out their coping strategies, to appraise quality of life. **Methodology:** A cross sectional, descriptive study was conducted in different places namely Kathmandu, Pokhara, Bharatpur, Bhairawa, Nepalgunj and Dharan with quota sample 100,80,80,80,80 respectively. Snow bowling technique was used to collect 500 cases of age range 20-50 years over six months duration in 2006. **Results:** Of total 500;(55.4%) were male, 73.0% married and mainly from age range 25-32; of them 80.0% literate, 69.0% farmer. One third were sharing needles while 43.5% indulged in unsafe sex. About 53.0% persons reported in good financial condition as supported by different non governmental and international agencies while the main problems faced were opportunistic infection and social stigma. The average score on perceived stress scale was 25.5 out of 56; main coping mechanisms were planning for future, positive reinterpretation, growth and active coping. Over all quality of life was good among 31.0%, while physical health 58.0%, psychological health 43.0%, social relationship 44.0% and environment condition 32.0% was reported as good. **Conclusion:** Mostly married, literate, in age range20-35, usual mode of transmission was unsafe sex, average stressed, planning, active coping mechanisms and one third subjects expressed over all quality of life as good.

Keywords: HIV, perceived stress, coping mechanisms, quality of life.

Introduction

HIV epidemic has become a great threat to the over all human development across the globe, in particular where this problem is prevalent. This condition continues to generate fear, misunderstanding and discrimination. The transmission of HIV within and from the marginalized groups, including commercial sex workers, truck drivers, and migrant laborers and injecting drug users drive to epidemic. In Nepal, the topography, environmental degradation, poverty and economic migration are linked and they combine with other factors to increase vulnerability to HIV. Nepal has recently recognized HIV/AIDS to be a burning development issue as it has entered the stage of concentrated epidemic among sex workers, injecting drug users and labor migrants. According to (NCASC), HIV prevalence is at 0.5% in the general population in Nepal[1]. Today HIV infection levels in the injecting drug user population, often perceived as self contained, is not only rising, but infections from this group now have a direct channel to the general population through prostitutes and their clients[2]. More adolescents today than in the past generations are involved in multiple health risk behaviors at earlier ages like sexual activities, drug use, reckless driving and more. The mean age of

Address for correspondence:
Mr. Binod Kumar Deo
Assistant Professor & Clinical Psychologist
Department of Psychiatry, BPKIHS
Email: binod_deo@yahoo.com

onset of puberty is continuing to decline while the mean age of marriage is rising. This implies a longer period of possible unprotected sexual activity in unmarried adolescents, early adults who have little access to contraceptive services particularly in developing countries. The increasing unprotected sex brings in the danger of too early and unwanted pregnancy, induced abortion often in hazardous conditions, sexually transmitted diseases and HIV infection resulting in AIDS[3].This misery originates various psychological problems Stress can originate in physiological, psychological and social conditions and threaten the integrity of the body, the personality, or the social system. Stress activates a potential predisposition toward maladjustment[4]. Fortunately human beings try to overcome stressful condition by using various coping & defense mechanisms. Coping processes are conscious intentionally used, significantly determined, non-hierarchical and associated with normality. Whereas, the defense mechanisms are unconscious, non intentional, dispositional, hierarchical process which is associated with or without morbid condition. Along with mentioned resources, other psychological supports are essential for prolonging life and improve its quality. As literature suggests through healthy life style and positive coping methods like accepting the situation and involvement in recreational activities along with positive thinking, stress can be lowered. In brief, the coping mechanisms directly or indirectly affect quality of life which is experienced subjectively. In addition, the available anti-retroviral therapy has considerably improved rates of mortality and morbidity, prolonged lives and hence improved quality of life[5]. This study was undertaken in view of scarce information in the psychological aspect of HIV positive person with following objectives:

1. To assess level of stress among HIV positive persons
2. To find out their coping strategies
3. To appraise quality of life

Materials and methodology

Subjects: HIV positive persons willing to participate in the study.

Inclusion criteria: HIV positive persons in age range 20-50

Exclusion criteria: Declared/known cases of AIDS.

Materials: The instruments used were:

1. Perceived Stress Scale(Cohen Sheldon)
2. COPE inventory(Carver C S et al)
3. WHOQOL(BREF)

Setting: The study was conducted in various cities to obtain number of subjects denoted in brackets as Kathmandu (100), Pokhara(80), Bharatpur (80), Bhairawa(80), Nepalgunj(80) and Dharan(80).

Sampling method: This was a cross sectional study, descriptive type and snow balling method was used for data collection. Usually the subjects were living in rehabilitation centers at different cities as mentioned above along with some cases were from community. Out of 500 sample almost equal number of male and female was taken. The help from a known HIV positive person and VCT counselor was taken for data collection along with small remuneration as Rs 75 (US $ ~ 1.0) per case and same amount to client was offered. Duration was over six months from 01july 2006to 30 December 2006.

Results

Out of 500; male were 250(50%) and female 250(50%), married were 365(73%) and 378(75.6%) were from age group 26-40 years. Literate were 366(91%). Unemployed, social worker and others along with house wives constituted as 310(62%). About 78.0 % subjects practiced unsafe sexual intercourse and needle sharing activities. About 47% participants had manageable financial condition.

Among perceived stressors: 109(21.8%) attributed to opportunistic infection, 85(17.0%) social discrimination and to loan by 56(11.2%) subjects. Regarding perceived stress, 31.0 % subjects felt as unable to control the important thing, 30.0% nervous and stressed, 39.0% just could not cope, 41.0% expressed anger and 49.0% worried on the situation. Concerning coping mechanisms; 86.0% participants used positive reinterpretation and growth, 92.0% looking for social support, 88.0% used active coping and 83.0 % mobilized religious coping while use of suppression of competing activities and planning was seen among 88.0 % of subjects. With regards to overall perception on quality of life, 39.0% subjects reported 'poor quality' and on health, 51.0 % expressed as 'medium' . Similarly on physical health domain; 58.1% participants reported good; on psychological 43.5% good, whereas 'social relationship' and environmental domain, 44.0% and 32.5% respectively remarked as 'good'.

Table No. 1
Socio-Demographic profiles of persons living with HIV. ***N=500***

Characte-ristics	Categ-ories	Freq-uencies	Percen-tages (%)
sex	Male	250	50.0
	female	250	50.0
Marital status	Married	365	73.0
	Unmarried	99	19.8
	Divorced/ widow	36	07.2
Age group	20-25	101	20.2
	26-30	173	34.6
	31-35	136	27.2
	36-40	69	13.8
	41-45	17	3.40
	46-50	04	0.8
literacy	Literate	402	80.4
	Illiterate	98	19.6
Education level	Primary level	92	22.9
	Secondary and SLC level	274	68.15
	10+2 and Higher level	36	8.95
Occupation	Teacher	02	0.40
	Student	25	05.0
	Business	26	5.2
	Laborer	57	11.4
	Farmers	80	16.0
	Housewife	97	19.4
	Social workerand other types	101	20.2
	Unemployed	112	22.4
Family size	1-2	—	08.6
	3	—	20.6
	4	—	22.0
	5	—	22.2
	6-8/ 8+	—	21.0
Financial condition	Good	30	6.0
	Manageable	235	47.0
	Weak	202	40.4
	Miserable	33	6.6

Table No. 2: Mode of HIV transmission and various stressors

Characte-ristics	Categ-ories	Frequ-encies	Percen-tages (%)
Mode of Transmission	Unsafe Sexual Intercourse	225	45.0
	Needle Sharing	166	33.2
	From spouse	109	21.8
Major Stressors	Diseases	109	21.8
	Social discrimination	85	17.0
	Loan	56	11.2
	Not mentioned	250	50.0

Table No. 3:Perceived stress and emotional state

Perceived Stress (in last month)	Never (%)	Sometimes (%)	Often (%)
It happened unexpectedly	45.0	27.0	28.0
It was unable to control the important thing	35.0	34.0	31.0
Felt nervous and stressed	26.0	44.0	30.0
Could not cope	20.0	41.0	39.0
Angered as situation was out of control	24.0	35.0	41.0
Keeping thinking about things	27.0	24.0	49.0
Pulling up high that could not overcome	67.0	13.0	20.0

Table No. 4: Mobilization of Various types of coping mechanisms

1.	Positive reinterpretation and growth	86.0%
2.	Mental disengagement	69.0%
3.	Focus on and venting of emotions	75.0%
4.	Use of instrumental social support	92.0%
5.	Active coping	88.0%
6.	Denial	70.0%
7.	Religious coping	83.0%
8.	Humor	52.0%
9.	Behavioral disengagement	27.0%
10.	Restraint	74.0%
11.	Use of emotional social support	78.0%
12.	substance use	23.0%
13.	Acceptance	70.0%
14.	suppression of competing activities	88.0%
15.	Planning	88.0%

Table No. 5: Overall perception with regards to various domains:

Characteristics	Category	Perception		
		Poor (%)	Medium (%)	Good (%)
Overall perception about	Quality of life	39.0	30.0	31.0
	Health	19.0	51.0	30.0
Domains	Physical health	13.4	28.4	58.1
	Psychological	35.0	21.5	43.5
	Social relationship	12.2	43.8	44.0
	Environment	31.0	36.5	32.5

Discussions

This is a cross-sectional, descriptive study wherein subjects were enrolled from several cities of Nepal. HIV positive persons and VCT counselors were deployed for data collection after briefing and learning trials. As they had the information about location of known positive persons the data collection process had become easier. Most of the persons were of age group20-40 which is similar to findings conducted by Budhachandra Y Jr. et al (2007) where most of the HIV affected persons fell age between 21 and 35 years[6]. On perceived Stress Scale, average score was 25.5 out of 56 which indicated subjects were moderately stressed. This finding is similar to C. Koopman et al(2000)[7] where finding was that the HIV positive persons who experienced the greatest stress in their daily life were disengaged behaviorally/emotionally in coping with their illness and those who approach their interpersonal relationships in a less severe or more anxious style. Unsafe sexual intercourse practice was common practice among theses people (Tab. 2); similarly needle sharing (33.2%) and among many HIV transmission was taken place from spouse (21.8%) which is similar to study conducted by Aich T. K. et al(2004)[8] which revealed uneducated, poor and ignorant young people from the border area of India and Nepal are acquiring HIV infection while they are working in Indian metropolis like Mumbai and subsequently spreading it to their homeland. About 30.0 % persons felt nervous and stressed which is similar to study conducted by Major, M. (1990)[9] HIV infected persons were found with psychiatric disorders. Coping mechanisms of people living with HIV showed use of instrumental social support that is similar to the findings drawn by Miller & Riccio (1990)[10]. In their study the infection with HIV was associated with psychosocial disorders. Adjustment reactions including despair, guilt, protest in those recently diagnosed is a common phenomenon (WHO)[11].Valente(2003) found a large percentage of emotional disorders and major depression associated with HIV infection resulting from immune suppression treatment and neuropsychiatry aspects of the diseases[12] which is consistent with our findings as it showed that 69.0 % uses mental disengagement,74.0% restraint and 88.0% suppression of competing activities. About 23.0 % showed substance use and 27.0 % behavioral disengagement as poor coping skills which is similar to Namir et al(1987)as their finding revealed that the patient with poor coping skills tend to be more anxious[13]. Coping skill is influenced by social resources (Holahan1996)[14]and in present finding 92.0% persons used instrumental social support. A study conducted by Sikkema K. Jr. et al(2003) in which a sample of 268 HIV infected individuals were examined. Analyzing their psychological distress and Hierarchical Regression revealed that the severity of grief reaction was associated with escape-avoidance and self-controlling strategies, loss and depressive symptoms[15]. In our study 74.0% persons used restraint as self controlling coping strategies. In our finding 31.0 % subjects expressed as overall good quality of life and58.1% also as good quality of life in physical health domain. Preventing deterioration of health and many were supported by NGOs and INGOs by giving them employment opportunity and financial support. They were also received continuous counselling and recreational services by various agencies. This could be due to easily available antiretroviral treatment Psychological support among HIV positives can help to prolong life and improve their quality of life (Bayers R, 1992)[16]. Psychological and environmental domain indicates as poor quality of life.

Conclusion

Mostly married, usually from age range 20-35, literate, housewives and unemployed under threat, major family size no.3-5, usually mode of transmission was unsafe sex and needle sharing. Diseases and social discrimination were as major stressors, while anger, thinking on and lack of competing activities as negative coping mechanisms. Psychological and environmental domain indicated as poor quality of life.

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