CHAPTER - II

REVIEW OF LITERATURE

A review of literature is important for developing a broad conceptual context into which the research problem will fit. The review also serves the essential purpose of providing the individual researcher with a perspective on the problem which will be necessary for interpreting the results. This chapter presents review of literature related to this study. Literature was explored to broaden the understanding and gain an insight into the selected problem. The literature is gathered from various sources such as scientific journals, text books, electronic data bases, conference papers, presentations and the like. Since the topic is based on experimental study, we have considered all available reviews from 1994 onwards. This chapter is divided into five subchapters under the following headings.

(i) Studies related to HIV/AIDS and Stigma
(ii) Studies related to HIV/AIDS and quality of life
(iii) Studies related to Stigma and quality of life in people living with HIV/AIDS
(iv) Studies related to Interventions for Stigma and quality of life
(v) Studies related to Psycho-education as intervention for other issues

(i) Studies related to HIV/AIDS and Stigma

The literature regarding HIV/AIDS-related stigma is not easily synthesized. Various researchers have explored and tried to find the causes of stigma, and the outcomes of stigma. Some of them are reviewed here.
Hasan, et, al. (2012) This study employed a quantitative approach by conducting a survey with an aim to know the prevalence of internalized stigma and to identify the factors associated with internalized stigma among PLWHA in Bangladesh. The findings suggest that there is a significant difference between groups with the low and the high-internalized HIV/AIDS stigma in terms of both age and gender. The prevalence of internalized stigma varied according to the poverty status of PLWHA. An exploratory factor analysis (EFA) found 10 of 15 items loaded highly on the three factors labelled self-acceptance, self-exclusion, and social withdrawal. About 68% of the PLWHA felt ashamed, and 54% felt guilty because of their HIV status. More than half (87.5% male and 19.8% female) of the PLWHA blamed themselves for their HIV status while many of them (38.2% male and 8.1% female) felt that they should be punished. The male PLWHA more frequently chose to withdraw themselves from family and social gatherings compared to the female PLWHA. They also experienced a higher level of internalized stigma compared to the female PLWHA. The results suggest that the prevalence of internalized stigma is high in Bangladesh, and much needs to be done by different organizations working for and with the PLWHA to reduce internalized stigma among this vulnerable group.

Pharris, et, al. (2011) analyze patterns of community stigma and determinants to stigma toward PLWHA, they performed an exploratory population-based survey with randomly sampled adults within a demographic surveillance site (DSS) in rural Vietnam. Participants were interviewed regarding knowledge of HIV and attitudes towards PLWHA. Data were linked to socioeconomic and migration data from the DSS and latent class analysis and multinomial logistic regression were conducted to examine stigma group sub-types and factors associated with stigma group membership. Result found unexpectedly high and complex patterns of stigma against
PLWHA in this rural setting. Women had the greatest odds of belong to the highest stigma group (OR 1.84, 95% CI 1.42-2.37), while those with more education had lower odds of highest stigma group membership (OR 0.45, 95% CI 0.32-0.62 for secondary education; OR 0.19, 95% CI 0.10-0.35 for tertiary education). Long-term migration out of the district (OR 0.61, 95% CI 0.4-0.91), feeling at-risk for HIV (OR 0.42, 95% CI 0.27-0.66), having heard of HIV from more sources (OR 0.44, 95% CI 0.3-0.66), and knowing someone with HIV (OR 0.76, 95% CI 0.58-0.99) were all associated with lower odds of highest stigma group membership. Nearly 20% of the population was highly unsure of their attitudes towards PLWHA and persons in this group had significantly lower odds of feeling at-risk for HIV (OR 0.54, 95% CI 0.33-0.90) or of knowing someone with HIV (OR 0.32, 95% CI 0.22-0.46). Author concluded by saying that Future stigma prevention efforts could be enhanced by analyzing community stigma sub-groups and tailoring intervention messages to community patterns of stigma.

Amuri, Mitchell, Cockcroft and Anderson (2011) reported that Tanzania has a generalized AIDS epidemic but the estimated adult HIV prevalence of 6% is much lower than in many countries in Southern Africa. HIV infection rates are reportedly higher in urban areas, among women and among those with more education. Stigma has been found to be more common in poorer, less-educated people, and those in rural areas. They examined associations between poverty and other variables and a stigmatizing. Other vulnerable groups, such as survivors of intimate partner violence, are also more likely to have a stigmatizing attitude. Author suggests that HIV prevention programme should take account of stigma, especially among the disadvantaged.
Vlassoff and Ali (2011) explored that HIV-related stigma was found to be high in Toronto's South Asian community. Respondents perceived it to be greater among South Asians than in other Canadian communities. South Asian families were said to harbor the most stigma, often rejecting HIV-positive members. Differences were noted between first- and second-generation South Asian migrants in knowledge about, and stigma toward, HIV. Women living with HIV were found to be particularly disadvantaged and stigmatized. Because of stigma, many people living with HIV concealed their illness and avoided HIV-related services. They concluded that, Major gaps in knowledge about HIV among Canadian South Asians, and a considerable amount of stigma against people living with HIV, were found. The paper concludes with recommendations to address stigma, based on suggestions from the study's participants.

Nattabi, Thompson, Orach and Earnest (2011) quantified the burden of stigma and examined factors associated with stigma among people living with HIV. Verbal abuse and negative self-perception were more common forms of stigma. The association between antiretroviral therapy and stigma suggested that organizational aspects of antiretroviral delivery may lead to stigmatization. Result suggested using Interventions such as counseling, education of health workers and the community would lead to reductions in negative self-perception and verbal abuse and in turn improve the quality of life for PLWHA.

Wong and Syuhada (2011) investigated the general public's perceptions about HIV/AIDS-related stigma and discrimination towards people living with or affected by HIV/AIDS in order to understand the root of HIV/AIDS-related stigma and discriminatory attitudes. Their Study was carried out using qualitative focus group discussions (FGD). An interview guide with semi-structured questions was
used by them. Participants were members of the public in Malaysia. Purposive sampling was adopted for recruitment of participants. Key factors affecting discriminatory attitudes included high-risk taking behavior, individuals related to stigmatized identities, sources of HIV infection, stage of the disease, and relationship with an infected person. Other factors that influence attitudes toward PLWHA include ethnicity and urban-rural locality. Malay participants were less likely than other ethnic groups to perceive no stigmatization if their spouses were HIV positive. HIV/AIDS-related stigma and discrimination were stronger among participants in rural settings. The differences indicate attitudes toward PLWHA are influenced by cultural differences.

Wagner, et, al.(2010) examined the variables associated with HIV stigma in HIV-positive women currently living in Ontario, Canada. Based on previous literature, they predicted that variables of social marginalization (e.g., ethnicity, income, education), medical variables (e.g., higher CD4 count, lower viral load), and increased psychological distress would be associated with higher perceived HIV stigma among HIV-positive women. In multiple regression analyses, for women born in Canada, lower educational level and higher anxiety were associated with higher HIV stigma. For women born outside of Canada, having been judged by a physician in Canada for trying to become pregnant was associated with higher HIV stigma. For HIV-positive women born outside of Canada, negative judgment by a physician regarding intentions to become pregnant should be addressed to reduce perceived HIV stigma and vice versa. They suggested that Health care providers should be trained in the provision of sensitive and effective health care for women living with HIV, especially when providing reproductive health care.
Jacobs and Kane (2010) reported that HIV-related stigma has been identified as a barrier to HIV testing and prevention efforts internationally and nationally. Although the prevalence of HIV/AIDS is rapidly increasing in women aged 50 and older, little is known about the HIV-stigmatizing behaviors in this underserved population. In this exploratory analysis we investigated the influence of self esteem, sensation seeking, self silencing, and sexual assertiveness on the HIV-stigmatizing behaviors in women aged 50 to 93. Implications for social work and health perception regarding HIV prevention in midlife and older women are considered.

Shamos, Hartwig and Zindela (2009) explored how gender differentially affects the stigma experiences of PLWHA in Swaziland, the extent and dimensions of HIV-related felt and enacted stigma and social support were analyzed. Semistructured, face-to-face interviews were conducted with PLWHA in Swaziland. Through the process of conceptual analysis, themes, including felt stigma, information management, enacted stigma, and social support, were explored, coded, and analyzed in the contexts of partner and familial relationships, and workplace and neighborhood settings. Findings revealed that there were high levels of felt stigma in all contexts, yet fewer than anticipated accounts of enacted stigma in family, work, and neighborhood contexts compared to their expressions of felt stigma. The amount and characteristics of felt and enacted stigma and social support differed based on gender, as women often experienced more felt and enacted stigma than men, and had less definite financial or emotional support.

Larios, Davis, Gallo, Heinrich and Talavera (2009) evaluated the relationship between concerns about HIV-related stigma, quality of life, and social support and evaluated social support as a possible pathway contributing to the
relationship between stigma concerns and quality of life in low-income Hispanics living with HIV. Persons who expressed greater HIV-related stigma concerns in the context of receiving medical care reported poorer psychological functioning, lower physical functioning and a decreased ability to complete daily activities. In addition, higher levels of stigma concerns were associated with lower social support. Mediation analyses showed that social support accounted, in part, for the relationship between stigma concerns and physical functioning, psychological functioning and interference with daily activities. Finally they suggested that Interventions can direct toward dispelling HIV-related social stigma by educating patients, communities, and physicians would be beneficial to improve quality of life in Hispanics living with HIV.

Li, Wang, Williams and He (2009) reveal that depression was significantly associated with both dimensions of stigma: internalized shame and perceived stigma. Self-reported emotional social support was negatively associated with depression. They found that internalized shame and emotional social support were significant predictors of depression after controlling for gender, age, income, and education. HIV-related stigma has a negative impact on psychological wellbeing of PLWHA in Thailand, and emotional social support remains a protective factor against depression. The men PLWHA more frequently chose to withdraw themselves from family and social gatherings compared to the women PLWHA. They also experienced a higher level of internalized stigma compared to the women PLWHA. The results suggest that the prevalence of internalized stigma is high and much needs to be done by different organizations working for and with the PLWHA to reduce internalized stigma among this vulnerable group.
Collectively the review of Stigma and HIV says that Stigma is more in rural setting, less educated, and high in women. Stigma varied according to age, gender and socio-economic status. Verbal abuse and negative self perception are common forms of stigma. Stigma is associated with other psychological problem like depression. Stigma effects as a barrier of HIV testing and prevention both nationally and internationally.

ii) Studies related to HIV/AIDS and Quality of life

Khumsaen, Aoup-Por and Thammachak (2012) examined the relationships between personal characteristics, social support, spiritual well-being, coping style and adaptation process, and QOL among Thai people living with HIV infection in Suphanburi Province, Thailand. Predictors of QOL were also investigated. Molassiotis's Quality of Life Assessment in Chronic Patients provided the theoretical framework for this descriptive correlational design. On the sample Multiple regressions were used to estimate correlates between the independent study variables and QOL in Thai PLWHA. The results revealed that age, education level, employment status, living in own house, living with family member, social support, spiritual well-being, and coping style and adaptation process were related to QOL. This study provides a backdrop for the implementation of nursing interventions that will be designed to reshape QOL among Thai PLWHA.

Patel, et, al. (2012) reveal that, on most QOL domains women on ART reported higher mean scores as compared to women not on ART. Additionally, women on ART reported less depression compared to women not on ART. Between the two groups of women not on ART, unexpectedly, there were no significant differences in their scores for QOL or depression. Thus, Zimbabwean women living
with HIV experience better overall QOL and lower depression on ART. Altogether, findings suggest that ART delivery in resource-poor communities can enhance overall QOL as well as psychosocial functioning, which has wide-ranging public health implications.

Pereira and Canavarro (2011) reveal that women reported lower scores of Psychological and Spirituality QOL. Younger PLWHA reported higher scores on Physical and Level of Independence domains. Age by gender interactions emerged on all domains of QOL except on the Level of Independence domain. Overall, women over 45 years old showed lower QOL scores. Psychopathological symptoms contributed significantly to the variance of all QOL domains. Gender differences in the association of HIV infection with QOL and psychopathological symptoms seemed to be modulated by age. Understanding gender and age differences (and their interaction) may provide potentially useful information for planning interventions to improve QOL and mental health among people infected with HIV/AIDS, especially among older women.

Hasanah, Zaliha, and Mahiran (2011) reported that those who acquired the HIV infection via a heterosexual route seemed to have a significantly lower social well-being, while those who acquired HIV via drug injection were not associated with losses in the overall QOL or any of its domains. Non-disclosure paradoxically had a greater effect on social well-being. About 38% had possible anxiety, depression or both, and these emotional disturbances were significantly associated with total FAHI and its five domains. Psychological and social well-beings were more affected than physical well-being in out-patients with HIV infection in Kota Bharu, Malaysia. The study suggests that the people living with HIV infection should receive better psycho-education and psychological intervention. He also says that Psychological and social
well-beings were more affected than physical well-being in out-patients with HIV infection in Kota Bharu, Malaysia. He suggests that people living with HIV infection should receive better psycho-education and psychological intervention.

Manciuc, et.al.(2011) explored Quality of life in relation to health is a consequence of disease and treatment on the patient's perception of his ability to have a full and useful life. They operationalized the quality of life using the following parameters: CD4 count and HIV viral levels in the patient's blood, the number of days of hospitalization, number of antiretroviral plans, types of side effects and their frequency, psychological issues (anxiety, depression, and neurotic tendencies). They centralized data from the Regional Center in Iaşi. Side effects accused by the patients emerged from discussions with the infectious disease doctor and psychologist, and psychological aspects were measured by specific instruments (PA Inventory, Beck Depression Scale). Result revealed that most patients enrolled in the study were male (59%) with mean age of 21.1 years. 34% of them came from rural areas. Average schooling level was 6 primary classes, with extremes between the two classes of primary and higher education. Only 14% of patients had a job, while the rest did not have a stable job or were not employed. 38% came from broken homes or foster care. 85% of patients were in therapy at the time of data centralization. 55% were in the second, third or fourth regimen. 25% were at their first scheme, while 10% in the eventh - eighth scheme. They concluded by measuring the quality of life through the above parameters, obtained a clear and comprehensive picture of the situation facing the HIV patient. They believe that close cooperation between the team of doctors and psychologists assisting the infectious patient, on the one hand, and specialists in other medical fields that interact with the patient, on the other hand, can enhance the quality of life of the HIV patient and maintain it at a comfortable level.
Fan, Kuo, Kao, Morisky and Chen (2011) examined the QOL and associated factors including life needs among PLWHA at different stages of their illness in the northern region of Malawi. Survey analysis of consecutive outpatient participants receiving highly active antiretroviral therapy at the Rainbow Clinic and non-HIV patients receiving care at the affiliated Mzuzu Central Hospital during a one-month period was performed. Scores were analyzed using t-test, ANOVA test, and Generalized Linear Model-Tukey’s test. Result revealed that HIV-positive patients had significantly lower physical functioning, mental health, social functioning, and mental component summary scores than HIV-negative patients. Further, WHO Stage III HIV patients had significantly lower vitality and mental health scores than WHO Stages I and I, and physical component summary scores than WHO Stages I and II patients. Finally, AIDS patients, as determined by CD4 count, had significantly lower bodily pain, and physical component summary scores than non-AIDS, HIV-positive patients. They came to conclusion that HIV patients undergoing treatment in Malawi have a significantly lower QOL, both mentally and physically, than their non-HIV counterparts. Further, HIV patients at more advanced stages, both by the WHO definition and by CD4 count, have a significantly lower QOL than HIV patients at earlier stages of the disease.

Abboud, et, al. (2010) explored a cross-sectional descriptive survey, using self-administered questionnaires. A convenience sample aged 18 years and above living with HIV/AIDS was recruited from outpatient departments at two major medical centers in Lebanon. The instruments included the Multidimensional Quality of Life HIV (MQoL-HIV), the HIV Symptom Index and a stigma scale, and a demographic section. The majority of the sample were male and single. The mean age was 38 years. The mean MQoL-HIV score was 176.85, with the highest scores for
the cognitive functioning, social functioning, and medical care; the lowest domain scores were for financial status, sexual functioning, and mental health. A single item measuring overall QOL was rated by 47.5% as neither poor nor good. Mean stigma score was 2.05 and mean HIV Symptom Index score was 0.6. Prevalence of symptoms and perceived stigma were negative predictors of QOL, being married was a positive predictor of QOL. The results of this study, which is the first to look at the QOL in people living with HIV/AIDS in Lebanon and the Middle East and North Africa region, showed that these mostly asymptomatic well-functioning individuals reported a fair level of QOL. The strongest determinants of QOL revolved around psychosocial aspects of life, namely social relationships, mental health, and medical care.

Ogbuji and Oke (2010) reveal that there is no significant relationship between age and quality of life. Almost equal proportion of participants aged 15 - 34 years (50.3%) and 35 - 60 years (49.7%) showed similar quality of life as indicated by emotional status, life satisfaction and level of coping with the infection. Majority (70.0%) considered their poor financial condition a barrier to treatment. Qualitative data showed stigmatization and discrimination against PLWHAs by family and community members regardless of age and gender. This stimulated a deep feeling of sadness, dejection, hopelessness, anxiety and fear thereby affecting negatively their quality of life. Poor financial status of majority of PLWA in Ibadan restricted their access to treatment and other care and services. Discrimination towards them by family, friends and the community affected negatively their quality of life. A combination of strategies-health education, psycho-social interventions is needed in addressing the needs of people living with HIV/AIDS.
Abasiubong, Ekott, Bassey, Etukumana and Edyang-Ekpa (2010) explored objectives of the study was: (i) to assess the quality of life in people living with HIV/AIDS, and (ii) to compare quality of life in males and females living with the disease. People living with HIV/AIDS from the HIV clinic, University of Uyo Teaching Hospital were randomly assessed for quality of life, using HIV/AIDS-Targeted Quality of life (HAT-QOL) questionnaire. Result reveal that: respondents consisting of (36.6%) males and (49.2%) females were analyzed. Females showed lower quality of life in comparable domains than males. The differences in life satisfaction and health worries were statistically significant. The results showed impairment in quality of life, except in medication worries and sexual function in people living with HIV/AIDS.

Vyavaharkar, et, al. (2009) examined physical, psychological, and social factors associated with quality of life (QOL) among rural women with HIV. Of the socio-demographic variables, age, race, and time of HIV diagnosis were significantly associated with QOL. In bi-variate analysis, HIV symptoms (frequency and extent symptoms were bothersome), perceived stigma, internalized stigma, and depression were significantly and negatively associated with QOL whereas social support, problem-focused coping, perceived situational control, and healthy lifestyles were significantly and positively associated with QOL. In adjusted analysis, HIV symptom frequency, depression, problem-focused coping, perceived situational control, perceived stigma, healthy lifestyles, and race remained significant predictors of QOL and explained 55% of the variance in QOL among the study participants. The study findings identify potential points of interventions to improve QOL among rural women with HIV disease.
Chandra, et al. (2009) reported that there was no gender difference in CD4 counts or use of antiretroviral therapy. Of the 29 facets of QOL, men reported significantly higher QOL in the following facets-positive feeling, sexual activity, financial resources and transport, while women reported significantly higher QOL on the forgiveness and blame facet. Of the six domains of QOL, men reported better quality of life in the environmental domain while women had higher scores on the spirituality/religion and personal beliefs domain. Understanding these gender differences may provide potentially useful information for tailoring interventions to enhance QOL among people infected with HIV/AIDS.

Marashi (2009) explored the QOL of patients with HIV/AIDS in New Delhi. Purposive sampling was used to identify subjects from the antiretroviral therapy clinic (ART) in Lok Nayak hospital, patients were interviewed with the WHOQOL-HIV instrument. This questionnaire included demographic data, multi-item scales and six domains namely physical, psychological, level of independence, social relationships, environment and spirituality religion. All domains have higher scores for women than men except the psychological domain. Correlation of scores of six domains with overall QOL score and among individual domains was statistically significant. Younger people showed poorer QOL and level of education correlated positively with all domains of QOL Overall results indicate that quality of life of AIDS attending Lok Nayak hospital is satisfactory.

Solomon, et al. (2009) reported that their study longitudinally assesses the quality of life (QOL) of HIV-infected individuals in a resource-limited setting prior to the extensive generic roll-out of highly active antiretroviral therapy. Data was collected at Y.R. Gaitonde Centre for AIDS Research and Education YRG CARE, a large community-based HIV tertiary care referral center in Chennai, South India. The
QOL questionnaire was administered to participants at baseline, 6-months follow-up, and 12-month follow-up. Study findings showed that QOL scores significantly improved in all five domains of the questionnaire between participants' baseline visit, second interview, and third interviews. They conclude that a multidisciplinary approach to managing HIV infection can enhance patients' QOL, independent of antiretroviral therapy.

Naranjo (2009) reported that many individuals newly infected with HIV struggle with psychosocial influences, such as poverty, stigma, depression, substance abuse, domestic violence, and/or cultural beliefs, which can affect their quality of life (QOL), willingness to seek medical care, and motivation to adhere to therapy, ultimately influencing health outcomes. Previous studies of QOL with HIV reveal that there is a relationship between coping styles and QOL and also age, education level, employment status. QOL is associated with physical, social and psychological domains. Psychological and spiritual QOL is less in women compare to men. Psychological and social well being was more affected in out-patients of PLWHA than inpatients. It is also observed that newly infected PLWHA struggle with psychosocial problems.

Wig, et, al. (2006) determine the impact of HIV/AIDS on the QOL in North India. Patients were administered a structured questionnaire by the HIV nurse coordinator. QOL was evaluated using the WHOQOL-Bref (Hindi) instrument. Result showed the overall QOL mean score on a scale of 0-100 was found to be 25.8. Similarly, on the scale of 0-100 the mean scores in the four domains of QOL in descending order were social (80.9); psychological (27.5); physical (17.7) and environmental domain (11.65). There was a significant difference of quality of life in the physical domain between asymptomatic patients (14.6) and patients with AIDS.
defining illnesses and asymptomatic and early symptomatic (12) patients. QOL in the psychological domain was significantly poorer in early symptomatic (12.1) and AIDS patients (12.4) as compared to asymptomatic individuals (14.2). A significant difference in QOL scores in the psychological domain was observed with respect to the educational status and income of patients. Significantly better QOL scores in the physical and environmental domain were present with respect to the occupation of the patients. Patients with family support had better QOL scores in environmental domain. Finding says that QOL is associated with education, income, occupation, family support and clinical categories of the patients.

iii) Studies related to Stigma and quality of life in people living with HIV/AIDS

In some studies the link between HIV stigma and QOL was directly explored, some of them are;

Subramanian, Gupte, Dorairaj, Periannan and Mathai (2009) reveal that nearly 70% had problems in parenting their children after acquiring the infection. 88% of the respondents reported of seeking help from their family members, relatives or close friends at the time of their illness. Among the four categories of stigma, most of them (96%) reported perceived stigma whereas actual stigma was mentioned by only 33%. All four categories of stigma were experienced on a higher proportion by women than men. Each type of stigma was significantly associated with each domain of quality of life of the respondents. Respondents who reported of actual stigma (33%) had significantly good quality of life in their physical domain (49%), psychological domain (48%) and environmental domain (44%). Multivariate analysis showed that gender and marital status had significant association with quality of life. The findings of the study underscore the need for enabling environment through "human force" to uplift their social status and to have a better quality of life.
Holzemer, Human, Arudo and Rosa (2007) reported that the purpose of their study was to explore the potential contribution of perceived HIV stigma to quality of life for people living with HIV infection. A cross-sectional design explored the contribution of demographic variables, symptoms, and stigma to quality of life in an international sample of people living with HIV infection. Stigma independently contributed a significant 5.3% of the explained variance in quality of life, after removing contributions of HIV-related symptoms and severity of illness. This study empirically documents that perceived HIV stigma had a significantly negative impact upon quality of life for a broad sample of people living with HIV infection.

Holzemer and colleagues (2007) developed a conceptual model of perceived HIV/AIDS-related stigma, based on data from focus groups with PLWHA. In the model, HIV/AIDS stigma is described as a process, with four dimensions: triggers, stigmatizing behaviors, types of stigma, and outcomes of stigma. The outcomes of stigma for example, poor health may also serve as triggers, starting the process again. The stigma process occurs within the environment (political, social, etc), and in the context of the health care system and the individuals who may enact stigma. A decrease in quality of life was identified as one of the outcomes of HIV stigma.

Buseh, Kelber, Stevens and Park (2006) explored the relationship of symptom prevalence and intensity, perceptions of health, and stigma on quality of life (QOL) among HIV-infected African American men. Cross-sectional correlation descriptive study show the result that Prevalent symptoms were fatigue (98%), fear (92.7%), shortness of breath (92.7%), gastrointestinal upset (85.5%), numbness (80.0%), and headache (76.4%). Symptoms with the highest intensity were gastrointestinal upset, body changes, fear, and fatigue. Symptom intensity was significantly associated with the measures of stigma and QOL.
Thomas, et al. (2005) reveal empirical clinic-based study which explored the relationship between stigma and quality of life in Chennai, India. The sample of persons living with HIV infection reported that the actual stigma experienced was much less (26%) as compared to the fear of being stigmatized (97%). Internalizing stigma was found to have a highly significant negative correlation with QOL in the psychological domain and a significant negative correlation in the environmental domain. Individuals are vulnerable to feelings of self-hatred. However, those who did experience actual stigma seemed more determined to have a good quality of life.

Phaladze, et al. (2005) reported that the purpose of their study was to increase understanding of the meaning of quality of life for people living with HIV/AIDS in four countries in sub-Saharan Africa: Botswana, Lesotho, South Africa, and Swaziland. Methods: Using a cross-sectional design and convenience sample, we administered a survey and collected data on demographic characteristics, measures of severity of illness, and perceptions of quality of life. The purposefully selected sample consisted of community-based people living with HIV/AIDS in 2002. Based on the Wilson and Cleary framework for organizing variables related to quality of life, a hierarchical multiple regression was conducted with quality of life as the dependent variable. Results reveal that the sample of 743 persons was 61.2% female with a mean age of 34 years. Approximately 62% of the sample reported having received an AIDS diagnosis. Ten predictor variables explained 53.2% of the variance in life satisfaction. Those participants with higher life satisfaction scores were less educated, had worries about disclosure and finances, did not have an AIDS diagnosis or other comorbid conditions, had lower symptom intensity, had greater functioning, and had fewer health worries. None of these participants was taking antiretroviral medications at the time of this study. They concluded that several dimensions of the Wilson and Cleary
model of quality of life were significantly related to life satisfaction for people living with HIV/AIDS in sub-Saharan Africa. Quality of life for this sample was primarily defined as overall functional ability and control over symptom intensity. These findings are similar to studies in developed countries that have shown the significant relationships among functional abilities, symptom control, and perceived quality of life. As antiretroviral medications become more available in these areas, community members and care providers can help clients realize the possibility of living well with HIV/AIDS, and can work with clients to improve functional ability and control symptom intensity to make living well a reality.

Geurtsen (2005) explored QOL is linked to variables that could be linked to HIV stigma. The researcher found that themes such as the ability to maintain life functioning, isolation, getting sick and current hardships were all variables that affected the quality of life of a person living with HIV/AIDS. The study further reported that themes such as secrets and silence about their HIV status, selective disclosure to some and not to others, living in the present rather than thinking of the future, and hopefulness were ways in which the participants felt they were achieving their own quality of life outcomes.

Thomas, et, al. (2005) explored an empirical clinic-based study explored the relationship between stigma and quality of life in Chennai, India. The sample of persons living with HIV infection reported that the actual stigma experienced was much less (26%) as compared to the fear of being stigmatized (97%). Internalizing stigma was found to have a highly significant negative correlation with QOL in the psychological domain and a significant negative correlation in the environmental domain. Individuals are vulnerable to feelings of self-hatred. However, those who did experience actual stigma seemed more determined to have a good quality of life.
It can be observed from the previous studies of stigma and QOL in PLWHA is that the components of stigma and components of QOL are associated. Stigma had a negative impact on QOL and they found highly significant negative correlation with QOL. It is seen that decrease in QOL was identified as one of the outcomes of HIV stigma.

(iv) **Studies related to Interventions for Stigma and quality of life**

There has been limited research to evaluate interventions to mitigate the impact of HIV/AIDS stigma and enhance QOL.

Schneiderman, Antoni, and Ironson (2011) Investigated in the Behavioral Medicine Research Center at the University of Miami examined relations among stress, immunity, and secondary prevention of HIV/AIDS for decades. The idea that patients can remain free of symptoms for a prolonged period, and that appropriate patient management could delay the onset of AIDS and ameliorate its course potential across the HIV disease spectrum was the impetus for our research. With these ideas, They came to view HIV as a chronic disease and utilized group- based cognitive behavioral stress management (CBSM) to improve quality of life and slowing symptom onset for those infected with HIV. Results revealed that: CBSM can improve the HIV-infected person's quality of life by decreasing the distress and depressed affect associated with having a chronic and likely fatal disease. Further, by utilizing CBSM techniques, the subsequence use of acceptance and positive reframing strategies would inherently lead to increased, or maintained, social support. A psychosocial intervention facilitates adherence to good health practices and appropriate utilization of the health care system. This occurs by decreasing the use of maladaptive coping strategies, such as avoidance and denial, and instead using more
problem-focused strategies. A CBSM intervention, including relaxation training, is able to attenuate the impact of stressors upon an already compromised immune system and in so doing might slow the course of immune decline that is observed in HIV spectrum disease.

Young, et, al. (2011) evaluates the effects of a community popular opinion leader HIV/STI intervention on stigma. Mixed effects modeling was used to analyze data on participants from the Peru site of the NIHM collaborative trial. Compared to participants in the comparison group, intervention participants reported lower levels of stigma at 12- and 24-month follow-up. Similar results were found within esquineros and homosexuales. No significant differences were found within movidas. Findings suggest that interventions designed to normalize HIV prevention behaviors and HIV communication can reduce HIV-related stigma and change community norms. Nonetheless, the existing literature didn’t focus on the role of Psycho-education in reducing stigma.

Sengupta, Banks, Jonas, Miles and Smith (2011) reviewed the literature to determine the effectiveness of HIV-related interventions in reducing HIV/AIDS stigma. Studies selected had randomized controlled trial (RCT), pretest-posttest with a non-randomized control group, or pretest-posttest one group study designs in which HIV-related interventions were being evaluated, and in which HIV/AIDS stigma was one of the outcomes being measured. A checklist was used to extract data from accepted studies, assess their internal validity, and overall quality. Data were extracted from 19 studies, and 14 of these studies demonstrated effectiveness in reducing HIV/AIDS stigma. Only 2 of these 14 effective studies were considered good studies, based on quality, the extent to which the intervention focused on reducing HIV/AIDS stigma, and the statistics reported to demonstrate effectiveness.
Future studies to reduce HIV/AIDS stigma could improve by designing interventions that pay greater attention to internal validity, use validated HIV/AIDS stigma instruments, and achieve both statistical and public health significance.

Lindley, Coleman, Gaddist and White (2010) determine the baseline level of HIV-related knowledge and stigmatizing attitudes, conducted a survey with parishioners, pastors, and care team members at Project F.A.I.T.H. churches, measuring their HIV-related knowledge and stigmatizing attitudes. Result said While most parishioners were very knowledgeable about HIV transmission via unprotected sex and needle sharing during injection drug use, they were less knowledgeable about transmission via casual contact, mosquitoes, donating blood, and an HIV test. Overall, HIV-related stigma was low at Project F.A.I.T.H. churches. Pastors and care team members at Project F.A.I.T.H. churches were significantly more knowledgeable and harbored significantly less stigma than their parishioners. They suggested that to effectively address HIV-related stigma at African American churches, educational programs must reinforce the ways in which HIV can and cannot be transmitted, and pay particular attention to educating males and older populations. These findings may be helpful to HIV-prevention efforts targeting African American faith-based organizations in South Carolina and elsewhere.

Wu, et, al. (2008) assessed the effect of a brief intervention aimed at reducing HIV-related stigma among service providers in China. Service providers from four county hospitals in the Yunnan province of China were randomly assigned into either an intervention or a control condition. HIV stigma reduction concepts were conveyed through participatory small group activities, including role-plays, games, group discussions, and testimony by an HIV advocate. Participants were assessed at baseline before the intervention, and at 3- and 6-month follow-ups. Data were analyzed using a
logistic regression mixed-effects model. Service providers in the brief intervention condition were significantly more likely to report better protection of patients' confidentiality and right to HIV testing, lower levels of negative feelings toward people living with HIV/AIDS, and more accurate understanding and practice of universal precautions. This brief intervention pilot showed potential in reducing HIV stigma and discrimination among service providers in China.

Lechner, et al. (2003) examine on study tested the effects of group-based cognitive-behavioral stress management/expressive-supportive therapy intervention (CBSM+) and a time-matched individual psycho-educational condition for women with AIDS reporting moderate to poor baseline QOL. QOL scores increased over the course of both interventions for the total QOL score and three QOL domains: cognitive functioning, health distress and overall health perceptions. While women in the CBSM+ group condition showed a significant improvement in mental health QOL from pre to post intervention, women in the individual condition did not change. No changes were observed for energy/fatigue, health transition, single-item overall QOL, pain, physical well-being, role functioning or social functioning in either condition. A finding of this study reports that intervention being effect in improving QOL.

Bajaj, Kalia and Mann (2004) reported that combining counseling and information-based approaches that break the "culture of silence" associated with HIV/AIDS and promote a culture of openness and support, can have a catalytic effect-starting a chain reaction that reduces stigma and discrimination and eventually also prevalence of HIV in the community.

The above studies on Intervention on stigma and QOL reveal that CBSM appears to be effective in management of HIV spectrum disease. HIV/STI
intervention normalized the HIV prevention and change in community norms. Brief intervention was effective in enhancing QOL.

v) Studies related to Psycho-education as intervention for other issues

Kreiner, Baranyi, Stepan and Rothenhausler (2009) found significant improvement in mental health status, life satisfaction, psychopathology, specific knowledge about depression and compliance. The vast majority of their sample would highly recommend Psycho-education to other depressive patients, and found an increase in knowledge about depression to be supportive. They suggested that future research should also focus on comparison studies of Psycho-education in depressive patients with Psycho-education in schizophrenic patients, particularly as Psycho-education has proven to be an effective treatment in schizophrenia.

Olley (2006) evaluated the efficacy of an individualized Psycho-education program in reducing psychological distress and risky sexual behavior and enhancing self-disclosure of HIV infection among attendees of a voluntary counseling and testing (VCT) center in Nigeria. The individuals were consecutively assigned to two groups: first group were assigned to psycho-education (PE) and second group were assigned to an attention-placebo control wait list group. Compared to the WL control group, the Psycho-education group showed a significant decrease in depression score, a significant decrease in the aggregate score of neurotic disorders, and a significant increase in safe-sex practices and self-disclosure of HIV status to significant others at four-week follow up. Within the PE group there was a significant decrease in BDI depression scores from baseline to four weeks post-assessment. The CCEI measures also indicate a significant decrease on all measures of neurotic disorders from pre-test to the four weeks post-assessment. Authors conclude that their manual-driven
Psycho-education program was effective in increasing HIV self-disclosure, reducing depression, and improving safe sexual practices.

Pomeroy, Kiam and Abel. (1999) saw effectiveness of a Psychoeducational group intervention for HIV/AIDS-infected and affected women was examined at a large southeastern county jail facility. A quasi-experimental pretest-posttest design was used to examine depression, anxiety, and trauma symptoms of women inmates. Results revealed that a multivariate analysis of covariance yielded significant differences between the experimental and comparison groups. Subsequent analysis of covariance for each dependent variable indicated significant differences between groups as well. Effect sizes ranged from moderate to strong. The Psychoeducational group intervention appeared to be effective in alleviating depression, anxiety, and trauma symptoms among women inmates infected and affected by HIV/AIDS.

Above studies on Psycho-education to other issues reports that Psycho-education is effective in reducing depression, anxiety, trauma, psychological distress, and increase in knowledge of HIV/AIDS.

**Overall Summary**

Collectively, previous research indicates that the PLWHA will deal with high stigma and low QOL. The importance Psycho-education to deal with stigma and QOL in PLWHA has been noted in the previous studies. Effect of Psycho-education on various other disorders was established. Charles et al. (2012) have explored the association between stigma, depression and QOL in PLWHA. He suggests that there is a need of Interventions to facilitate HIV positive persons to effectively cope with HIV associated stigma is urgently required in India. Nevertheless, there is a dearth of information that specifies the need to develop such interventions. Brown, Trujillo and
Macintyre (2003) suggest that AIDS stigma can be reduced through intervention strategies including information, counseling, coping skills and acquisition, and contact with affected groups. However, the review of literature did not reveal any research, investigating the effect of Psycho-education on stigma and QOL in PLWHA. Based on the above review, we hypothesized the impact of Psycho-education on stigma and QOL in PLWHA.