Chapter 2
Review of Literature
CHAPTER TWO

REVIEW OF LITERATURE

Literature review is an assessment of the literature which provides the summary of the literature available on a particular topic. Literature review is a basis for research in nearly every academic field. The process of reviewing the literature is often ongoing and informs many aspects of the research (Wikipedia, n.d). It gives a theoretical base for the research and helps the researcher determine the nature of a research work. The works which are irrelevant should be discarded and those which are peripheral should be looked at critically. All works included in the review must be read, evaluated and analyzed. Relationships between the literature must also be identified and articulated, in relation to your field of research. The purpose of the literature review is to convey to the reader what knowledge and ideas have been established on a topic and what their strengths and weaknesses are. The literature review must be defined by a guiding concept (e.g. your research objectives, the problem or issue you are discussing or your argumentative thesis) (Taylor, n.d). The current review of literature provides the summery of the works related to the topic entitled “death anxiety, religiosity and optimism as related to mental well-being among people living with HIV/AIDS”.

2.1 Death Anxiety

Sewell et al. (2000) carried out a 2-year longitudinal study to evaluate prevalence of Axis I anxiety disorders and anxiety symptoms and their relationship to manifestations of HIV illness in a sample of no intravenous drug users. The sample comprised of 173 homosexual men with HIV or AIDS (HIV/AIDS) and 84 homosexual men negative for HIV or AIDS (HIV). Data were compared with national prevalence rates to make available a framework for interpretation. No significant differences were observed. However, compared with the general population, both HIV/AIDS and HIV men reported more anxiety symptoms
and stress. For the HIV/AIDS group there was a positive relationship between anxiety and HIV symptoms, fatigue, and physical limitations. No changes in rates or levels of anxiety were observed in those whose immunologic markers improved or worsened over the 2 years.

Mystakidou et al. (2005) conducted a study for the assessment of anxiety and depression in advanced cancer patients and their relationship with quality of life. Results revealed that in the prediction of HAD-T, the contribution of physical, emotional, role, and social functioning along with nausea-vomiting, dyspnea, sleep disturbance and gender is high. For anxiety, the predictor variables were physical, role, cognitive, emotional, and social functioning, followed by dyspnea, sleep disturbance, and appetite loss, while depression was predicted by physical, pain, sleep disturbance, constipation, as well as pain and, nausea-vomiting.

Morrison et al. (2011) conducted an interview to gain an initial perspective of mental health issues facing the Human Immunodeficiency Virus (HIV)-positive population at the University Hospital Center of Tirana (UHCT) HIV/AIDS Ambulatory Clinic. From June-August 2009, they conducted semi structured interviews with 79 patients (93% response rate) at the UHCT HIV/AIDS Ambulatory Clinic. The interviews assessed patient-reported histories of mental health diagnoses, patients’ demographics, and current emotional health status. The results revealed that the percentage of patients who reported a history of diagnosis of depression or anxiety was high – 62.3% and 82.3%, respectively. Factors associated with a history of depression included having been diagnosed with anxiety ($P < 0.001$), having a higher number of barriers to care ($P < 0.001$), having a higher number of current medical and social needs ($P < 0.001$), or having not obtained antiretroviral therapy (ART) abroad ($P = 0.004$). Factors associated with a history of anxiety included having been on first-line ART ($P = 0.008$), having been diagnosed with HIV for shorter periods of time ($P = 0.043$), having
been diagnosed with depression \((P < 0.001)\), having a higher number of current medical and social needs \((P = 0.035)\), or having not obtained ART abroad \((P = 0.003)\).

Kagee and Martin (2010) conducted a study to assess the Symptoms of depression and anxiety among a sample of South African patients living with HIV. Little systematic research has been conducted on the extent of psychiatric disorders among South African patients in general, and among patients living with HIV in particular. The present study reports on a survey conducted among 85 patients receiving treatment at three HIV clinics in the Western Cape. Participants completed the Hopkins Symptom Checklist (HSCL) and the Beck Depression Inventory (BDI), two self-report instruments designed to measure mood disturbance. The mean score of the sample on the HSCL was 47.54, which was significantly different from the commonly used cut-point of 44 for clinically significant distress; 52.9\% of the sample scored in the elevated range on this measure. On the BDI, 37.6\% of the sample fell in or above the moderate range for depression. The results suggest that a considerable proportion of the sample may be experiencing psychiatric difficulty, for which they may not be receiving treatment.

Kolva, Rosenfeld, Pessin, Breitbart, and Brescia (2011) conducted a study to examine anxiety in terminally ill cancer patients, including the prevalence of anxiety symptoms, the relationship between anxiety and depression, differences in anxiety between participants receiving inpatient palliative care and those receiving outpatient care, and characteristics that distinguish highly anxious from less anxious patients. Participants were 194 patients with terminal cancer. Approximately half \((n = 103)\) were receiving inpatient care in a palliative care facility and half \((n = 91)\) were receiving outpatient care in a tertiary care cancer center. The Hospital Anxiety and Depression Scale were used to assess anxiety and depression, and were administered along with measures of hopelessness, desire for hastened death, and social support. Participants obtained a wide range of scores on the HADS-A (0 to 21), with the
majority of participants reporting low levels of anxiety and others experiencing severe and 
clinically significant anxiety. Although infrequently studied, these rates of clinically 
significant anxiety symptoms are consistent with a recent prevalence study examining anxiety 
disorders in terminally ill cancer patients.

Miller, Lee, and Henderson (2012) did a Systematic Review and Meta-Analysis. 18 
studies analyzed here included 1,757 participants; 1,072 had been diagnosed with 
HIV=AIDS, 661 were HIV_, and 24 did not know their HIV status. Average participant age 
across studies was 38.35 years. The meta-analytic results clarify the state of the extant 
empirical research on DA in persons with HIV=AIDS. First, although DA has been observed 
to a greater extent in persons with HIV=AIDS than in HIV_ persons, moderating variables of 
this effect suggested that DA subsides subsequent to HIV diagnosis and, importantly, 
whereas studies conducted prior to the advent of HAART document the effect of HIVþ status 
on DA, studies conducted after the advent of HAART suggest that persons with HIV= AIDS 
do not exhibit significantly greater DA than HIV_ persons. The former moderation effect is 
consistent with studies demonstrating that distress associated with HIVþ test results declines 
and adjustment improves subsequent to initially testing positive. The latter effect is consistent 
with recent meta-analytic research demonstrating that personal coping strategies (e.g., direct 
action, approach coping) generally exhibit strengthened inverse association with illness-
related negative affect following the advent of HAART.

Olagunju, Adeyemi, Ogbolu, and Campbell (2012) held a study that aimed to find out 
the relevance, types and correlates of anxiety disorders among people living with HIV/AIDS 
attending a sub-saharan Afirican HIV clinic. The results revealed high prevalence of anxiety 
disorders among PLWHI which is many folds the prevalence rates reported among the 
general population. The diagnoses of anxiety disorder in PLWHA are more likely among
those with lack of family support, loss of sources of livelihood and less likely in PLWHA with no previous history of mental illness and younger age group.

Dalmida, Koenig, and Holstad (2013) conducted a study where the final sample included 292 male and female outpatients with various stages of HIV/AIDS. Eligibility criteria required participants to be HIV-positive, 18 years of age or older, able to speak and understand English, and mentally competent as determined by a screening assessment with the Mini Mental Status Exam (scores ≥ 27). The MMSE was administered by the Principal Investigator (PI) or a trained research interviewer and all other questionnaires were administered using the Audio Computer Assisted Self Interview (ACASI) on laptop computers. 56.7% reported depressive symptoms. PLWHA with depressive symptomatology reported significantly poorer health outcomes, including poorer HIV medication adherence, lower CD4 cell count, and poorer HRQOL. Social support partially mediated the relationship between religious coping and depressive symptoms. High rates of depressive symptoms are present in PLWHA, which negatively impact health outcomes. Religious coping, perceived stress, and social support satisfaction serve an important role in depressive symptomatology among PLWHA.

Hong and Tian (2014) investigated the prevalence of anxiety and depression and their risk factors in Chinese cancer patients. The sample included 1217 patients and all the participants provided their written consent. The levels of anxiety and depression differ with the tumor sites. Lung, esophagus and cervix cancer patients were the high-risk group for anxiety. Poor performance status, pain, old age and low-level education were the risk high factors for depression, whereas poor performance status, old age, and female gender were the predicting factors for anxiety.
Yi et al. (2015) examined the association of AIDS-related stigma and discrimination with mental disorders among PLHIV in Cambodia. This study examined the prevalence rates of different forms of AIDS-related stigma and discrimination and their relationship with mental disorders among PLHIV in Cambodia. Consistent with previous studies, this study demonstrates that PLHIV continue to experience significant levels of various forms of stigma and discrimination in familial and community interactions that impact a broad range of aspects in their daily lives, although they manifest differently and in varying degrees in different settings and countries.

Kee et al. (2015) held a study to assess anxiety and depressive symptoms among patients infected with human immunodeficiency virus in South Korea. The results showed the prevalence of anxiety symptoms in HIV-infected with Korean was about 32% (mean of anxiety score, roughly 47 point), and that of depressive symptoms was around 36% (mean of depression score, approximately 14 point). The factors related with symptoms of anxiety or depression in HIV patients were smoking and constant symptoms for more than one week within the past six months.

Ng et al. (2015) studied the level of depression, anxiety, QoL and PSS among Malaysian breast cancer women over a period of 12 months and their associations at baseline, 6 and 12 months. Malaysian breast cancer women had relatively better QoL with lower level of anxiety and depression. Perceived social support was an important factor for better QoL and low level of psychological distress. It reflects the importance of attention on activities that enhance and maintain the social support system for breast cancer patients.

Tesfaw et al. (2016) conducted a cross-sectional study at ALERT hospital May, 2015. Data were collected using a pretested, structured and standardized questionnaire. Systematic sampling technique was used to select the study participants. Binary logistic regression
analysis was used to identify associated factors. Odds ratio with 95 % CI was computed to assess the strength of associations. The results revealed that the prevalence of co-morbid depression and anxiety among HIV patients was 24.5 % and prevalence of depression and anxiety among HIV patients was 41.2 % (172) and 32.4 % (135) respectively. Multivariate analysis showed that individual who had perceived HIV stigma (AOR = 3.60, 95 % CI (2.23, 5.80), poor social support (AOR = 2.02, 95 % CI (1.25, 3.27), HIV stage III (AOR = 2.80, 95 % CI (1.50, 5.21) and poor medication adherence (AOR = 1.61, 95 % CI (1.02, 2.55) were significantly associated with depression. Being female (AOR = 3.13, 95 % CI (1.80, 5.44), being divorced (AOR = 2.51, 95 % CI (1.26, 5.00), having co-morbid TB (AOR = 2.74, 95 % CI (1.37, 5.47) and perceived HIV stigma (AOR = 4.00, 95 % CI (2.40, 6.69) were also significantly associated with anxiety.

Watts, Prescott, Mason, McLeod, and Lewith (2015) aimed to systematically review the literature pertaining to the prevalence of depression and anxiety in patients with ovarian cancer as a function of treatment stage. 3623 patients with ovarian cancer from primary research investigations. Their findings suggest that the prevalence of depression and anxiety in women with ovarian cancer, across the treatment spectrum, is significantly greater than in the healthy female population. With the growing emphasis on improving the management of survivorship and quality of life, they conclude that further research is warranted to ensure psychological distress in ovarian cancer is not under diagnosed and undertreated.

Shukla, Agarwal, Singh, and Srivastava (2016) held a study to examine anxiety among people living with HIV/AIDS on antiretroviral treatment attending tertiary care hospitals in Lucknow, Uttar Pradesh, India. Hospital-based cross-sectional study was conducted from November 2013 to March 2014 among 170 patients on treatment attending antiretroviral therapy (ART) centre of two tertiary care hospitals of Lucknow. Systematic random sampling was used to recruit patients. The anxiety level of all included patients was
scored as per Hamilton anxiety rating scale. The mean HAM-A score of 179 patients was 10.74±6.04. Majority (92.1%) of the patients had HAM-A score less than 17 indicating mild severity, 5.0% of the patient had mild to moderate severity while only 2.7% had moderate to severe level of anxiety symptoms. None of the patient had very severe level of anxiety. Significant association was found between level of anxiety symptoms with educational status (0.03), perception of side-effects during last one month (0.03) and duration of treatment (0.04).

Charalambous, Kaite, Charalambous, Tistsi, and Kouta (2017) attempted to explore the anxiety levels and any correlations to the quality of life of women with breast cancer that were undergoing chemotherapy. The time following the completion of the first cycle of chemotherapy is associated with anxiety and lower quality of life levels in breast cancer patients.

2.2 Religiosity

Cotton et al. (2009) conducted the study with the purpose to characterize spirituality and religion in a diverse sample of patients with HIV/AIDS and to examine the association of spirituality/religion with various demographic, clinical, and psychosocial correlates both at baseline and over time. This study was one of the first to examine changes in levels of spirituality in people with a chronic illness using a longitudinal design. Over 12 to 18 months, mean levels of spirituality, the use of religious coping strategies, and participation in both organized and non-organized religious activities did not change significantly for the cohort, indicating that spirituality/religion was generally a relatively stable construct in these patients’ lives. On the other hand, increases in meaning/peace scores over 12 to 18 months were evident, as expected from aging and perhaps from reassessing life and its meaning in the face of a serious illness. The decrease in levels of intrinsic religiosity (i.e., internalization of
one’s religious practices and beliefs), however, were more surprising and may reflect the relatively lower rates of religious service attendance (and therefore of formal practices) in this population. Increases in levels of spirituality were associated, not surprisingly, with certain positive life changes: having secured housing; having more life satisfaction, social support, self-esteem, and optimism; having fewer depressive symptoms; and having had a longer time since diagnosis.

Yi et al. (2006) aimed to investigate religion, spirituality, and depressive symptoms in patients with HIV/AIDS. Patients were selected from 4 medical centers in 3 cities in 2002 to 2003, and then the trained interviewers administered the questionnaires. Data were collected from 450 subjects. Lower spiritual well-being were related to significant depressive while personal religiosity and having a religious affiliation was not associated when controlling for other factors. Helping to address the spiritual needs of patients in the medical or community setting may be one way to decrease depressive symptoms in patients with HIV/AIDS.

Szafarski et al. (2006) held this study to estimate the direct and indirect effects of spirituality/religion on patient’s perceptions of living with HIV/AIDS. It was found that with the perceptions of living life with HIV/AIDS, the level of spirituality/religion is positively associated, both directly and indirectly.

Trevino et al. (2007) attempted to investigate the relationship between positive coping and spiritual struggle versus viral load, CD4 count, quality of life, HIV symptoms, depression, self-esteem, social support and spiritual well-being in 429 patients with HIV/AIDS. The results of the study revealed religious coping was associated with positive outcomes while spiritual struggle was associated with negative outcomes. In addition, high levels of positive religious coping and low levels of spiritual struggle were associated with small but significant improvements over time.
Muturi and An (2010) attempted to explore whether and to what extent religiosity plays a role in stigma toward HIV/AIDS. Results of hierarchical regression showed that after controlling for key factors, religiosity was a significant factor predicting the level of religious stigma. Those with high religiosity displayed significantly higher stigma, associating HIV/AIDS with a curse or punishment from God. Verbatim responses to an open-ended question also revealed seemingly ingrained prejudice against HIV/AIDS from a religious perspective. The findings point to the important role of faith-based organizations (FBOs) in addressing HIV/AIDS issues within African American communities.

Holt, Oster, Clay, Urmie, and Fouad (2011) intended to examine the role of religiosity in functioning among African Americans and Whites with a cancer diagnosis. Patients were recruited from an existing study and mailed a religiosity survey. Participants (N=269; 36% African American; 56% women) completed the mail survey, and interview data from the larger cohort was utilized in the analysis. Multivariate analyses indicated that in the overall sample, religious behaviors were marginally and positively associated with mental health and negatively with depressive symptoms. Among women, religious behaviors were positively associated with mental health and negatively with depressive symptoms. Religiosity was not a predictor of study outcomes for men. Among African Americans, religious behaviors were positively associated with mental health and vitality. Among Whites, religious behaviors were negatively associated with depressive symptoms.

McFarland, Pudrovská, Schieman, Ellison, and Bierman (2013) planned to evaluate whether cancer diagnosis influence religiosity or not. Results showed that a cancer diagnosis was associated with increased religiosity. Moreover, they found: (a) no evidence that the influence of cancer varied by cohort; (b) strong evidence that people diagnosed with cancer at earlier ages experienced the largest increases in religiosity; and (c) no evidence that changes in religiosity are influenced by years-since-diagnosis.
Szafarski (2013) attempted to focus on special populations (ethnic-minorities, women, and youth), spirituality/religion measurement, mediating/moderating mechanisms, and individual and community-level interventions. Spirituality/religion in PLWH has been refined as a multidimensional phenomenon which improves health/quality of life directly and through mediating factors (healthy behaviors, optimism, social support). Spirituality/religion helps people to cope with stressors, especially stigma/discrimination. Spiritual interventions utilizing the power of prayer and meditation and addressing spiritual struggle are under way. Faith-based community interventions have focused on stigma and could improve individual outcomes through access to spiritual/social support and care/treatment for PLWA. Community engagement is necessary to design/implement effective and sustainable programs.

Caplan, Sawyer, Holt, and Brown (2014) examined changes in religiosity among community-dwelling cancer survivors. Previously diagnosed and newly diagnosed cancer survivors age 65+ were interviewed at baseline and four years later to understand how components of religiosity may change. Religiosity was assessed as organizational, non-organizational, and intrinsic using the Duke Religiosity Scale. At four years, 45 persons had a new diagnosis of non-skin cancer in addition to the 94 diagnosed at baseline. In comparison to persons without a cancer diagnosis and participants with a baseline diagnosis, newly diagnosed participants were more likely to decrease church attendance. Although not statistically significant, a larger proportion of recently diagnosed persons increased non-organizational religiosity behaviors and intrinsic religiosity compared to those with cancer at baseline and those without cancer. African Americans were more likely than Caucasians to show increased non-organizational religiosity. Caucasians with a cancer diagnosis showed increased intrinsic religiosity, perhaps because of a ceiling effect among African Americans. Although all groups showed declines and increases in the measures, baseline religiosity was
the strongest predictor of religiosity at 48 months, indicating stability in religiosity over time, even in the context of a cancer diagnosis.

Salsman et al. (2016) conducted the study to examine the correlation between Religion/Spirituality and Mental Health in Cancer. Four electronic databases were systematically reviewed and 2,073 abstracts met initial selection criteria. Reviewer pairs applied standardized coding schemes to extract correlational indices of the relationship between R/S and mental health. A total of 617 effect sizes from 148 eligible studies were synthesized using meta-analytic generalized estimating equations; subgroup analyses were performed to examine moderators of effects. The relationship between R/S and mental health is generally a positive one. The strength of that relationship is modest and varies as a function of R/S dimensions and mental health domains assessed.

Igbende et al. (2016) in their study examined belief about spiritual healing, gender and adherence to medication among 143 HIV/AIDS patients attending General Hospital Sankera in Benue State. The respondents were in the age range of 20-67 with a mean age of 33.4 years. Out of this number, 69 (48.3%) were males while 74 (51.7%) were females. Morisky Adherence to Medication Scale (MAMS) and Perceived Potency of Spiritual Healing Questionnaire (PPSHQ) were used for data collection. The results of the Analysis of Variance (ANOVA) indicated that perceived potency of spiritual healing and gender produced main effects on adherence to medication among HIV/AIDS patients.

2.3 Optimism

Frain, Berven, Chan, and Tschopp (2008) held a study which intended to contribute to the understanding of quality of life as it is experienced by a community-based, non-clinical sample of individuals with HIV/AIDS, applying family resiliency theory and cognitive appraisal concepts. More specifically, the following variables were examined as predictors of
quality of life: disease progression; the family resiliency variables of family problem solving and coping ability, family resources, and family appraisal of the diagnosis; and the cognitive appraisal variables of uncertainty and optimism. Through the use of a Web-based survey, 147 individuals with HIV/AIDS completed an online questionnaire, defining family broadly and in their own way, and responding to instruments measuring disease progression and their perceptions of family resiliency, cognitive appraisal and quality of life. Disease progression as measured by CD4 count, was not found to be related to quality of life. When considered separately, both the family resiliency variables and the cognitive appraisal variables were found to predict quality of life. However, when entered after disease progression and cognitive appraisal variables in a hierarchical regression equation, the family resiliency variables were not found to add significantly to the prediction of quality of life, due to the inter correlations between the family resiliency and cognitive appraisal variables. One important consideration in interpreting the results is that a number of individuals who lived alone indicated that they were unable to respond to the family resiliency measures, and living situation may be an important factor in the influence of family resiliency variables in predicting quality of life. The overall prediction model, comprised of the three sets of predictor variables, was found to explain over 60% of the variance in quality of life. The results may be helpful in understanding the quality of life of individuals with HIV/AIDS and may be of assistance to professionals in identifying needed interventions and service delivery options.

Park, Kang, and Weaver (2013) intended to study the effect of breast cancer risk, psychological distress, and dispositional optimism on immune responses in healthy women. A convenience sample of 117 healthy women completed questionnaires for objective and subjective breast cancer risk assessment, psychological distress, and dispositional optimism and gave a blood sample for measurements of NKCA. Objective breast cancer risk was
assessed using a computer program based on the modified Gail model. Data were analyzed using multiple regressions and Pearson’s correlation coefficients. Higher objective risk was associated with lower NKCA at 12.5:1 effect or to target ratio after controlling for birth control use and subjective risk, whereas subjective risk showed no effect on NKCA. Psychological distress did not mediate the effect of subjective risk on NKCA, although high subjective risk was associated with high psychological distress. Dispositional optimism moderated the relationship of subjective risk with general psychological distress, but not with breast cancer-specific distress. In addition, objective breast cancer risk showed a modest but significant positive correlation with subjective risk. Correlational and multiple regression analysis revealed that optimism was positively and directly related to emotional well-being, optimism was positively and directly related to self-transcendence, perceived social support was positively and directly related to emotional well-being, and problem-focused coping was positively and directly related to emotional well-being. Self-transcendence was found to mediate the relationship between optimism and emotional well-being.

Nirmal, Divya, Dorairaj, and Venkateswaran (2008) studied quality of life in HIV/AIDS patients: A cross-sectional study in south India. This study was done from July to September, 2007 in the outpatient department of the ART clinic at a tertiary care hospital, Chennai, South India. QOL was evaluated using WHO QOLBREF instrument ideally suited for busy clinics. WHO QOLBREF has 26 items grouped under four domains. In this study, the environmental domain had the maximum QOL score of the four QOL domains. This suggests that the patients had relatively better quality of health services and good accessibility to them, whereas the domain hardly hit was the social domain with scores way behind the other three domains indicating that the patients’ social contacts and sexual activity were affected markedly to a great extent. The QOL scores had linear relationship with the CD4 counts. When the study population was divided into men and women and their CD4
counts were compared, women in the study had better CD4 counts compared to their male counterparts.

Campos, César, and Guimarães (2009) investigated quality of Life among HIV Infected Patients in Brazil after Initiation of Treatment. Patients were recruited at two public health referral centers for AIDS, Belo Horizonte, Brazil, for a prospective adherence study. Patients were interviewed before initiating treatment (baseline) and after one and four months. Quality of life was assessed using a psychometric instrument, and factors associated with good/very good quality of life four months after the initiation of antiretroviral therapy were assessed using a cross-sectional approach. Logistic regression was used for analysis. Overall quality of life was classified as ‘very good/good’ by 66.4% of the participants four months after initiating treatment, while 33.6% classified it as ‘neither poor nor good/poor/very poor’. Logistic regression indicated that >8 years of education, none/mild symptoms of anxiety and depression, no antiretroviral switch, lower number of adverse reactions and better quality of life at baseline were independently associated with good/very good quality of life over four months of treatment.

Basavaraj, Navya, and Rashmi (2010) did a review which highlights the relevance and complexity of physical, psychological, and social factors as determinants of health-related quality of life in HIV-infected persons. The data suggested that physical manifestations, antiretroviral therapy, psychological well-being, social support systems, coping strategies, spiritual well-being, and psychiatric co-morbidities are important predictors of QOL in this population. Consequently, the impact of HIV infection on the dimensions of QOL, including physical and emotional well-being, social support systems, and life roles, has emerged as a key issue for persons infected with HIV.
Mazanec, Daly, Douglas, and Lipson (2010) examined the relationships between dispositional optimism and HRQOL in newly-diagnosed adult cancer patients. Optimism was significantly correlated with spiritual well-being, anxiety, depression, and HRQOL. Optimism was not a significant predictor of HRQOL at initial diagnosis and treatment when age, and scores for functional status, spiritual well-being, depression, and anxiety were entered into the regression equation.

Imam, Karim, Ferdous, and Akhter (2011) carried out a cross sectional study which was an attempt to determine the level and factors associated with HQoL among the people living with HIV. A convenient sample of 82 HIV-infected people from three NGOs and one Infectious Disease Hospital (IDH), were interviewed using an interviewer administered, semi structured questionnaire developed by adopting the “WHOQOL-HIV BREF instrument”. A majority of the respondents were with low Quality of Life (QoL) in all the domains of HQoL. The proportion of respondents with low QoL was highest in the domain of social relationship (64.6%) followed by psychological domain (59.8%), physical domain (58.5%), level of independence domain (56.1%), environmental domain (52.4%) and spirituality domain (52.4%) of HQoL. Bivariate analysis revealed that the overall perception of QoL was better in the respondents living in urban area, who were employed and asymptomatic of the centre for disease control (CDC) stage of HIV. The perception of overall health was higher in females, all respondents less than 35 years of age, asymptomatic of the CDC stage of disease and with a current CD4 count greater than 200 cell/mm3. These findings highlight the need for enhanced socio-psychosocial support and a better environment for improving the health related quality of life among people living with HIV.

Yamada (2010) attempted to examine the relationship between social support, optimism, and cognition in breast cancer and non-hodgkin's lymphoma survivors. The aim of this study was to gain a better understanding of the relationship between social support and
optimism on cognition, specifically in non-Hodgkin’s lymphoma (NHLS) and breast cancer survivors (BCS). It was hypothesized that social support and optimism would be positively related to cognition, and that social support would mediate the optimism-cognition relationship. Twenty-seven BCS ($M_{age} = 71.96$), twenty-five female ($M_{age} = 69.76$) and twenty-five male ($M_{age} = 65.28$) NHLS groups were recruited. Each participant completed a three-hour standardized neuropsychological battery designed to evaluate a range of cognitive abilities involving attention, premorbid and current intellect, memory, language, visuospatial skills, and executive functioning, as well as self-report measures of mood, social support, and optimism. Performances on cognitive tests were within normal limits, but differences were found in aspects of executive functioning ($p < .01$) with the men outperforming women in the NHLS group. Women in the NHLS group performed better on a measure of executive functioning ($p < .05$) and visuospatial functioning ($p < .01$) than women in the BCS group. Women from both groups performed better than the male NHLS group on verbal learning and memory measures (all $p$’s < .05). The groups did not differ on psychosocial variables. Correlations between psychosocial variables (i.e., social support and optimism) were variably related to cognitive measures in both groups. Social support did not mediate the optimism cognition relationship. This is the first study to consider the relationship between social support, optimism, and cognition and early interventions to improve cognition in cancer survivors is discussed.

Ngizla, West, Dave, Levitt, and Lambert (2014) investigated quality of life in individuals living with HIV/AIDS attending a public sector antiretroviral service in Cape Town, South Africa. A cross sectional study sample of 903 HIV infected patients who were categorized as not receiving ART (ART naïve) or receiving first-line ART for > 6 months (ART). HRQoL outcomes were compared in the two groups. HRQoL was assessed using the EQ5D (five domains) and Visual Analogue Scale (EQ5D VAS). The study data suggested
that ART is effective in improving the HRQoL (that is, self-rated health state), including those subjects who were immune compromised, which may be applicable to ART eligibility of the public sector ART program in South Africa.

Sumpio, Jeon, Northouse, and Knobf (2017) held an Exploratory Study of Treatment Complexity, Optimism, Self Efficacy, Coping and Psychological Distress in Persons with Advanced Stage Cancer Diagnoses. The convenience sample of 121 adults subjects with stage III and IV cancers, primarily gastrointestinal and lung, were recruited from an outpatient cancer center. Mean treatment-related hours was 20.77 (SD = 10.93) and means visits 9.95 (SD = 4.07). Subjects 65 years and older had significantly fewer hours and more visits. Female patients had significantly more hours and visits. Correlational analysis showed that being younger, less optimistic, less self efficacious, and having more symptom distress was associated with more avoidant coping and greater psychological distress. However, total hours and visits were not significant correlates of the other model variables. Multivariate analysis yielded a final model with negative illness appraisal, lower optimism, higher symptom distress and younger age accounting for 54% of the variance in psychological distress. Illness appraisal partially mediating the effect of optimism and symptom distress, and predicted avoidant coping. Active coping was not predicted by optimism. For advanced cancer patients, treatment complexity did not contribute to overall psychological distress.

2.4 Mental Well-Being

Wilk and Bolton (2002) in their qualitative interviews of individuals residing in two Ugandan communities affected by the HIV/AIDS epidemic investigated the perceptions of the epidemic’s mental-health effects. Participants in that study described loss of hope, worry, self-pity, social isolation, apathy, stigmatization, anger, grief and suicidal ideation they experienced after learning their HIV test results were positive.
Siegel and Schrimshaw (2006) investigated whether the perception of having experiences growth as a result of stressful event, often termed benefit finding, moderates the effects of stress on psychological distress and well-being. An ethnically diverse sample of 138 women living with HIV/AIDS completed the series of self-report measures. Significant interactions revealed that among women with a high number of HIV-related physical symptoms, benefit finding moderated the negative effects of physical symptoms on both depressive and anxious symptoms. Benefit finding was not found to moderate the affects of social conflict.

Mavandadi, Zanjani, Have, and Oslin (2009) tried to explore the associations among age, various dimensions of social support, and psychological and functional well-being. Despite endorsing greater medical comorbidity, older adults reported significantly lower depressive symptomatology, greater positive effect, and were less likely to report seeing a behavioral health specialist than their younger counterparts. No age group differences emerged for instrumental support or amount of social interaction. However, older adults reported higher subjective support, which in turn was associated with lower depressive symptomatology, greater positive effect, and non-utilization of behavioral health services.

Mukloo and Wallston (2012) investigated the relationship between positive psychological attributes and psychological well-being in persons with HIV/AIDS. The results of the study revealed that the psychological well-being in persons with HIV is highly a trio of personal coping resources, namely a sense of coherence, an optimistic outlook of life, and the belief that one is capable of bringing about desired outcomes. This latter attribute, labeled PC or generalized self-efficacy, is also predictive of a positive change in well-being over time.
Baird, Jones, Martin, and Yearwood (2012) found that the HIV-positive result can trigger a range of emotions (denial, fear, anger, grief, depression, hopelessness and acceptance). As a result of these emotions, the individual might present as pre-occupied; hopeless; ruminating about loss of significant others because of the disease; delay in accessing treatment; not adhering to treatment protocols; experiencing difficulty in managing work and family routines; and ultimately becoming at risk for poorer physical and mental health and overall quality of life.

Janz et al. (2014) investigated factors associated with declines in emotional well-being (EWB) over time in breast cancer survivors. Women with breast cancer (Stages I-III) residing in Los Angeles, CA or Detroit, MI and reported to the Surveillance, Epidemiology, and End Results registries between June 2005-February 2007 completed surveys at 9 months and 4 years after diagnosis. EWB was measured by the Functional Assessment of Cancer Treatment-Breast. Using a stress coping framework, logistic regression models assessed associations between personal, social, and clinical correlates, appraisal (e.g., worry about recurrence) and coping factors (e.g., emotional support) to EWB declines. A considerable number of breast cancer patients report emotional well-being declines over time. Early identification of women, who are vulnerable, such as women with past depression, is crucial to improve quality of care. Women would benefit from education about cancer recurrence and tailored strategies to manage worry about recurrence over time.

Gonzalez et al. (2014) examined the association between spiritual well-being and depressive symptoms. Findings suggest that spiritual well-being is a valuable coping mechanism and that Meaning/Peace has a unique advantage over Faith in protecting cancer survivors from the effects of depression symptoms; therefore, turning to Meaning/Peace as source of strength may improve psychological well-being during survivorship.
Davis et al. (2015) examined how the two different aspects of well-being (eudaimonic and positive affect) and psychological distress were associated with tumor norepinephrine (NE) in ovarian cancer patients. They stated that eudaimonic well-being is associated with lower tumor, and independent of positive affect and psychological distress. Because adrenergic signaling is implicated in tumor progression and increasing eudaimonic well-being may improve both psychological and physiologic resilience in ovarian cancer patients.

Shrinivasa et al. (2015) revealed that women diagnosed with HIV/AIDS face multiple risk factors, such as the HIV/AIDS diagnosis, physical effects on QOL, stigma and discrimination, fear of rejection and violence from intimate partner, and concerns about sexuality and reproductive health. Various socio-economic factors, such as gender-specific roles related to motherhood, homemaking, socio-economic inequalities, and minority grouping, determine the degree to which stigma is faced by women living with HIV/AIDS. They perceive heightened discrimination in health care settings and intimate relationships. These factors may have personal and social implications, such as poor psychological well-being, lack of treatment adherence, and high risk sexual behaviors. Sexual and reproductive health care also greatly affected due to higher stress levels in women living with HIV/AIDS. Empirical studies have shown that various mediating factors, such as social support, individual coping and resilience, are instrumental in reducing the impact of this stress. Women have been reported to experience a higher need for social support when compared to male counterparts. A positive relationship has been linked between social support and QOL among women living with HIV/AIDS.

Mukund and Gopalan (2015) examined the impact of mental well-being and Quality of Life on Depression, Anxiety and Stress among people living with HIV/AIDS infection. Cross sectional survey design was used. A sample of 60 people (males and females of equal number) over the age of 18 years and with the diagnosis for HIV/AIDS for more than six
months participated in the study. To assess the depression, anxiety and stress among PLWHA, DASS scale was used and to assess their psychological well-being, Warwick Edinburgh Mental Well-Being scale was used. In order to assess their present status of QOL regarding the illness, WHO’s QOL HIV-BREF Scale was used. Majority of the PLWHA had moderate level of anxiety and mild level of depression after being diagnosed. Most of the participants have positive mental well-being and had enhanced quality of life. A direct effect of mental well-being has been found on the depression, anxiety and stress among PLWHA indicating that higher the mental well-being of the PLWHA, the greater is the likelihood that they do not suffer from depression, exhibit less anxiety and are living a stress free life and vice versa. The study also found direct impact of QOL on psychological distress, depression and anxiety among PLWHA i.e. poor QOL of PLWHA makes them more prone to and vulnerable to stress, depression and anxiety and vice versa.

Niu, Luo, Liu, Silenzio, and Xiao (2016) by using multiple Chinese and English literature databases, a systematic review of observational research (cross-sectional, case-control, or cohort) published between 1998 and 2014 on the mental health of people living with HIV in China was conducted. 94 eligible articles were identified. A broad range of instruments were used across studies. Depression was the most widely studied problem; the majority of studies reported prevalence greater than 60% across research settings, with indications of a higher prevalence among women than men. Rates of anxiety tended to be greater than 40%. Findings regarding the rates of suicidality, HIV-related neurocognitive disorders, and substance use were less and varied. Only one study investigated posttraumatic stress disorder and reported a prevalence of 46.2%. Conflicting results about health and treatment related factors of mental health were found across studies.

Ramaiya et al. (2016) intended to identify salient psychosocial and mental health challenges confronted by HIV-positive youth in a resource-poor Tanzanian setting. A total of
24 qualitative interviews were conducted with a convenience sample of adolescents aged 12–24 receiving outpatient HIV care at a medical center in Moshi, Tanzania. All interviews were audio-recorded, transcribed, and coded using thematic analysis. Psychosocial challenges identified included loss of one or more parents, chronic domestic abuse, financial stressors restricting access to medical care and education, and high levels of internalized and community stigma among peers and other social contacts. Over half of youth (56%) reported difficulties coming to terms with their HIV diagnosis and espoused related feelings of self-blame.

Arrey, Bilsen, Lacor, and Deschepper (2016) examined the role of spirituality/religion as a source of strength, resilience and well-being among sub-Saharan African (SSA) migrant women with HIV/AIDS. A qualitative study of SSA migrant women was conducted between April 2013 and December 2014. Participants were recruited through purposive sampling and snowball techniques from AIDS Reference Centers and AIDS workshops in Belgium, if they were 18 years and older, French or English speaking, and diagnosed HIV positive more than 3 months beforehand. They conducted semi-structured interviews with patients and did observations during consultations and support groups attendances. Thematic analysis was used to analyze the data. 44 women were interviewed, of whom 42 were Christians and 2 Muslims. None reported religious/spiritual alienation, though at some point in time many had felt the need to question their relationship with God by asking “why me?” A majority reported being more spiritual/religious since being diagnosed HIV positive. Participants believed that prayer, meditation, regular church services and religious activities were the main spiritual/religious resources for achieving connectedness with God. They strongly believed in the power of God in their HIV/AIDS treatment and well-being. Spiritual/religious resources including prayer, meditation, church services, religious activities and believing in the power of God helped them cope with HIV/AIDS.