II REVIEW OF LITERATURE

HIV/AIDS has infected more than 60 million people and claimed over 20 million lives since its appearance in 1981 (World Bank, 2003). In 2002, alone it killed three million people, making it the fourth leading cause of death in the world and the most devastating epidemic. Moreover, the global rate of HIV/AIDS infection is growing. Approximately five million people were infected with HIV in 2003, the largest number in a twelve-month span since the pandemic’s beginning (UNAIDS, 2004). Another 14,000 infections occur around the world each day (World Bank, 2003). Though the epidemic is international, the disease has disproportionately affected the developing world (UNAIDS, 2004). According to UNAIDS, at the end of the last decade, 95 percent of all HIV/AIDS cases had been in developing nations (UN Report Estimates, 2010).

The following chapter gives a detail review of HIV/AIDS victims with the role of psychosocial intervention and quality of life in order to support the present research.

2.1. Indian scenario for HIV/AIDS, sex work and need for intervention or rehabilitation

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2.1. INDIAN SCENARIO FOR HIV/AIDS, SEX WORK AND NEED FOR INTERVENTION OR REHABILITATION

Sex work in India has been carried out in ancient India and it is one of the oldest profession in the world since an organized society is formed. In fact, the term sex work has emerged as a new terminology as prostitution was considered to be a derogatory word. In ancient India, there was a practice of having brides of the town and it can be seen as early as in Vedas and other Buddhist and Sanskrit texts. Courtesans were women who served the elite and they lead a luxurious life. According to Merriam and Webster Dictionary and courtesan is a prostitute with a courtly, wealthy, or upper-class clientele. Similarly, devadasis are women who are artistically talented and are dedicated to serve in the temples full time and they were called as temple prostitutes (Jai Shankar and Halder, 2011). Later the priests and the rich people in the society to fulfill their carnal desires used them. Then prostitution spread to cater to the other population irrespective of language, creed and caste.

Prostitution existed in India for a long time. Now it has become a thriving business in rural and urban setups and yet it has become a debatable issue. (Casciani and Dominic, 2009). In 2007, the Ministry of Women and Child Development reported the presence of over 3 million female sex workers in India, with 35.47 percent of them entering the trade before the age of 18 years (UNODC, 2007). Human Rights Watch puts the figure of sex workers in India at around 20 million, with Mumbai alone being home to 200,000 sex workers, the largest sex industry centre in Asia (Merrinews, 2008). The number of prostitutes has doubled in the last decade (BBC News, 2006)

India has the largest number of people living with HIV, an estimated 5.1 million in the year 2003, after South Africa (NACO, 2007; UNAIDS, 2004). Heterosexual contact has been estimated to be the most common mode of transmission of infection in India, and six Indian states have been categorized as high prevalence states because HIV prevalence in these states exceeds
5% among the high-risk individuals and 1% among the women attending antenatal clinics (NACO, 2006). In these six states, HIV is estimated to be transmitted through heterosexual sex to a large degree and is linked to sex work in four states of Andhra Pradesh, Karnataka, Maharashtra, and Tamil Nadu, and through injecting drug use in the other two states of Manipur and Nagaland (NACO, 2006; UNAIDS, 2004).


AIDS and sex work is an issue as there are many reasons to it. A report by an organization that fights against HIV infection, AVERT states the reasons as:

- High rates of HIV have been found amongst individuals who does sex work in many countries with diverse culture. Even where the HIV prevalence is low, amongst this group it is usually higher than the rate found amongst the general adult population.
- Sex workers generally have a high number of sexual partners and this means that if they do become infected with HIV, they can potentially pass it on to multiple clients.
- Preventing HIV infections amongst those involved in the sex trade has been proven to be an instrumental part of many countries’ fight against AIDS

Recent modeling to assess the impact of four types of interventions on prevention of HIV transmission in India suggest that FSW interventions that promote use of condoms in addition to other safe sex practices to be the most effective in preventing HIV transmission as compared with interventions focusing on treatment of sexually transmitted infections, prevention of mother-
to-child transmission and provision of the highly active antiretroviral therapy (Nagelkerke et al, 2002).

Of the 835 government-supported targeted intervention programmes for high-risk individuals in India, 199 (23.8%) target FSWs and 171 (20.5%) target truckers, and the remaining target migrant workers, street children, prisons, men who have sex with men, intravenous drug users, and others (NACO, 2006). The majority of sex work in India is clandestine due to unfavorable legal environment and discrimination against female sex workers (Dandona et al. 2005).

Dandona et al. (2006) said that the majority of sex work in India is undercover due to unfavorable legal environment and discrimination against female sex workers (FSWs). A broader frame work on the demography and the sex work characteristics of female sex workers in India was studied. The results for a total of 5010 (75.4%), 1499 (22.5%), and 139 (2.1%) street-, home-, and brothel-based FSWs, respectively. The mean age was 20–34 years (75.6%), belonging to scheduled caste (35.3%) and scheduled tribe (10.5%), illiterate (74.7%), and of those separated/divorced (30.7%) was higher among FSWs. The FSWs engaged in sex work for >5 years were more likely to be non-street-based FSWs, illiterate, living in small urban towns, and to have started sex work between 12–15 years of age. The mean age at starting sex work (21.7 years) and gap between the first vaginal intercourse and the first sexual intercourse in exchange for money (6.6 years) was lower for FSWs in the rural areas as compared with those in large urban areas (23.9 years and 8.8 years, respectively). The data also highlights that women struggling with illiteracy, lower social status, and less economic opportunities are especially vulnerable to being infected by HIV, as sex work is considered to be one of the few options available to them to earn money.

Bastia (2006) emphasized that Ignorance of the law of the land is no defence. Furthermore, it is a legal dictum that one should not be held criminally liable unless possessing a guilty mind. But during trials of some sexual offences in
India it is often observed that the accused did not know that he had committed an offence because the crime in question was a part of his socio-cultural milieu. India is a vast country with great socio-cultural diversity and many different ethnic groups, each with its own distinct cultures. However, the entire Indian culture is religion based and finds its root from the ancient Holy Scriptures. The sexual culture of Indian society stems from the Kama Sutra of Vatsyayana, an epic on sex. This text is considered holy and is accepted culturally, even though many practices contained therein are offences under modern law. Child marriages and arranged marriages are an integral part of Indian society and in some tribes, even prostitution is socially sanctioned. However, all of these are also against the law. Many of the conflicts observed between the sexual practices that are accepted in Indian culture but not by the law can be explained on the basis that the Indian legal system is borrowed from that of the British.

**Hosain and Chatterjee (2005)** emphasized that despite the rising prevalence of human immunodeficiency virus (HIV)/acquired immunodeficiency syndrome (AIDS) since 1994 in Bangladesh, the World Bank found the epidemic to be preventable provided vigorous and prompt action is taken. High-risk heterosexual contact, especially among Commercial Sex Workers (CSWs), is a major mode of transmission. Formulation of relevant and effective prevention programmes for HIV/AIDS requires better understanding of the knowledge, attitudes, behaviours and practices in the high-risk groups. A total of three hundred CSWs were interviewed if they had heard of AIDS, correct knowledge of transmission and symptoms was lacking. HIV/AIDS was viewed as a remote threat, over-ridden by immediate economic and survival concerns. Although the majority of CSWs knew that condoms afforded protection against STDs/AIDS, only one-third of sex acts on the last day of work were protected through condom use. CSWs who were married, had been a CSW for less than 5 years, were with a new client, or had two or more clients in last working day reported significantly higher condom use. Client dissatisfaction was the major reason for not using condoms. Many did not obtain treatment for STDs in a timely fashion. A comprehensive HIV
programme that combines clinical and screening measures with behaviour change and communication interventions.

**PANDA et al. (2001)** attempted to address the interface between drug use and sex work among women drug users in Manipur and the prevalence of HIV, hepatitis B and other sexually transmitted infections in them. A cross-sectional survey was conducted among sixty-nine women drug users. Data were generated with the help of a semi-structured questionnaire on socio demography, drug use practice and health issues after obtaining informed consent from the participants. Subsequently, consent was also obtained from 60 respondents for collecting blood for unlinked anonymous tests for HIV and hepatitis B surface antigen. Clinical examination for reproductive tract infections, offered to all the study participants, generated data on sexually transmitted diseases. It was found that the prevalence of HIV infection in injecting drug users was 57% Eighty-one percent of women who agreed to have a clinical examination had abnormal vaginal discharge, of which 27% had endocervical discharge. It is concluded that environmental interventions to reduce civil unrest and forced migration have an important role to play in HIV containment. The high rate of HIV infection, and the probability of a high rate of sexually transmitted infections in women drug users suggests that a targeted intervention in this population group is a public health need. An innovative outreach strategy should be designed for effective implementation of interventions among women injecting drug users and non injecting drug users who operate from the streets as sex workers to support their drug habit as well as livelihood.

**Bhattacharya (2005)** examined socio cultural expectations of sexual behavior and the reasons. Married women who report monogamous sexual relationships with their husbands are a high-risk group for HIV infection in India. Based on the public health model and a population-based perspective on HIV infection prevention, it’s underlying mechanisms that link the role of women in society, holistic health beliefs, and cultural beliefs about the transmission of HIV with the precursors to nonuse of condoms. It is found that
promoting condom use requires an emphasis on family health, not only as contraceptives.

Brahme et al. (2005) reported sexual risk factors associated with HIV infection among men attending two sexually transmitted disease (STD) clinics in Pune, India and compares these behaviours between young and older men. Between April 1998 and May 2000, 1,872 STD patients were screened for HIV infection. Data on demographics, medical history and sexual behaviour were collected at baseline. The overall HIV prevalence was 22.2%. HIV risk was associated with being divorced or widowed, less educated, living away from the family, having multiple sexual partners and initiation of sex at an early age. The risk behaviours in younger men were different to older men. Younger men were more likely to report early age of initiation of sex, having friends, acquaintances or commercial sex workers as their regular partners, having premarital sex and bisexual orientation. Young men were more educated and reported condom use more frequently compared with the older men. Similar high HIV prevalence among younger and older men highlights the need for focused targeted interventions aimed at adolescents and young men and also appropriate interventions for older men to reduce the risk of HIV and STD acquisition.

Safren et al. (2006) described issues relevant to HIV prevention among men who have sex with men (MSM) in South India by surveying 62 MSM outreach workers from three nongovernmental organizations in Chennai. Although 92% reported having sex with men, only 74% identified as gay and 27% were married. Only half of these men reported having been tested for HIV. More than half of the sample reported that they would rather not know they had HIV until they were sick, and almost half indicated that they would rather end their life than live with the disease. Eighty-five percent of the sample reported having experienced varying levels of harassment from police, and 86% reported varying levels of harassment from others. The complication increases as gay men gets married.
Mehta et al. (2006) investigated changes over a decade in prevalence and correlates of HIV among high-risk women attending sexually transmitted infection (STI) clinics in Pune, India. It was found that the annual HIV prevalence increased from 14% in 1993 to 29% in 2001-2002. The change in HIV prevalence over time was paralleled by changes in clinic visitor characteristics; in later periods, women were older, more often employed, less likely to be currently married, and more likely to report condom use. Thus, it was concluded that women attending STI clinics in India represent a small, hidden subgroup, likely put at risk for HIV because of high-risk behavior of their male partners, generally their husbands. Educational and awareness efforts that have targeted other subgroups in India (men and CSWs) should also focus on these hard-to-reach women. Risk reduction in this subgroup of Indian women would also be expected to reduce perinatal infections in India.

Chattopadhyay and McKaig (2004) stated that India has the highest number of HIV/AIDS cases in the world. Current HIV/AIDS prevention strategies are based on regular and appropriate condom use. However, most commercial sex workers (CSWs), who form the core/high-risk groups toward whom the prevention strategy is directed, are disempowered and socioeconomically marginalized. This does not allow them to insist on condom use by the client, especially in absence of governmental structural support. This study discusses HIV/AIDS prevention issues that relate to CSWs in India; issues that play a vital role in initiation, perpetuation, and expansion of economic activity of CSWs; and those factors that influence the HIV/AIDS preventive practices of CSWs. The study argues that CSWs can be empowered and emancipated that HIV/AIDS control and prevention efforts in India must recognize that ad hoc promotion of condom use or similar such programs will not be effective to control HIV/AIDS; and that more extensive developmental work aimed at betterment of living conditions of CSWs is required for effective HIV/AIDS prevention.
Venkataramana and Sarada (2001) stated that India has the world’s highest number of HIV/AIDS infections next to Africa. Eighty-five per cent of HIV transmission in India occurs through heterosexual contact. One billion population, a large number of female sex workers, high prevalence of sexually transmitted infection (STIs) and low condom use make a potent combination for explosive growth of the epidemic. Taking available estimates of the number of female sex workers (FSWs), their work patterns, prevalence of HIV and STIs and condom use among them in 1999 as the base, and adopting reasonable infectivity rates, the study attempted to present a model to estimate the spread of HIV infection in commercial sex networks until 2005. HIV infections in commercial sex networks are estimated to increase from the 1999 level of approximately 2.49 million to about 3.93 million by 2005 in a favourable scenario, and to 6.87 million in a worse scenario. Spread of HIV is influenced in the short term by condom use and prevalence of STIs, and these are the only factors that can be manipulated to limit the spread of the infection.

Singh and Hart (2007) dealt with deeply controversial side of cultural tourism in mapping the position of the sex industry. In doing so, it places sex tourism in two epistemic contexts: one context expands the notion of cultural policies, the other notes the implicit and explicit origins and effects of cultural policies affecting sex work, although these positions are not mutually exclusive. Sex tourism, poses a particular challenge to the understandings embedded in these contexts. The sex industry points us to the limits of cultural policies, both in terms of expanding the scope of cultural industries and also in documenting their effects.

Steen and Dallabetta (2003) investigated that sex workers have high rates of sexually transmitted infections (STIs), many of them easily curable with antibiotics. STIs as co-factors and frequent unprotected exposure put sex workers at high risk of acquiring HIV and transmitting STIs and HIV to clients and other partners. This study reviews two STI treatment strategies that have proven effective with female sex workers and their clients. 1) Clinical services
with regular screening have reported increases in condom use and reductions in STI and HIV prevalence. Such services include a strong peer education and empowerment component, emphasize consistent condom use, provide effective treatment for both symptomatic and asymptomatic STIs, and begin to address larger social, economic and human rights issues that increase vulnerability and risk. 2) Presumptive treatment of sex workers, a form of epidemiologic treatment, can be an effective short-term measure to rapidly reduce STI rates. Once prevalence rates are brought down, however, other longer-term strategies are required. Effective preventive and curative STI services for sex workers are key to the control of sexually transmitted infections, including HIV, and are highly synergistic with other HIV prevention efforts.

Govind (2004) conducted a study on the patients receiving anti TB treatment who have co-infection with HIV found that among 310 HIV sero-negative pulmonary TB cases, the symptoms were cough with/without expectoration (69.5%) followed by fever (65.9%), weight loss (63.04%) anorexia(60.80%), breathlessness (47.4%) chest pain (45.36%), haemoptysis (16.5%), extra pulmonary involvement (9.27%) and lymph node enlargement (6.8%). The duration of illness was more then 2 Yr. in 78.32% cases. Among 42 HIV sero-positive cases, fever was in (82.75%) followed by cough (75.86%), weight loss (72.42%), anorexia (65.17%) breathlessness (55.17%), chest pain (41.37%), haemoptysis (13.95%), extra pulmonary involvement (11.2%) and lymph node enlargement was in 8.4% cases. The duration of illness was short and majority (62.8%) cases were within 2 years. Thus, the clinical presentation was same in both groups. Though extra pulmonary involvement was higher in HIV sero-positive group, but statistically insignificant. There were no distinctive clinical manifestation among drug resistance. HIV Sero-positive or negative group. The progression of disease was more rapid among the HIV positive patients.
Deering et al. (2008) assessed the extent to which migration could explain heterogeneity in HIV prevalence in Bagalkot district, in Karnataka state, India, examining important migration-related risk factors for HIV transmission and implications for prevention. Mathematical modeling was used to explore the potential impact of different seasonal migration patterns on HIV prevalence. A deterministic compartmental mathematical model of heterosexually transmitted HIV infection was developed. Even with very high-risk migrant sexual behaviour in the migration destination, targeting interventions at 30%-100% of local core groups could prevent a maximum of 12%-40% of new infections (87% effective condoms), from 2004-2015. Targeting migrants locally and at their destination could have up to 1.6-times the impact of targeting migrants only at their destination. Results suggest that core group interventions introduced locally because of the difficulty of reaching migrant populations could still be beneficial. Understanding how local sexual networks change during migration is crucial for understanding the impact of migration on HIV transmission, and for designing HIV preventive interventions.

Blanchard et al. (2005) compared the socio demographic characteristics and sex work patterns of women involved in the traditional Devadasi form of sex work with those of women involved in other types of sex work. Data were gathered through in-person interviews. Sampling was stratified by district and by type of sex work. It was found that out of 1588 female sex workers (FSWs) interviewed, 414 (26%) reported that they entered sex work through the Devadasi tradition. Devadasi FSWs were more likely than other FSWs to work in rural areas (47.3% vs. 8.9%, respectively) and to be illiterate (92.8% vs. 76.9%, respectively). Devadasi FSWs had initiated sex work at a much younger age (mean, 15.7 vs. 21.8 years), were more likely to be home based (68.6% vs. 14.9%), had more clients in the past week (average, 9.0 vs. 6.4), and were less likely to migrate for work within the state (4.6% vs. 18.6%) but more likely to have worked outside the state (19.6% vs. 13.1%). Devadasi FSWs were less likely to report client-initiated violence during the past year (13.3% vs. 35.8%) or police harassment (11.6% vs. 44.3%). It was concluded that differences in socio behavioral characteristics and practice patterns
between Devadasi and other FSWs necessitate different individual and structural interventions for the prevention of sexually transmitted infections, including human immunodeficiency virus infection.

Rushing and Watts (2005) found that high levels of forced sex and sexual exploitation were experienced by the majority of the young women. The young women describe their entry into sex work, first sexual experience (intercourse), violence, and condom negotiation and use. Although access to health care was available, the young women perceived the stigma attached to sex work as a barrier to receiving health care, and thus, preferred health education and care from peers. Health education programs focusing on peer education and support are essential for protecting and empowering these young women. In addition, policies and programs must work toward effective strategies to protect young migrant women.

Kerrigan et al. (2006) assessed the effectiveness of 2 environmental–structural interventions in reducing risks of HIV and sexually transmitted infections (STIs) among female sex workers. Two intervention models were implemented over a 1-year period: community solidarity and solidarity combined with government policy. Both were evaluated via preintervention–postintervention cross-sectional behavioral surveys, STI testing and participant observations, and serial cross-sectional STI screenings. It was found that significant increases in condom use with new clients in community solidarity intervention model. Significant increases in condom use with regular partners and reductions in STI prevalence were documented, as were significant increases in sex workers’ verbal rejections of unsafe sex and participating sex establishments’ ability to achieve the goal of no STIs in routine monthly screenings of sex workers in the solidarity combined with government policy model of intervention. It is concluded that interventions that combine community solidarity and government policy show positive initial effects on HIV and STI risk reduction among female sex workers.
Ngugi et al. (1996) emphasized that peer-mediated education programs focusing on female sex workers for the control of human immunodeficiency virus (HIV) infection and other sexually transmitted diseases (STDs) have led to increased condom use and increased adoption of other safer sex practices, as well as declines in STD and HIV incidence among female sex workers. These results are encouraging. They also stated that constraints to expanding program coverage include inadequate political commitment; deficiencies in program planning, management, and human resources; and insufficient funding. The challenges currently are to show that behavioral change can be sustained and to scale up activities from small demonstration projects to district, provincial, and national levels.

Patterson et al. (2008) examined the efficacy of a 30 minute behavioral intervention to promote condom use among female sex workers. At baseline and after 6 months, women underwent interviews and testing for HIV, syphilis, gonorrhea, and chlamydia. The observation states that there was a 40 percent decline in cumulative sexually transmitted illness incidence in the intervention group. There were concomitant increases in the number and percentage of protected sex acts and decreases in the number of unprotected sex acts with clients. This brief behavioral intervention shows promise in reducing HIV and sexually transmitted illness risk behaviors among female sex workers and may be transferable to other resource-constrained settings.

Wechsberg et al. (2010) described an experimental design where 93 women who reported recent substance use and sex trading were randomly assigned to a modified Standard HIV intervention or to a Woman-Focused HIV prevention intervention. Participants reported high rates of sexual risk and violence at baseline. At follow-up, findings showed decreases in the proportion of women reporting unprotected sex and the daily use of alcohol and cocaine. Daily alcohol and cocaine use decreased more for women receiving the Woman-Focused intervention. Although violence continued to be a problem, at follow-up Woman-Focused participants reported being
victimized less often than women receiving the Standard intervention. This study demonstrates the feasibility of implementing cross-cultural behavioral HIV prevention interventions, and supports the need for future studies of women’s contextual issues and the effectiveness of targeted interventions.

Parry et al. (2010) conducted a rapid assessment with drug using commercial sex workers (CSWs) to investigate practices putting them at risk for contracting HIV. Drugs enhance the sexual experience and prolong sex sessions. Interviews revealed inconsistent condom use among CSWs together with other risky sexual practices such as needle sharing. Among CSWs who agreed to HIV testing, 34% tested positive. Barriers to accessing drug treatment and HIV treatment and preventive services were identified. Interventions recognizing the role of drug abuse in HIV transmission should be prioritized, and issues of access to services, stigma and power relations must be considered.

Hawkes and Santhya (2002) emphasized that there are many features that make India a vulnerable country as far as a sexually transmitted infection (STI)/HIV epidemic is concerned. These include the lack of a strong evidence base on which to formulate decision making, a pluralistic and often unregulated health sector, and a highly vulnerable population. Nonetheless, India has shown strong commitment to other areas of a comprehensive reproductive health care programme, and may be able to do so in the field of STI/HIV control. Vast numbers of people in India are severely disadvantaged in terms of income, education, power structures, and gender. Addressing these basic issues of human rights lies at the core of achieving better health outcomes.

The relationship between poverty and AIDS stands to reason since as much as 80 percent of HIV infections occur through sexual transmission (UNAIDS, 2004) and economic position often predicts the frequency and nature of sexual activity (Whiteside A, 2002). The poor are more likely to be driven to
trading sex to meet basic needs, have less choice over condom use, and may be forced to have multiple sexual partners for economic protection. Poverty, furthermore, is linked to a number of other factors that increase the risks of HIV infection, including humanitarian crises, mental disorders and substance abuse. Therefore there is a need to propagate the right psycho social interventions to all sex workers. The quality of life of the female sex workers can to a large extent depend on these rehabilitative measures.

The above studies has reflected the prevalence of sex work in India, the use of condoms, the migration of the diseases and its sources, the knowledge available to sex workers regarding the preventive measures.

2.2. IMPACT OF SEX WORK ON FEMALE SEX WORKERS AND THEIR FAMILY

It has been suggested that female sex workers and their clients play a very prominent role in the HIV epidemic in India, and that effective interventions for them could help substantially curb this epidemic (Nagelkerke et al, 2002). Sex work has a deep connection and close relationship with the families of the sex workers. Every female sex worker has a reason to enter this profession and in order to understand in detail its impact the following studies are mentioned. The studies reflect the impact on the physical and mental health of the sex workers, their personality and quality of life as well as their poor socioeconomic status.

Karikalan (2012) examined that family members of sex workers threw them out of their house when they learned about their source of income. Although the female sex workers are indebted to contribute to the family expenses, they are unable to reveal the truth and work under a pretext. The family of sex workers abandon them or brutally abuse them.
Kotiswaran (2008) observed that sex work is both unknown and not accepted by many members of the sex workers family. The income generated by the husbands are insufficient to run their families and so the woman enters the profession. Some husbands are aware of the situation but suffer silently in pain and anguish as they consider themselves helpless in their financial state.

Chattopadhyay et al. (2004) examined that the reasons for initiation of women into the sex trade and concluded that the failure of family support along with the lack of ability to provide for themselves due to poverty and illiteracy were key factors for adopting prostitution.

Beard et al. (2010) stated that injection drug users and female sex workers are two of the populations that are most at risk for becoming infected with HIV and their children are vulnerable. The reason is because parents' drug usage or sex work is often, illegal and hidden, identifying their children becomes difficult and this in turn the increases children's vulnerability and marginalization.

Bletzer (2005) writes that most research on female sex workers is urban-based, emphasizing economic necessity and risk-taking. His findings suggested that the sampled women followed the usual paths into substance use. Most began using substances before they began sex work. Mothers took an interest in children's wellbeing, and many visited the children who does not live with them whenever possible. Their principal concern was assuring that children were raised in the best way available. Few daughters follow their mothers into sex work, and a few older children drank moderately. Several children had experienced abuse from persons other than parents.

Chege et al. (2002) found that there was more emphasis on physical, rather than psychological aspect of childcare by the female sex workers. The practice of living with the children ensured that earnings from the sex trade
were used for the immediate needs of the children such as food. However, this practice had a negative influence on the children as the majority of the respondents conducted their sexual business at home with little or no privacy. Health seeking behaviour for the children was hampered by lack of funds and to some extent alcohol consumption by the mothers. Efforts to invest in the education of their children were undermined by lack of funds and truancy.

**UNAIDS (2001)** examined that there is an almost hysterical kind of fear, at all levels, which make them pathologically scared of having to deal with an HIV positive patient. Wherever they have an HIV patient, the responses are shameful. Their very own family, the husband, parents and siblings abandoned them mercilessly.

**Crago et al. (2008)** reported that transsexual sex workers complained that twenty-three of her friends died of AIDS, 19 trans women and four women, all sex workers. None of them got Anti ReteroViral Therapy. It was the fear of discrimination and abuse from the doctors that kept them from getting medication.

**Seshu (2003)** stated that apart from the stigma already attached to sex workers, society and their own family has further marginalised them as core transmitters of the HIV infection.

**Palmer et al. (2011)** examined that with significant reductions in AIDS-related morbidity and mortality, HIV is increasingly viewed as a chronic condition. However, people on antiretroviral therapy (ART) are experiencing new challenges such as metabolic and morphological body changes, which may affect self-perceived body image. The concept of body image is complex and encompasses an individual's perception of their existential self, physical self and social interpretation of their body by others. The Longitudinal Investigations into Supportive and Ancillary Health Services (LISA) cohort is a prospective study of HIV-positive persons on ART. An interviewer-
administered survey collects socio-demographic and health information including body image, stigma, depression, food insecurity, and quality of life (QoL). The adjusted multivariate analysis showed participants who reported high stigma in the presence of depressive symptoms were more likely to have negative body image compared to people reporting low stigma and no depressive symptoms. The estimated probability of a person having positive body image without stigma or depression was 68%. When stigma alone was included, the probability dropped to 59%, and when depression was included alone the probability dropped to 34%. Depressive symptoms and high stigma combined resulted in a probability of reporting positive body image of 27%. Further efforts are needed to address body image among people living with HIV. In order to lessen the impacts of depression on body image, such issues must be addressed in health care settings.

Lee et al. (2005) examined that HIV is recognized as a highly stigmatized disease; however, there has been a lack of research on the internalization of this stigma by seropositive people. They examined internalized stigma among HIV-positive men and women. The majority of the sample experienced internalized stigma related to their HIV status. Individuals who experienced high internalized HIV stigma (IHS) had been diagnosed with HIV more recently, their families were less accepting of their illness, they were less likely to ever have attended an HIV support group, and they knew fewer people with HIV.

Karim et al. (1995) stated that the social context within which women engaged in sex work at a popular truck stop in South Africa are placed at risk of human immunodeficiency virus (HIV) infection and the factors that influence their ability to reduce their risk were assessed. It was found that given the various pressing needs for basic survival, the risk of HIV infection is viewed as one more burden imposed on these women by their lack of social, legal, and economic power. Violence, or the threat thereof, plays an important role in their disempowerment. In the few instances in which sex workers were able to insist on condom use, it resulted in a decrease in earnings, loss of clients, and physical abuse. It was concluded that to reduce the sex workers' risk for HIV
infection include negotiation and communication skills to enable them to persuade their clients to use condoms; development of strategies through which they can maximally use their group strength to facilitate unified action; and accessibility of protective methods they can use and control, such as intravaginal microbicides.

Ghys et al. (2002) observed that female sex workers are at high risk for infection with HIV, and their clients may act as a bridging population by spreading HIV to the general population. Comprehensive HIV surveillance among sex workers includes surveillance of HIV infection, of sexually transmitted infections and of risk behavior. Surveillance of HIV infection among sex workers is critical for countries with low-level or concentrated HIV epidemics, and can help in monitoring the response to the HIV epidemic in countries with a generalized epidemic. Sex workers are a vulnerable population, and particular attention needs to be paid to human rights issues including consent, confidentiality and stigma. Collaborations with key players in the local sex work scene - sex workers themselves in the first place - and alliances with salient institutions and groups are key to the success of surveillance among sex workers.

Surveillance activities should have a strong link to interventions targeted at sex workers. Surveillance for HIV infection among sex workers can be institution- or community-based. Institutional settings include screening programs for registered sex workers, of sexually transmitted diseases clinics, and re-education camps. Specific sources of bias need to be considered in different settings, and must be measured - through the collection of socio-demographic and behavioral data - to allow a correct interpretation of prevalence data and time trends. Community-based HIV infection surveillance can be conducted in a probability sample of the sex worker population, thereby reducing selection bias. (Ghys, Jenkins and Pisani, 2001)

Dandona et al. (2005) assessed the non-use of condoms in sex work and with regular sex partners by female sex workers (FSWs), and identified its associations that could assist in planning HIV prevention programmes. FSWs
were street-, home-, and brothel-based. Most of them reported non-use of condom with at least one of her last three clients. Lack of knowledge that HIV could be prevented, no access to free condoms, being street-based as compared with brothel-based, and no participation in FSW support groups were the most significant predictors of condom non-use with clients. Other associations included lower social support, lower income, age >24 years, illiteracy, and living in medium-size urban or rural areas. Almost all of them neither used condom consistently with clients nor with regular sex partner. It can be summarized that about half the FSWs do not use condom consistently with their clients in Indian state putting them at high risk of HIV infection. Non-brothel-based FSWs, who form the majority of sex workers in India, were at a significantly higher risk of HIV infection as compared with brothel-based FSWs. With their high vulnerability, the success of expansion of HIV prevention efforts will depend on achieving and sustaining an environment that enables HIV prevention with the non-brothel based FSWs.

Banadakoppa et al. (2008) explored the determinants of HIV prevalence among female sex workers (FSW), as well as factors associated with district-level variations in HIV prevalence among FSW in four states in southern India. HIV prevalence among the FSW surveyed was 14.5% a large interdistrict variation, ranging from 2% to 38 in the districts. Current marital status and the usual place of solicitation emerged as important factors that determine individual probability of being HIV positive, as well as the HIV prevalence within districts. The home-based FSW being HIV positive was greater for brothel-based FSW and public place-based FSW. Unmarried FSW and those who were widowed/divorced/separated, or from the devadasi tradition, had higher odds of being HIV positive) than those currently married. The estimated district level variance in HIV prevalence was lowest for brothel-based unmarried FSW, followed by brothel-based widowed/divorced/separated or devadasi FSW. Heterogeneity in the organization and structure of sex work is an important determinant of variations in HIV prevalence among FSW across districts in India, much more so than the districts themselves.
Romans (2001) compared the mental and physical health, adult abuse experiences and social networks of female sex workers of different age groups. A convenience sample of sex workers were interviewed and completed two well established questionnaires, the General Health Questionnaire (GHQ-28) and the Intimate Bond Measure (IBM). Sex workers were invited to reflect on their experiences of their work. The results showed that there were no differences in mental health on the GHQ-28 or in self-esteem between the two groups. Neither were there any differences in their assessment of their physical health or the quality of their social networks. Sex workers were less likely to be married and had been exposed to more adult physical and sexual abuse than the comparison group. They were more likely to smoke and to drink heavily when they drank. One-third said that their general practitioner was not aware of their work. The illegal and stigmatized nature of sex work are likely to make usual public health strategies more difficult to apply, considerations which should give concern from a preventive health standpoint.

Wawer et al. (1996) examined the social origins and working conditions of selected female commercial sex workers. The majority of all women maintained financial ties to the home by sending income to parents, siblings and other relatives but this pattern is stronger among Northern women. Qualitative data suggest that women were systematically recruited into prostitution from villages in the North India and their work enabled them to comply with traditional family support roles. Women from the Northeast revealed a more complex pattern of entry with intra family strife, divorce, efforts to find other employment, and entry into sex work at a later age than the women from the North. The lives of commercial sex workers were found to be tightly controlled by brothel owners and managers, although 8% were living with a husband or partner, and non-commercial sexual relationships in the month prior to interview were reported by up to 23%. Education on HIV must take these attitudes and motivations into account as well as sanctions for brothel owners who do not enforce condom use.


Delvaux et al. (2003) assessed the need for more comprehensive sexual and reproductive health services for women sex workers in Cambodia. Interviews with the women and data from the government clinic indicated that excluding condoms, a very low proportion of women sex workers were currently using a modern contraceptive method. Induced abortion was widely used but was perceived to be risky and costly. Data from a mobile team intervention and the government clinic respectively showed that 25.5% and 21.9% of women sex workers reported at least one previous induced abortion. These findings reveal the need for awareness on contraception, safe abortion services among sex workers, reproductive rights and reproductive health needs of women sex workers in general.

Rekart (2005) insisted that sex work is an extremely dangerous profession. The use of harm-reduction principles can help to safeguard sex workers’ lives in the same way that drug users have benefited from drug-use harm reduction. Sex workers are exposed to serious harms: drug use, disease, violence, discrimination, debt, criminalisation, and exploitation (child prostitution, trafficking for sex work, and exploitation of migrants). Successful and promising harm-reduction strategies are available: education, empowerment, prevention, care, occupational health and safety, decriminalisation of sex workers, and human-rights-based approaches. Successful interventions include peer education, training in condom-negotiating skills, safety tips for street-based sex workers, male and female condoms, the prevention-care synergy, occupational health and safety guidelines for brothels, self-help organisations, and community-based child protection networks. Straightforward and achievable steps are available to improve the day-to-day lives of sex workers while they continue to work.

Steen and Dallabetta (2003) reviewed two STI treatment strategies that have proven effective with female sex workers and their clients. 1) Clinical services with regular screening have reported increases in condom use and reductions in STI and HIV prevalence. Such services include a strong peer education and empowerment component, emphasize consistent condom use, provide effective treatment for both symptomatic and asymptomatic STIs, and
begin to address larger social, economic and human rights issues that increase vulnerability and risk. 2) Presumptive treatment of sex workers, a form of epidemiologic treatment, can be an effective short-term measure to rapidly reduce STI rates. Once prevalence rates are brought down, however, other longer-term strategies are required. Effective preventive and curative STI services for sex workers are key to the control of sexually transmitted infections, including HIV, and are highly synergistic with other HIV prevention efforts.

**Buzdogan et al. (2009)** in research update states and also affirms the study by Banadakoppa et al that the sex workers had taken up sex work when their husbands desert them or when they were widowed. Majority of the sex workers were illiterates or functionally illiterate. Most of the home based sex workers live in their own homes and brothel and mobile sex workers live in rented houses. They mention that they had to support their family economically and including their parents and children. Over half of the sex workers earn between Rs.3000 to Rs.5000 which drastically decreases as the age progresses. Most of the brothel based sex workers said that they were forced or cheated into sex work and almost all of the home based or street based sex workers said that they had to support a family and thus had entered the profession. Almost all the sex workers reported that they used condoms consistently with clients but not with their regular intimate partners. The research also throws light that along with HIV prevention the sex workers had to be aware of sexual and reproductive health which was found to poor in the interviewed women.

**Brahme et al. (2006)** assessed the impact of awareness regarding safe sex in a cohort of FSWs by studying trends in HIV prevalence, sexually transmitted diseases (STDs), and risk behaviors measured from 1993 to 2002 in Pune, India. A total of 1359 FSWs attending 3 STD clinics were screened for HIV infection, and data on demographics, sexual behaviors, and past and current STDs were obtained. The overall HIV prevalence among FSWs was 54%. Not being married, being widowed, inconsistent condom use, clinical
presence of genital ulcer disease and genital warts were independently associated with HIV infection among FSWs. The prevalence of HIV remained stable over 10 years (46% in 1993 and 50% in 2002). The prevalence of genital ulcer disease decreased over time whereas that of observed genital discharge remained stable. Reported consistent condom use as well as the proportion of FSWs who refused sexual contact without condoms increased over time. These data collectively suggest that safe sex interventions have had a positive impact.

Manopaiboon et al. (2003) presented findings from a qualitative study about factors affecting women's ability to leave sex work and influencing their lives after leaving. The authors interviewed 42 current and former female sex workers (FSWs) drawn from a cohort study of 500 FSWs. All but one of the participants had quit sex work at least once. The majority experienced one or more quit-re-entry-quit cycles. Women's ability and decisions to leave sex work were determined primarily by four factors: economic situation, relationship with a steady partner, attitudes towards sex work and HIV/AIDS experience. Economic concerns, ranging from survival needs to materialistic desires, had the strongest influence. Most women perceived their risk for HIV infection to be lower after leaving sex work, but three of the 17 HIV-infected women acquired infection after having left, presumably from their steady partners. Prevention efforts should guide women as they transition out of commercial sex work. Interventions aimed at assisting women wanting to leave sex work need to address the role of economic factors.

Wong and Yilin (2005) conducted a qualitative study to understand more about the female sex workers's HIV awareness, medical-seeking behaviors and needs. They found that the sex workers were young and the turnover rates were high. Contrary to common belief, many came from nearby villages or cities, but were probably reluctant to participate in organized activities. Their medical knowledge was very limited, often acquired from peers and self-medication was common. The contraception they used was inappropriate and screening for cervical cancer was nonexistent. They were very stigma
conscious. Condoms were purchased in small quantities when required and used only if the clients were agreeable.

**Bassel et al. (2001)** examined the prevalence of physical and sexual abuse by intimate and commercial sexual partners among street-based sex workers and explores correlates of partner abuse by commercial partners using the following factors: sociodemographics, substance abuse, sexual behavior, and physical and sexual childhood abuse. The results showed that partner abuse is a common occurrence among street sex workers. Two of three street prostitutes have experienced lifetime physical or sexual abuse by either an intimate or commercial partner. In addition, one of eight reported physical and sexual abuse by both intimate and commercial partners during their lifetime. Women who were homeless in the last year, those who reported exchanging for drugs and money as their main source of income, used injection drugs in the past year and had sex in crack houses, and who were human immunodeficiency virus (HIV)-positive were more likely to report combined physical and sexual abuse. Understanding the relationship between partner violence, victim's substance abuse, and HIV-risk behavior is important for the development of public policies and treatment and prevention strategies to address the constellation of problems that drug-using female street sex workers face.

**Gregson et al. (2002)** investigated that greater susceptibility to infection on exposure in women is believed to be a contributory factor as is greater exposure to previously infected sexual partners of the opposite sex. He found that older age of sexual partner was associated with increased risk of HIV-1 infection in men and women. Young women form partnerships with men 5–10 years older than themselves, whereas young men have relationships with women of a similar age or slightly younger. Greater number of lifetime partners is also associated with increased risk of HIV. Young men report more partners than do women but infrequent coital acts and greater use of condoms. These behavior patterns are underpinned by cultural factors.
including the expectation that women should marry earlier than men. A strong gender effect remains after factors that affect exposure to infected partners are controlled for. The substantial age difference between female and male sexual partners is the major behavioural determinant of the more rapid rise in HIV prevalence in young women than in men.

Rossler et al. (2010) found high rates of mental disorders among female sex workers. In particular 1-year prevalence rates were high what points to the immediate burden associated with sex work. It is essential to consider the heterogeneity of female sex work. Work setting and nationality characterize different groups of sex workers concerning rates of mental disorders. As has been shown by other studies, female sex workers frequently are exposed to high levels of violence. Violence proved to be an important correlate of mental disorders.

Ebenezer (1995) states that socio-economic factors such as financial handicap, divorce or separation from husband, unemployment and peer influence were found to be major factors encouraging the growth of the sex industry. Ill health and some psychological factors such as poor self-concept, dissatisfaction with commercial sex and self-dissatisfaction may be capable of destabilizing the sex industry. The prevalence of psychopathological symptoms is very high among the sex workers. There was a high prevalence of sleep disorders, intellectual disorder, general somatic disorder, neuroticism and mood disorders.

Scambler and Paoli (2008) addressed the near global attribution of stigma and deviance to female sex workers, and the salience of this attribution for health interventions in HIV/AIDS. A conceptual frame is developed as a guide to comparative sociological study in this area, and the importance of explanation at the level of social structure emphasized. It is argued that norms of shame and blame and the labelling process with which they are bound up always arise within a structure nexus. The authors emphasised, in particular, the figuration-specific tensions between the global and the local, system and life, world and, the relationship between structure, agency and culture.
Peracca et al. (1998) explored popular attitudes towards female sex workers by examining the general public's perceptions of a prostitute's ability to marry based on focus group data. The tentative conclusion emerging from the findings that the general public believes sex workers cannot marry shows that there is a relative lack of severe or lasting social stigma that facilitates recruitment into prostitution and permits it to persist on a widespread scale.

Yan and Xiaoming (2007) reviewed behavioral studies on female sex workers (FSWs) in China from 1990 to 2006. The study indicated that FSWs are young, mobile, most of them have both commercial and non-commercial sex partners; they have low rates of consistent condom use and high rates of STD infection. Some FSWs are also engaged in drug abuse. There is a great variation of sexual practices and HIV risks among FSWs across different work settings. Limited numbers of intervention studies have reported positive effects on increasing condom use and/or decreasing STD infections. Future behavioral intervention programs need to be multi-faceted and incorporate environmental and structural factors for different groups of FSWs as the scenario in India also represents China.

Murray et al. (2006) examined the association between perceived relationship intimacy and consistent condom use among 258 female sex workers and 278 male regular paying partner. Higher intimacy among sex workers and regular paying partners was negatively associated with consistent condom use. Among those reporting higher perceived intimacy, male participants were more than twice as likely to report consistent condom use as female participants. Female sex workers in relationships of higher perceived intimacy are at greater risk of HIV/AIDS than their male regular paying partners. Gender-sensitive HIV prevention programs are needed to address the differential influence of relationship intimacy on condom use in the context of sex work.

Griensven et al. (1995) identified socio-economic and demographic factors related to prevalent HIV infection among female commercial sex workers.
The overall HIV prevalence rate was 22% and showed a statistically significant decrease from 36% when the age at start of commercial sex work was between 12 and 15 years old to 11% when the age at start was 21 years or over. Working in direct service, lower education, having no children and having a debt to the employer were all related to an elevated risk for HIV infection. The younger age at start of commercial sex work, working in direct service and having a debt to the employer were independently associated with prevalent HIV infection. Prevention activities are needed to prevent younger girls from entering sexual service business and to protect them from HIV infection once they start working in the commercial sex service.

**Rao et al. (2003)** suggested that sex workers who use condoms face large income losses because clients have a preference for condom-free sex. This has important implications for AIDS policy. The authors rely on a natural experiment—the non systematic placement of sex workers in a safe sex information program—to identify the relationship between condom use and the price for sex. The authors found that sex workers who always use condoms face large losses of between 66% and 79% of income than their other counterparts who does not use condoms.

The above studies has thrown light on the stigma, quality of life, personality, socio economic status condom usage, mental health, and physical health of the female sex workers and an insight about their family. The impact of sex work on female sex workers is large and viscous.
2.3. IMPACT OF HIV/AIDS, STI AND STIGMA

Though there has been some progress toward containing the spread of HIV, the virus continues to multiply around the world, yielding harsh psychosocial and economic consequences for present and future generations. The regions where HIV/AIDS is having its strongest impact are being devastated by the multi-faceted effects of the disease. In addition to deteriorating quality of life for infected people, AIDS is taxing already strained health and social care systems, creating orphans, forcing the poor further into poverty, reducing the workforce, and putting immense pressure on national economies. For some countries, the present crisis threatens to undo the development progress that has taken place over the last half century (Baingana, Thomas and Comblain, 2005).

It is most difficult to understand the great impact HIV/AIDS has on the victims. The stigma associated with the sickness is also great. More than the external stigma self stigmatization that is condemning oneself or degrading thoughts about oneself will create a huge damage In order to have a clear understanding the following studies will be supportive.

In India, as elsewhere, AIDS is often seen as “someone else’s problem” – as something that affects people living on the margins of society, whose lifestyles are considered immoral. Even as it moves into the general population, the HIV epidemic is still misunderstood among the Indian public. People living with HIV have faced violent attacks, been rejected by families, spouses and communities, been refused medical treatment, and even, in some reported cases, denied the last rites before they die (United Nations Development Programme, 2006).

As well as adding to the suffering of people living with HIV, this discrimination is hindering efforts to prevent new infections. While such strong reactions to HIV and AIDS exist, it is difficult to educate people about how they can avoid infection. AIDS outreach workers and peer-educators have reported
harassment (Human Rights News, 2002), and in schools, teachers sometimes face negative reactions from the parents of children that they teach about AIDS.

Discrimination is also alarmingly common in the health care sector. Negative attitudes from health care staff have generated anxiety and fear among many people living with HIV and AIDS. As a result, many keep their status secret. It is not surprising that for many HIV positive people, AIDS-related fear and anxiety, and at times denial of their HIV status, can be traced to traumatic experiences in health care settings (UNAIDS, 2001).

A 2006 study found that 25% of people living with HIV in India had been refused medical treatment on the basis of their HIV-positive status. It also found strong evidence of stigma in the workplace, with 74% of employees not disclosing their status to their employees for fear of discrimination. Of the 26% who did disclose their status, 10% reported having faced prejudice as a result (UNDP, 2006). People in marginalized groups - female sex workers, hijras (transgender) and gay men - are often stigmatized not only because of their HIV status, but also because they belong to socially excluded groups (United Nations Development Program 2006).

Stigma is made worse by a lack of knowledge about AIDS. Although a high percentage of people have heard about HIV and AIDS in urban areas (94% of men and 83% of women) this is much lower in rural areas where only 77% of men and 50% of women have heard of HIV and AIDS (President’s Emergency Plan For AIDS Relief, 2008). However, the real challenge lies with ignorance about how HIV is transmitted - for example the majority of men and women in rural areas believe that AIDS can be transmitted by mosquito bites. In 2009, NACO carried a population based survey in Nagaland, where it was shown that 72.8% of people surveyed believed HIV could be transmitted by sharing food with someone (National Aids Control Organisation 2009).
Brown et al. (2003) reviewed 22 studies that test a variety of interventions to decrease AIDS stigma in developed and developing countries. This study assesses published studies that met stringent evaluation criteria in order to draw lessons for future development of interventions to combat stigma. The target group, setting, type of intervention, measures, and scale of these studies varied tremendously. The majority of the studies aimed to increase tolerance of persons living with HIV/AIDS (PLHA) among the general population. The remaining studies tested interventions to increase willingness to treat PLHA among health care providers or improve coping strategies for dealing with AIDS stigma among PLHA or at-risk groups. Results suggest some stigma reduction interventions appear to work, at least on a small scale and in the short term, but many gaps remain especially in relation to scale and duration of impact and in terms of gendered impact of stigma reduction interventions.

Bond (2002) evaluated the extent of perceived and enacted HIV/AIDS-related stigma. Stigmatisation is abundant, ranging from subtle actions to the most extreme degradation, rejection and abandonment. Women with HIV and pregnant women assumed to be HIV positive are repeatedly subjected to extensive forms of stigma, particularly once they become sick or if their child dies. Despite increasing access to prevention of mother to child transmission initiatives, including anti-retroviral drugs, the perceived disincentives of HIV testing, particularly for women, largely outweigh the potential gains from available treatments. HIV/AIDS related stigma drives the epidemic underground and is one of the main reasons that people do not wish to know their HIV status. Unless efforts to reduce stigma are, as one peer educator put it, “written in large letters in any HIV/AIDS campaign rather than small”, stigma will remain a major barrier to curbing the HIV/AIDS pandemic.

Roura et al. (2009) investigated the interplay between antiretroviral therapy (ART) scale-up, different types of Stigma and Voluntary Counselling and Testing (VCT) uptake 2 years after the introduction of free ART. Qualitative study was done using in-depth interviews and group activities with a
purposive sample of 91 community leaders, 77 ART clients and 16 health providers. It was found that the complex interplay between ART, stigma and VCT in this setting is characterized by two powerful but opposing dynamics. The availability of effective treatment has transformed HIV into a manageable condition which is contributing to a reduction in self-stigma and is stimulating VCT uptake. However, this is counterbalanced by the persistence of blaming attitudes and emergence of new sources of stigma associated with ART provision. It was concluded, where anticipated stigma prevails, provision of antiretroviral drugs alone is unlikely to have sufficient impact on VCT uptake. Achieving widespread public health benefits of ART roll-out requires community-level interventions to ensure local acceptability of antiretroviral drugs.

Heijnders and Der Meij (2006) conducted a literature review to identify stigma-reduction strategies and interventions in the field of HIV/AIDS, mental illness, leprosy, TB and epilepsy. The review identified several levels at which interventions and strategies were being implemented. These are the intrapersonal, interpersonal, organizational/institutional, community and governmental/structural level. Although a lot of work has been carried out on stigma and stigma reduction, far less work has been done on assessing the effectiveness of stigma-reduction strategies. The effective strategies identified mainly concentrated on the individual and the community level. In order to reduce health-related stigma and discrimination significantly, single-level and single-target group approaches are not enough. A patient-centered approach, which starts with interventions targeting the intrapersonal level, to empower affected persons to assist in the development and implementation of stigma-reduction programmes at other levels is the requirement.

Lee et al. (2005) examined the HIV-related stigma among employees and owners of stalls. Of the participants 53% were women and 47% were men. Ages ranged from 18 to 49 years (M=35, SD=8.1). Half of the participants believed that punishment was an appropriate response toward those living with HIV (50%). Over half (56%) were unwilling to be friends with infected
individuals. The majority thought that those living with HIV should be isolated (73%). They agreed that persons living with HIV should not take care of other people’s children (85%). Punishing beliefs toward persons living with HIV were related to being male, older, married, less educated, and unwilling to be tested for HIV.

**Palmer et al. (2011)** states that a person’s bodily image about himself depends on the self stigma and depression scales. The more a person scores on self stigma and depression scales, he/she would have more negative attitude towards himself. Therefore, they recommend that interventions should also focus to address the issues on self stigma and build a positive image about oneself.

**Singh (2011)** in a news report on behalf of Ministry of Health’s National AIDS Programme Secretariat also shares that although the impact of stigma and discrimination still has a dire impact on the fight against HIV/AIDS, the health sector has been able to make inroads among some key populations. However, self-stigma has been noted as a major factor in addressing the impact of HIV/AIDS.

**Anderson et al. (2008)** explored the effects of HIV/AIDS-related Stigma and Discrimination (HASD) on HIV-positive people. Interviews with respondents revealed that they are keenly aware of the stigma surrounding HIV/AIDS. All respondents mobilise a variety of strategies in order to avoid HASD, which have implications for their social interactions and emotional well being. While some manage to avoid the “spoiled identity” of the stigmatised, thereby creating their own understandings of HIV infection, these may remain individual-level negotiations. HASD affects HIV-positive people at home and in the diaspora in a variety of ways: emotionally, mentally, financially, socially and physically. Interventions specifically addressing stigma and discrimination must be formulated for the population. Tackling stigma and discrimination requires more than education; it requires “cultural work” to address deeply entrenched notions of sexuality.
Nuwaha et al. (2001) conducted focus group discussions and semi-structured interviews with community members and patients with STIs. And found that there was no stigma towards people with AIDS, although stigma towards people with other STIs was high. There were also strong negative attitudes towards the use of condoms. More than 60% of the patients interviewed had received treatment from the informal sector which included self-treatment and traditional healers. It was found that to reduce the incidence and complications of STIs, there may be a need to collaborate with the informal sector, to further evaluate the beliefs and practices identified in this study and to target them for health education.

Scambler and Paoli (2008) addressed the near global attribution of stigma and deviance to female sex workers, and the salience of this attribution for health interventions in HIV/AIDS. A conceptual frame is developed as a guide to comparative sociological study in this area, and the importance of explanation at the level of social structure emphasized. After a general review of the empirical literature, more sustained attention is paid to specific aspects of female sex work in three contexts or figurations, the cities of London, Bangkok and Kolkata. It is argued that norms of shame and blame and the labelling process with which they are bound up always arise within a structure nexus.

Liu et al. (2002) explored the effect of perceived stigmatization on control of sexually transmitted diseases. A cross-sectional study was conducted and it was found that among 406 patients, 80% felt stigmatized, 28% sought treatment only after suffering symptoms for at least 1 week, and 40% reported continuing to have sex while having symptoms. No association was observed between feelings of stigmatization and delay in seeking treatment. Among those married, 77% expressed unwillingness to notify their spouses. Patients who felt stigmatized were less likely to agree to notify their spouses. Policies are needed to reduce stigmatization, reduce time to treatment, and promote disclosure to sex partners.
Shuper et al. (2007) attempted to quantify the relationship between alcohol consumption and unprotected sexual behavior among People Living With HIV/AIDS (PLWHA). It was revealed that any alcohol consumption, problematic drinking, and alcohol use in sexual contexts were all found to be significantly associated with unprotected sex among PLWHA. Taken together, these results suggest that there is a significant link between PLWHA’s use of alcohol and their engagement in high-risk sexual behavior. These findings have implications for the development of interventions to reduce HIV transmission risk behavior in this population.

Doan et al. (2007) emphasized that stigma and discrimination against People Living With HIV/AIDS (PLHIV) are a pressing problem. Nearly all participants experienced some form of stigma and discrimination. Causes included exaggerated fears of HIV infection, misperceptions about HIV transmission, and negative representations of PLHIV in the media. Participants faced problems in getting a job, perceived unfair treatment in the workplace and experienced discrimination in the healthcare setting. Both discrimination and support were reported in the family environment.

Elford et al. (2007) examined the extent to which people living with HIV reported being discriminated against because of their infection. Nearly one-third of respondents said they had been discriminated against because of their HIV infection. Of those who reported experiencing HIV-related discrimination, almost a half said this had involved a health care worker including their dentist or primary care physician.

Greeff et al. (2008) emphasized that the concept of stigma has received significant attention in recent years in the HIV/AIDS literature. Although there is some change towards the positive, AIDS still remains a significantly stigmatized condition. AIDS stigma and discrimination continue to influence people living with and affected by HIV (PLWA), as well as their health-care providers. Unless stigma is conquered, the illness will not be defeated.
Violet et al. (2008) has conducted a study to find out if internalized HIV stigma among the HIV infected changes over time, and whether it differs with demographics and rural or urban location. They found that a gender and rural-urban dichotomy that seems to influence the experience of HIV felt stigma. Being urbanite and being female significantly increases stigma. The rural experience indicates insignificant change over time.

Hamra et al. (2006) quantified expressed stigma in clients of the Kangemi program for HIV positive children, and to characterize the association between stigma and other population characteristics. Respondents who were younger, had never married, and had less education expressed greater stigma. Differences in stigma were associated with poor knowledge about AIDS and negative attitudes toward testing, but not with gender or tribal affiliation. Condom use at last intercourse, unrelated to stigma, was only 40% . While this population has good knowledge about AIDS and appraises risks realistically, it fails to reduce these risks. Associations between stigma and other domains can inform interventions that improve HIV care and mitigate spread of HIV.

Lichtenstein (2003) presented that STI-related stigma directly and indirectly affected willingness to be treated for STI at public health clinics. Four dimensions of stigma emerged: (1) Religious ideation affected how health workers felt about ‘promiscuous’ patients (especially women), (2) privacy fears discouraged male patients from seeking treatment at local clinics, (3) racial attitudes affected willingness to be treated for STI and (4) Stigma transference (being “scarlet lettered”) emerged as a potent disincentive to treatment. Partner notification was more likely if patients felt betrayed by a sexual partner.

Chan et al. (2007) analyzed the interrelationships between the stigma of HIV/AIDS and the co-stigmas of commercial sex (CS) and injecting drug use (IDU). It was found that there were strong interactions between the stigmas of AIDS and IDU but not between AIDS and CS. Although AIDS was shown to
be stigmatizing by itself, it was significantly less stigmatizing than IDU. The findings highlight the need to consider the non-disease-related stigmas associated with HIV as well as the actual stigma of HIV/AIDS in treatment and care settings.

Mathews et al. (2005) conducted a pilot telephone survey to identify social barriers to treating sexually transmitted infections (STIs) in a socially conservative state in USA. The participants reported that infected persons, *per se*, should not be stigmatized. However, almost half of respondents stated that they would seek revenge against a partner who infected them. Feelings of embarrassment negatively affected willingness to seek health care; almost half of the respondents stated that, if infected, they would delay treatment or not seek treatment at all. Differences in responses emerged in relation to ethnicity and religiosity, with African-Americans and regular churchgoers being more likely than others to say they would delay or refuse treatment because of embarrassment. Gender differences also emerged: respondents reported that women would be more stigmatized than men if they were infected, even though men should be held responsible for spreading STIs. These findings suggest that stigma may be a compelling barrier to STI control, and that ethnicity, gender and religiosity play an important role in attitudes towards treatment.

From the above studies it is evident the great impact HIV/AIDS has on the sex workers. The sexually transmitted diseases have surely created a fear on the minds of people. There is a clear stigma attached by people for various reasons. More than the social stigma HIV infected individuals are traumatized by self stigma.

**2.4. KNOWLEDGE, ATTITUDE AND PRACTICES ON STI, HIV/AIDS**

Increasing prevalence of HIV in sex workers is an indication of increasing probability of a generalized epidemic (UNAIDS, 2004). A high prevalence of HIV in female sex workers (FSWs) has been reported recently from some
parts of India, including the state of Tamil Nadu (Desai et al, 2003). It becomes imperative to spread the facts of the disease and make sure the sex workers and others have the knowledge to adopt preventive measures. It is necessary for them to adapt to the present scenario and have the right attitude.

Kalichman and Simbayi (2005) examined associations among the belief that AIDS is caused by spirits and supernatural forces. Eleven percent of the men believed that AIDS is caused by spirits and supernatural forces, 21% were unsure if AIDS is caused by spirits and the supernatural, and 68% did not believe that AIDS is caused by spirits and supernatural forces. The finding suggests that relationships between traditional beliefs about the cause of HIV-AIDS and AIDS stigmas are mediated by AIDS-related knowledge. AIDS education efforts are urgently needed to reach people who hold traditional beliefs about AIDS to remedy AIDS stigmas.

Lazarus et al. (2006) explored the knowledge, attitudes and practices with regard to HIV/AIDS and condom use. It was found that education, sex, and nationality were positively associated with knowledge about HIV/AIDS. Less than half of both men and women scored more than 70% on the knowledge portion of the questionnaire. Men had a more negative attitude towards condoms than women, but greater knowledge about them. One-third of the women reported never having seen or heard of a condom, and almost half had never received information about condoms. Both sexes preferred receiving such information from the TV or friends instead of family doctors or HIV-positive individuals. This study suggest that knowledge about HIV/AIDS is low. The groups receive little information, while condom knowledge is particularly low among poorly educated women, and men have a negative attitude to condom use.

Lonn et al. (2007) investigated the level of knowledge about HIV and AIDS and risk behavior among young people at a medical University in China. The students were from Sunni Muslims and speak a Turkish language.
Questionnaires were handed out to 400 students. All but one had heard about HIV/AIDS and approximately 95% knew the most common routes of transmission: sexual contact, mother to child, and sharing needles. Eighty percent also knew about transmission through breastfeeding. There were some knowledge gaps about how HIV is not transmitted. The questionnaires showed that only 5.7% of the undergraduate students admitted to being sexually active. Twenty-eight percent of the undergraduates and 17% of the postgraduates would not tell anyone if they were infected with HIV. In the interviews the students’ knowledge of HIV/AIDS seems to be superficial. Although they did not display high sexual risk behavior during the time of our study, attitudes are changing, and becoming more liberal.

Umeh et al. (2008) explored the relationship between sources of HIV/AIDS information and knowledge, and the relationship between knowledge of HIV/AIDS and care for people with AIDS among health care providers in three different levels of health care institutions The results showed a fair level of knowledge among all health care professionals, with the highest level of knowledge among the doctors and the lowest among laboratory workers. There was a significant gender difference in the level of knowledge but the data suggested that knowledge did not differ by hospital settings. There were generally negative feelings and views about the care of HIV/AIDS patients among the professionals, these views being worst at the community health centers and best at the government hospital. The greatest source of information for the majority of professionals was health talks/seminars, and those respondents who got their information from school scored the highest on the items on general knowledge of HIV/AIDS incidence, cause, transmission, and clinical treatment.

Norr et al. (2004) conducted a peer group HIV prevention intervention based on social–cognitive learning theory, gender inequality, and the primary health care model for community-based health promotion was developed for urban employed women. All women volunteered to participate in the intervention. Compared with women in the delayed control group, women in the
intervention group had significantly higher post intervention levels of knowledge of HIV transmission, sexually transmitted diseases (STDs), and HIV prevention behaviors; positive condom attitudes and confidence in condom use; personal safer sex behaviors; and positive attitudes toward persons living with HIV/AIDS and community HIV/AIDS-related activities.

Aral et al. (2003) clarified the organization of sex work and described the likely contributions of different types of sex work to disease transmission. It was found that intermittent truck stop and railway station sex workers may be the most important groups in the dissemination of STIs. Identifiable positions in the social organization of street sex work include pimps, assistant female pimps, guards, drivers, indicators, the sex workers themselves, and recruitment truckers can help in the curbing of transmission of STI infections.

Afsar et al. (2002) studied knowledge, attitude and practices regarding sexually transmitted infections. There was little awareness regarding causes and prevention of sexually transmitted infections in the community. The situation was slightly better among health care providers. While health care providers believed that the prevalence of sexually transmitted infections is high, the community did not consider themselves at risk. The community believed that these diseases are problems among a sub-population of male adolescents, especially those who have homosexual relations. However, due to social norms, they rarely discussed such health problems with other family members or elders. Adolescents with any sexual health problems visit quacks. Considering the suspected high prevalence of sexually transmitted infections and the relative lack of knowledge, it is imperative that a public health intervention be initiated. This must include educating not only the community but also the health workers.

Kalichman et al. (2010) examined gender attitudes and sexual violence-supportive beliefs (rape myths) for HIV transmission. Over 40% of women and 16% of men had been sexually assaulted, and more than one in five men openly admitted to having perpetrated sexual assault. Traditional
attitudes toward women's social and gender roles, as well as rape myths, were endorsed by a significant minority of both men and women. Multivariate analyses showed that for men, sexual assault history and rape myth acceptance, along with alcohol and other drug use history, were significantly related to cumulative risks for HIV infection. In contrast, they found that women were at substantial risk for sexually transmitted infection (STI), including HIV, women's risks were only related to lower levels of education and alcohol use history. The authors speculate that women's risks for STI/HIV are the product of partner characteristics and male-dominated relationships, suggesting the critical importance of intervening with men to reduce women's risks for sexual assault and STI/HIV.

Lau and Tsui (2005) examined the level of discriminatory attitudes towards People Living With HIV/AIDS (PLWHA) and factors in association with such attitudes. It was found that around 42% of the respondents exhibited discriminatory attitudes. For instance, about 42% would avoid making physical contact with PLWHA; 35% believed that all infected medical staff should be dismissed and about 47% would agree with enacting a law to prohibit PLWHA. A sizeable proportion of the respondents also hold negative perceptions about PLWHA (for example, 43.7% agreed that the majority of PLWHA are promiscuous, 20.7% thought that PLWHA are merely receiving the punishment they deserve, etc). Multiple regression analysis found that age, HIV related knowledge, the above mentioned negative perceptions about PLWHA, fear related to AIDS, and exposure to HIV related information were independent predictors of discriminatory attitudes towards PLWHA. About 30% would give PLWHA the lowest priority in resource allocation among five groups of patients with chronic diseases. Discriminatory attitudes towards PLWHA are common and cover different aspects of their life because of low knowledge and poor attitude towards HIV/AIDS.

Xiaodong et al. (2007) assessed students' knowledge, attitudes and practices on HIV and AIDS. Respondents were asked to provide information about knowledge and attitudes about HIV/AIDS. Study results indicated that
the majority of undergraduates had a moderate level of HIV and AIDS knowledge, acceptance and attitudes towards people with HIV and AIDS. Boys had more acceptance and positive attitudes towards people with HIV and AIDS than girls. Students majoring in medicine performed better (more knowledgeable and accepting) than non-medical students. Most students did not know HIV VCT centers and most students did not show their confidence for controlling of HIV and AIDS. The students’ knowledge about HIV/AIDS was uneven. A peer educational program to talk about self esteem, healthy sexual attitudes, being human-accepting and loving should be provided to them.

**Upreti et al. (2007)** attempted to assess knowledge, attitude and behaviour on STIs/HIV/AIDS in the context of young peoples of Nepal. The findings indicate that the overall knowledge regarding STIs and HIV/AIDS is high although the level of knowledge seems to differ according to education, gender, and area of residence. Knowledge about condoms was also very high but practice of correct and consistent use in premarital and extramarital sexual relations with non-regular partners seems to be lower. The overall sexual behaviour among young people is unsafe. This suggests that young people’s sexual and reproductive health issues need to be further addressed and explored in order to promote safer and responsible sexual behaviour.

**Odu et al. (2008)** determined the knowledge, attitude and sexual behaviour of students with regard to HIV/AIDS. The authors found that most (89.4%) respondents were aware of the existence of HIV/AIDS, and knew the aetiology, routes of transmission, signs and symptoms, and preventive measures against the disease. While a little over half (59.8%) of the respondents revealed that they could hug people with HIV/AIDS, one out of four (27.2%) stated that these persons should be isolated from the community. Less than a quarter (22.3%) of the respondents believed that they were vulnerable to HIV/AIDS. More than half (58.2%) had ever had sex; the mean age at their first sexual exposure (for all respondents) was 16.7 ± 4.4 years. Almost half (48.2%) of the 191 currently sexually active respondents had multiple sexual partners. Of the sexually active respondents, 75.9%
claimed to have ever used condoms; among these, male respondents were more likely to have ever used condoms than their female counterparts. The study revealed a gap in the knowledge of HIV/AIDS and an inappropriate sexual behaviour among respondents. Meaningful strategies, such as an innovative and culturally sensitive adolescent sexual and reproductive health programme that focuses on modification of sexual behaviour should be adopted to allow young people to prevent transmission of the HIV/AIDS virus.

**Chacham et al. (2007)** described work carried out to promote sexual and reproductive health for sex workers. Sex workers were trained as peer educators and workshops were offered on self-care for sex workers and their clients. The intervention offered clinic consultations and self-care workshops on sexuality, contraception, STI/HIV prevention and self-examination. Health care needs during menstruation and unhealthy vaginal practices led to promotion of the diaphragm as a contraceptive, for prevention of reproductive tract infection. Meeting the sexual and reproductive health needs of sex workers depends on the promotion of their human rights, access to health care without discrimination, and attention to psychosocial health issues, alcohol and drug abuse, and violence from clients, partners, pimps and police.

The above studies clearly bring out the knowledge prevailing among the sex workers and adolescents. The studies conducted to promote right preventive measures have clearly enhanced the knowledge of AIDS/HIV and STI among sex workers and others.

### 2.5. IMPACT OF NUTRITION ON QUALITY OF LIFE

Many studies bring out the fact and prove it with facts that the right kind of nutrition can have a positive and healthy consequence on both the physical as well as mental health of patients. This consecutively has a positive effect on the Quality of life and enhances it. In order to understand the impact of nutrition on quality of life the following studies are stated. The following
studies throw light on the how individuals can sustain better and raise their quality of life with the right nutrition.

Dwyer (2001) emphasised that good nutrition promotes Quality of Life (QOL) by averting malnutrition, preventing dietary deficiency disease and promoting optimal functioning. However, definitions of quality of life also encompass life satisfaction and both physical and mental well-being. Nutrition and diet have not been a part of mainstream research on quality of life and are not included among key quality of life domains.

Crogan and Pasvogel (2003) described the influence of protein calorie malnutrition (PCM) on quality of life in nursing homes. It was found that of the participants, 38.6% were malnourished. Protein calorie malnutrition (measured by BMI) influenced quality of life for these residents in that there was a significant relationship between BMI and functional status (eating, personal hygiene, and toilet use) and BMI and psychosocial well-being (initiative or involvement, unsettled relationships, and past roles). Depression was not a significant indicator of low BMI in these nursing home residents. Low BMI, indicating protein calorie malnutrition to negatively influence quality of life. Understanding the relationship between quality of life and PCM could lead to improved quality of life for older adults in nursing homes.

Caro et al. (2007) evaluated the quality of life (QoL) of patients by taking into account physical, psychological and social conditions. Quality of life intervention approach, should be started as early as possible,. As it can reduce or even reverse their poor nutritional status, improve their performance status and consequently their Quality of life. Nutritional intervention accompanying curative treatment has an additional and specific role, which is to increase the tolerance and response to the oncology treatment, decrease the rate of complications and possibly reduce morbidity by optimizing the balance between energy expenditure and food intake. In palliative care, nutritional support aims at improving patient's Quality of life by controlling
symptoms such as nausea, vomiting and pain related to food intake and postponing loss of autonomy.

Gardner and Fergusson (2004) emphasized that infection with the Human Immunodeficiency Virus (HIV) and the development of Acquired Immunodeficiency Syndrome (AIDS) have had a significant impact on domestic and global health, social, political, and economic outcomes. Prevention and treatment efforts to control HIV infection are more demanding than in previous decades. Achieving food and nutrition security, and managing nutrition-related complications of HIV infection and the multiple aspects of disease initiated by or surrounding HIV infection, referred to as HIV disease, remain challenges for patients and for those involved with HIV/AIDS prevention, care, and treatment efforts. Confounding clinical issues include medication interactions, coinfection with other infections and diseases, wasting, lipodystrophy, and others. Dietetics professionals, other health care professionals, and people infected with HIV will need to understand and address multiple complex aspects of HIV infection and treatment to improve survival, body functions, and overall quality of life. Individualized nutrition care plans will be an essential feature of the medical management of persons with HIV infection and AIDS.

Maaravi et al. (2000) studied the nutritional status of the participants. There was a significant positive relationship between nutritional scores and activities of daily living as well as cognitive state. In addition, a strong negative relation was found between nutritional scores and visits to the family physician in the previous fortnight, visits to the emergency room in the previous year, and hospital admissions in the following two years. The results suggest that nutritional state is one of the major determinants of the quality of life in the elderly and therefore, should be part of any geriatric assessment.

Tong et al. (2010) determined the prevalence of nutrition impact symptoms in medical oncology patients at 1, 6, and 12 months after commencement of chemotherapy and to investigate the relationship of these symptoms to quality of life (QoL) and performance status. Nutrition impact symptoms were
commonly experienced, even 12 months following commencement of chemotherapy, and were associated with poorer QoL and performance status. This highlights the importance of early identification and management of nutrition impact symptoms with adequate follow-up in order to provide optimal care for people with cancer.

**Suttajit (2007)** said that the nutritional problems have been shown to be significant and contribute to health and death in HIV and AIDS patients. Weight loss, lean tissue depletion, lipoatrophy, loss of appetite, diarrhea, and the hypermetabolic state each increase risk of death. The role of nutrition is involved in the pathogenesis of HIV+ leading to AIDS. He also revealed that studies consistently show that serum antioxidant vitamins and minerals decrease while oxidative stress increases during AIDS progression. The optimization of nutritional status, intervention with foods and supplements, including nutrients and other bio-active food components, are needed to maintain the immune system. Various food components may be recommended to reduce the incidence and severity of infectious illnesses by forms of bio-protection that include reduced oxidative stress. People with HIV+/AIDS can be informed about the basic concepts of optimal nutrition by identifying key foods and nutrients, along with lifestyle changes, that contribute to a strengthened immune system. Moreover, nutritional management, counseling and education should be beneficial to the quality and extension of life in AIDS.

**Alvarez (1999)** said that the infection by HIV continues to be the most aggressive pandemic of our century, with a high economical, social, and health care cost. In the last years the development of new, highly effective therapies has made it possible to change the prognosis, the quality of life, and the survival of many patients. However, the associated malnutrition continues to appear, with dramatic consequences. It affects between 50 and 90% of the seropositive patients. Its origin is multi-factorial and its early detection allows positive therapeutic responses to be obtained, with nutritional repletion, if the correct treatment is given. The future of the nutritional therapeutic approach in
patients with HIV infection passes through a combined therapy that includes: nutritional education, drugs, and nutritional support.

**Oguntibeju et al. (2007)** has revealed that macronutrients and micronutrients are critical for fighting HIV-infection, because they are required by the immune system and major organs to attack infectious pathogens, HIV inclusive. It was believed that weight gain or maintenance might be achieved through good nutrition and has helped to reduce the consequences of wasting in people living with HIV/AIDS. Nutrition has helped to strengthen the immune system and reduce the severity and impact of opportunistic infections in people living with HIV/AIDS. It is known that an immune dysfunction as a result of HIV/AIDS leads to malnutrition and this in turn leads to further immune dysfunction. Various research studies have confirmed that nutrient deficiencies are associated with immune dysfunction and accelerated progression to AIDS. In this review, the interrelationship between nutrition and immune system in HIV infection is presented.

**Thomas and Mkandawire (2006)** said that HIV affects almost all bodily systems, which can lead to recurrent opportunistic infections, weight loss, distribution of weight changes, and death. Malnutrition and wasting, two symptoms that interfere with nutrient availability, accessibility, and metabolism, are associated with higher morbidity and mortality. Nausea, vomiting, swallowing or chewing difficulties, or the response of the body to opportunistic infections or medications that are considered vital to the treatment of the disease may affect nutritional status. A positive nutritional balance may help to improve the immune and other body systems, and delay the progression of the disease.

From the above studies we can infer that it is mandatory to include nutritive care in order to raise the quality of life. The studies support the fact that Nutrition has a significant impact on the overall Quality of life of the patients.
2.6. ROLE OF INTERVENTIONS AND EFFECT OF PSYCHOSOCIAL INTERVENTION ON QUALITY OF LIFE

The term **Psychosocial Intervention** refers to a range of social, educational, occupational, behavioral, and cognitive interventions for increasing the role performance of persons with serious and persistent illness and enhancing their recovery. Psychosocial intervention includes services aimed at long-term recovery and maximization of self-sufficiency, as distinguished from the symptom stabilization function of acute care.

**Quality of life** is defined as individual's perceptions of their position in life in the context of the culture and value system where they live, and in relation to their goals, expectations, standards and concerns. It is a broad ranging concept, incorporating in a complex way a person’s physical health, psychological state, level of independence, social relationships, personal beliefs and relationship to salient features of the environment.

In order to understand the impact psychosocial intervention has on the quality of life the following studies are stated. This will give an in depth knowledge of the relationship between them.

*Lutgendorf et al. (1994)* investigated that psychosocial interventions such as cognitive behavioral stress management (CBSM), may enhance coping and social support which contribute to an improvement of quality of life factors such as emotional functioning, social functioning, and sense of well-being, for HIV-infected men during several phases of HIV spectrum disease. These phases include the acutely stressful period immediately following notification of HIV+ status, the adjustment period following this news, and the process of dealing with chronic symptomatic HIV infection.

Normalization of some aspects of immunological status were found to accompany some of these psychosocial changes in the short-run. Longer-
term follow-up indicated relationships between psychosocial factors and improved immunological status and physical functioning up to 2 years later. Factors such as an increased use of active coping strategies, including relaxation exercises, use of more functional appraisals and elicitation of social support, and decreased use of denial/avoidance coping strategies, may be key predictors of longer-term emotional well-being, social functioning, and physical functioning in HIV-infected populations.

Special issues need to be addressed in emerging models of quality of life assessment in HIV populations. Loss of employment and its financial and existential consequences are also factors which impact sense of self and well-being, and need to be addressed both in research as well as in interventions. The effect of repeated HIV-related bereavements upon an individual's social network and the emotional, social, and physical sequel of bereavement have implications for HIV quality of life research as well. Quality of survival time has become a paramount issue in the context of HIV spectrum disease.

Crepaz et al. (2006) found that the interventions significantly reduced unprotected sex and decreased acquisition of sexually transmitted diseases. As a whole, interventions with the following characteristics significantly reduced sexual risk behaviours. They were based on behavioural theory, designed to change specifically HIV transmission risk behaviours, delivered by health-care providers or counselors, delivered to individuals, delivered in an intensive manner, delivered in settings where PLWH receive routine services or medical care, provided skills building, addressed a myriad of issues related to mental health, medication adherence, and HIV risk behaviour. It was concluded that interventions targeting PWLH are efficacious in reducing unprotected sex and acquisition of sexually transmitted diseases.

Ulasi et al. (2009) assessed HIV/AIDS-related stigma and discrimination of People Living With HIV/AIDS (PLWHA). Regression analysis showed that participants with higher educational attainment were more likely to favor policies denying employment to PLWHA. It was disapproved of revealing HIV
sero-status. Muslims were more likely than Christians to agree with identifying PLWHA and more likely to advocate revealing HIV sero-status. Males were more likely to favor revealing HIV status. Employed persons were more likely to have social contact with PLWHA. These findings are useful in guiding the design of interventions against HIV/AIDS-related stigma.

**Askew and Berer (2003)** reviewed and assesses the contributions made to date by sexual and reproductive health services to HIV/AIDS prevention and treatment, mainly by services for family planning, sexually transmitted infections and antenatal and delivery care. It also describes other sexual and reproductive health problems experienced by HIV-positive women, such as the need for abortion services, infertility services and cervical cancer screening and treatment. The study shows that sexual and reproductive health programmes can make an important contribution to HIV prevention and treatment, and that STI control is important both for sexual and reproductive health and HIV/AIDS control. More integrated programmes of sexual and reproductive health care and STI/HIV/AIDS control should be developed.

**King et al. (2009)** conducted a study whose primary objective was to assess the effectiveness of interventions that aim to improve the psychosocial well-being of children directly affected by HIV and AIDS in the interventions that was conducted for improving the psychosocial well-being of children affected by HIV and AIDS. They said that the current practice is based on anecdotal knowledge, descriptive studies and situational analyses as there were no interventions conducted for psychosocial well being. This systematic review has identified the need for high quality intervention studies. Therefore, interventions has to be designed for children affected with HIV which focus on their psychosocial well-being.

**Foster (2007)** investigated the socio cultural barriers in HIV/AIDS prevention and presents a new approach or framework for addressing these barriers. The
framework highlights Stigma, Fear, and Denial as barriers in interventions for HIV/AIDS. The framework uses a culturally competent, community-based approach.

Phillips et al. (2006) examined that a growing body of evidence demonstrates a significant relationship between spirituality and health. HIV-infected individuals often find new meaning and purpose for their lives while establishing new connections and strengthening old ones. They examined the relationships among spiritual well-being, sleep quality, and health status in 107 HIV-infected men and women. Spiritual well-being was found to be a significant factor related to both sleep quality and mental and physical health status. Every study participant reported sleep disturbance. The findings suggested that spiritual well-being and sleep quality need to be assessed so appropriate interventions can be implemented to improve health outcomes in this population.

Osborn et al. (2006) investigated the effects of Cognitive Behavioral Therapy (CBT) and Patient Education (PE) on commonly reported problems (depression, anxiety, pain, physical functioning, and Quality Of Life (QOL)) in adult cancer survivors. CBT was effective for depression, anxiety, and QOL was improved at both short and long term follow up. PE was not related to improved outcomes. CBT is related to short-term effects on depression and anxiety and both short and long term effects on QOL. Individual interventions were more effective than group. Various CBT approaches provided in an individual format can assist cancer survivors in reducing emotional distress and improving quality of life.

Friedland et al. (1996) evaluated coping, social support and quality of life (QOL) were examined in 120 HIV patients (mean age = 37). Information was gathered from self-administered questionnaires. Respondents had good levels of social support and used a variety of coping strategies. Their scores on the behavioural and subjective measures of QOL were somewhat below average. The illness-related measure indicated that their diagnosis had an almost neutral effect on QOL and showed several areas where QOL had been positively affected. Income, emotional social support, and problem-oriented
and perception-oriented coping were positively related to QOL. Tangible social support and emotion-oriented coping were negatively related and symptom severity was not related at all. Close friends provided most types of support. Although respondents indicated high levels of satisfaction with support generally, they expressed a need for more emotional support. Unemployment was high despite participants being relatively healthy and well-educated.

_Tuck et al. (2001)_ designed this study to examine the relationships among spirituality and psychosocial factors in a sample of 52 adult males living with human immunodeficiency virus (HIV) disease and to determine the most reliable spirituality measure for a proposed longitudinal study. HIV disease is among the most devastating of illnesses, having multiple and profound effects upon all aspects of the biopsychosocial and spiritual being. Although research has suggested relationships among various psychosocial and spiritual factors, symptomatology and physical health, much more research is needed to document their potential influences on immune function, as well as health status, disease progression, and quality of life among persons with HIV disease. This descriptive correlational study explored the relationships of spirituality and psychosocial measures. The findings indicated that spirituality as measured by the existential well-being (EWB) subscale of the Spiritual Well-Being Scale was positively related to quality of life, social support, effective coping strategies and negatively related to perceived stress, uncertainty, psychological distress and emotional-focused coping. The other spirituality measures had less significant or non significant relationships with the psychological measures. The study findings support the inclusion of spirituality as a variable for consideration when examining the psychosocial factors and the quality of life of persons living with HIV disease.

_Lutgendorf et al. (2001)_ designed structured intervention a) to increase cognitive and behavioral coping skills related to managing the distress of symptomatic HIV, and b) to increase social support among group members.
He examined the relative contribution of changes in coping skills and social support during the intervention period to reductions in dysphoria, anxiety, and distress-related symptoms in this sample. Twenty two participants out of forty showed significant improvement in cognitive coping strategies involving positive reframing and acceptance, and in social supports involving attachment, alliances, and . Improved cognitive coping, specifically acceptance of the HIV infection, was strongly related to lower dysphoria, anxiety, and total mood disturbance in both conditions. Changes in social support and in cognitive coping skills seem to mediate the effects of the experimental condition on the changes in distress noted during the intervention. These results suggest that cognitive coping and social support factors can be modified by psychosocial interventions and may be important determinants of the changes in psychological well-being and quality of life during symptomatic HIV infection that can be achieved through this form of intervention.

Huanguang et al. (2004) assessed the total effects of social support and coping as well as the direct and indirect effects of these factors through depression on health-related quality of life. It was found that coping and social support had total effects on some, but not all dimensions of health-related quality of life, whereas depression was associated with all dimensions of health-related quality of life. Furthermore, the effects of both social support and coping were mainly through the intermediate variable, depression. In the era of Highly Active Antiretroviral Therapy (HAART), when quality of life issues are of paramount importance, strategies to improve social support, coping, and particularly, depressive symptoms are strongly encouraged.

Chochinov et al. (2005) examined a novel intervention, dignity therapy, designed to address psychosocial and existential distress among terminally ill patients. Dignity therapy invites patients to discuss issues that matter most or that they would most want remembered. After the intervention to improve sense of dignity, depression, sufferings, and hopelessness; sense of purpose, sense of meaning, desire for death, will to live, and suicidality among
terminally ill patients, it was found that ninety-one percent of participants reported being satisfied with dignity therapy. Seventy six percent felt a heightened sense of dignity; 68% reported an increased sense of purpose; 67% reported a heightened sense of meaning; 47% reported an increased will to live; and 81% reported that it had been or would be of help to their family. Post intervention measures of suffering showed significant improvement and reduced depressive symptoms.

**Barbara, Ralf (2001)** investigated the effectiveness of psychosocial interventions on quality of life in adult cancer patients. The overall effect size of psychosocial interventions and the effect of potential moderating variables such as type and duration of intervention, sociodemographic and clinical parameters, characteristics of QoL measurement, and methodological quality of the selected studies were calculated using a meta analysis model suggested by Hunter and Schmidt. The most important moderating variable was duration of psychosocial intervention with durations of more than 12 weeks being significantly more effective than interventions of shorter duration. The meta analytical findings support the usefulness of psychosocial interventions for improving QoL in adult cancer patients.

**Mendes de Leon et al. (2006)** conducted a study to find out the effect of a psychosocial intervention and quality of life after acute myocardial infarction. Psychosocial interventions of limited duration confer modest QOL benefits in post myocardial infarction patients who are depressed or have low perceived social support. Interventions of longer duration or greater intensity is required to produce more substantial improvements in QOL in patients.

**Farkhondeh et al. (2005)** studies the effects of psycho-educational intervention on health-related quality of life (QOL) of patients with chronic liver disease. From the point of marital status 74.5% in the experimental and 67.3% in the control group were married. Findings revealed that there were no significant differences from view point of gender and marital status between two groups. A statistically significant difference in all domains of QOL was shown in three months after the intervention. Generally, the result of this study
revealed that psycho-educational intervention had an improving effect on QOL of patients with chronic liver diseases. It seems that the combination of psychological and educational intervention leads to improvement of QOL.

Ashton et al. (2005) examined social support and maladaptive coping as predictors of HIV-related health symptoms. Sixty-five men and women living with HIV/AIDS completed baseline measures assessing coping strategies, social support, and HIV-related health symptoms. The individuals reported lower increase in HIV-related health symptoms used less venting (expressing emotional distress) as a strategy for coping with HIV. However, when satisfaction with social support was added to the model, the use of this coping strategy was no longer significant, and individuals reporting more satisfying social support were more likely to report lower increase in their HIV-related health symptoms, suggesting that social support is a robust predictor of health outcomes over time independent of coping style and baseline medical status.

A patient's well being is determined not only by his or her health status and response to treatment, but also by other social and psychological dimensions. The identification of factors that determine quality of life (QoL) is important in order to better tailor health and social care services, and thereby improve the functioning and well being of people living with HIV. Thus it is a completely mandatory to intervene and provide suitable adaptive measures (McDonnell et al. 2005).

The above studies in this section gives an overview of the impact the interventions especially psychosocial interventions has on the Quality of Life of various diseases including HIV/AIDS. It also suggest the effective duration of the interventions. Thus, it projects the importance of interventions that benefit HIV infected individuals in aiding a better Quality of Life.

At the outset, it is evident from the above sections the scenario of sex work in the nation – the extent and percentage of its spread. The impact of sex work on the female sex workers and their family gives a understanding of the
stigma associated with their condition and their overall quality of life. The personality of the HIV/AIDS victims explains their attitudes and knowledge prevailing. The studies reveal the poor socio economic status prevalence among the sex workers. It becomes most evident to understand the impact HIV/AIDS has caused on the mental health and physical health of the sex workers. Thus, it becomes mandatory to implement psycho social intervention and rehabilitative measures on female sex workers.

Along with the right nutrition, suitable psychosocial intervention, social support and economic support a person can enhance their Quality of Life. The investigator had delved into the different areas to build the intervention program focusing on HIV positive female sex workers which would find the relationship between the psychosocial intervention and quality of life.