Advanced International Journal for Research (AIJFR)
E-ISSN: 3048-7641 ● Website: www.aijfr.com ● Email: editor@aijfr.com

# Socioeconomic Profile of Women Living with HIV/AIDS

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**Abstract**

This study examines the socioeconomic profile of women living with HIV/AIDS (WLHA) in Ludhiana, Punjab, a group disproportionately affected due to gendered social norms, limited awareness, and structural inequalities. Based on a descriptive, cross-sectional design, data were collected from 67 HIV-positive women aged 15–60 years through in-depth, semi-structured interviews and a structured socio-demographic schedule. Variables studied included age, marital status, caste, religion, education, occupation, income, and social class. Findings indicate that the majority of respondents were in the 25–45 age group and that most were widowed or previously married, often learning about their HIV status only after the illness or death of their husbands. Early marriage, low educational attainment, poverty, and economic dependency emerged as key risk factors influencing women's vulnerability to HIV, aligning with national and global research. Overall, the study highlights how gender, socioeconomic disadvantage, and cultural constraints intersect to shape women's risk environments. The findings underscore the need for gender-sensitive prevention strategies, social protection measures, and targeted support for WLHA in India.

**Keywords:** HIV/AIDS, women, socioeconomic profile, Ludhiana, vulnerability, India

## 1. Introduction

Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) continue to be major public health challenges globally, with significant social, economic, and psychological implications. While HIV/AIDS affects individuals across all demographics, women particularly in low- and middle-income regions are disproportionately impacted due to a combination of biological vulnerability, gender inequality, and socioeconomic disadvantage.

HIV significantly affects women's health and overall well-being, and globally, women constitute the majority of HIV cases. As of 2024, an estimated 40.8 million people were living with HIV worldwide, with women accounting for approximately 53% of this population (UNAIDS, 2024).

The impact of HIV on women varies by region. In Sub-Saharan Africa, women and girls represent 63% of all new HIV infections. In contrast, in other parts of the world, men and boys made up more than 70%

of new HIV diagnoses in 2022(UNAIDS, 2024). According to UNAIDS (2020), approximately 38 million people worldwide are living with HIV, with around 5.8 million of them residing in Asia. In India alone, the National AIDS Control Organization (NACO, 2020) reports that 2.349 million people are living with HIV, making it the country with the third-highest number of cases globally, with an estimated HIV prevalence rate of 0.22%.

Research conducted in India shows that young women often contract HIV within the framework of monogamous relationships. This highlights a concerning trend where women's risk of infection is not necessarily linked to high-risk behavior, but rather to structural and relational vulnerabilities. Indian women face a disproportionately higher susceptibility to HIV/AIDS, largely due to limited awareness about the disease, prevailing poverty, and persistent gender inequality (Rompay et al., 2008). These intersecting factors not only elevate the likelihood of HIV transmission but also intensify the adverse effects of the disease on women compared to men. Understanding the socioeconomic profile of women living with HIV/AIDS is essential to formulating effective policies, targeted interventions, and support mechanisms that address their unique needs and challenges.

**Review of literature**

Studies indicate that young women, particularly those aged 15–24, are biologically more susceptible to HIV than their male counterparts. In regions such as Sub-Saharan Africa, young women are up to eight times more likely to contract HIV compared to young men (Berkley et al., 1990; Gregson & Garnett, 2000). Similar trends are observed in India and the Caribbean, where adolescent girls are significantly more vulnerable than boys (UNAIDS, 2010; Centre for Reproductive Rights, 2002). In Tamil Nadu, 40% of women testing HIV-positive were between 18–25 years (Newman et al., 2000), and other studies consistently show that the majority of HIV-positive women are in the 15–29 age group (Karim et al., 2010).

Early and child marriage is common in developing regions, which increases HIV risk due to limited ability of young wives to negotiate safe sex and frequent unprotected intercourse (UNAIDS, 2014; Clark, 2004). Contrary to the perception that marriage offers protection, studies reveal that married adolescent girls may be at equal or higher risk of HIV than their unmarried counterparts (Santhya & Jejeebhoy, 2007; Bruce & Clark, 2004). This risk is compounded by husbands' prior high-risk behaviors and social pressure on young brides to prove fertility through regular sexual activity (Miller & Lester, 2003; Lee et al., 2009). Married, monogamous women, especially homemakers, are increasingly being recognized as a high-risk group (Gangakhedkar et al., 1997; Bhattacharya, 2004).

Education emerges as a key factor in reducing HIV vulnerability. Higher educational attainment is linked to increased awareness, better health choices, and reduced risk behaviors, especially among young women (Bakilana et al., 2005; Angrist, 2006). However, some scholars argue that education alone is not a straightforward determinant of HIV risk (Williams et al., 2000).

Poverty, low literacy, and employment in informal sectors increase women's exposure to high-risk situations, including transactional sex and gender-based violence (Dunkle et al., 2004; Wojcicki, 2005). Poorer women are often more vulnerable due to limited access to healthcare and information (Collins et al., 2000; Casale & Whiteside, 2006). Paradoxically, other studies report that wealthier women may also face increased risk due to greater mobility and urban exposure (Mishra et al., 2007; Hanson & Hanson, 2008).

Cultural and religious norms play a dual role in HIV prevention. In some conservative societies, cultural practices discourage condom use, increasing infection risk (Hasnain, 2005). However, religious adherence has been associated with lower engagement in risky behaviors, suggesting a protective influence (Elifson et al., 2003; Shapiro et al., 1999).

While several studies highlight global and African trends, there is a lack of updated and region-specific research focusing on the current socioeconomic profiles of HIV-positive women in India. Through present study an attempt is made to fill in this gap.

**Objective-**

To study the profile of women suffering from HIV/AIDS.

**Methodology**: The present study employed a descriptive and exploratory research design to document the socioeconomic characteristics of women living with HIV/AIDS (WLHA) and to understand the structural factors contributing to their vulnerability. Although qualitative elements were incorporated through in-depth interviews, the overall design was cross-sectional, relying on both narrative accounts and quantitative socio-demographic data. Primary data was collected through in-depth, semi-structured interviews.

**Study Area and Participants** The study was conducted at the Anti-Retroviral Therapy (ART) Centre of Lord Mahavir Civil Hospital in Ludhiana, Punjab. The centre serves a large catchment area, making it an appropriate site for identifying WLHA from diverse social and economic backgrounds. The unit of analysis comprised HIV-positive women aged 15 to 60 years.

**Sampling Strategy** A total of 67 respondents were selected using theoretical and purposive sampling. Priority was given to women who were information-rich cases and who were willing to share their experiences. Married, widowed, deserted, divorced, and unmarried women were all included to ensure representation of diverse life situations. Women who were severely ill or unable to participate in an interview were excluded.

**Data Collection Tools and Procedures**
Data were collected using two tools:

1. **A semi-structured interview schedule**, which captured the participants' demographic details (age, caste, religion, marital status, income, education, occupation, social class).

2. **In-depth interviews**, which enabled the researcher to obtain contextual information about women's lived experiences, awareness about HIV, marital history, and socio-economic challenges.

Interviews were conducted in Punjabi or Hindi, depending on respondents' preference, and typically lasted 30–45 minutes. Respondents' anonymity and confidentiality were maintained, and interviews were conducted in a supportive and non-judgmental setting.

**Ethical Considerations** The study adhered to ethical standards, ensuring voluntary participation, informed consent, and confidentiality. Sensitive topics were approached with care, and participants were assured that declining to answer any question would not affect their access to services at the ART Centre.

## Results

### Socio-economic profile

#### PRESENT AGE OF THE RESPONDENTS

Age of the respondents is one of the important characteristics in understanding the level of maturity of individuals. Age is considered as important variable in the present study as it is important to understand how it affects sexual practices of the respondents.

For the present study the women in the age group of 15 to 60 years were included in the sample. It is in this regard information on age of the respondent was procured.

**Table 1 Present Age of the respondents**

| Age (in Years) | No. of Respondents |
|---|---|
| 15-25 | 09 |
| 25-35 | 18 |
| 35-45 | 29 |
| 45-55 | 07 |
| 55 and above | 04 |
| **Total** | **67** |

Table 1 shows the present age of the respondents. It shows that a large number of respondents i.e. 29 were in the middle age group i.e. 35-45 years. There were 18 respondents whose age was between 25-35 years. There were nine respondents in the age group of 15-25 years. There were seven respondents in the age group of 45-55 years and four respondents who were above the age of 55 years.

#### MARITAL STATUS OF THE RESPONDENT

Marriage in all societies is an important step in a person's life course. Most Indian women live in a world where their worth is measured by marriage and children. Generally speaking, marriage is associated with economic security and stability. In present study an attempt has been made to know the marital status of HIV positive women as studies report that married women are at high risk of contracting HIV/AIDS.

It is in this regard information on marital status was procured.

**Table 2 Marital status of the respondents**

| Marital Status | No. of Respondents |
|---|---|
| Married | 14 |
| Second Marriage | 07 |
| Widow | 38 |
| Divorced | 02 |
| Never Married | 05 |
| Deserted | 01 |
| **Total** | **67** |

Results reveal that out of 67 respondents, there were only five respondents who were unmarried, remaining 62 were once married. Collected data shows that most of these respondents had no or very little information of HIV/AIDS, when they got married it was only after the illness or death of their husbands they came to know about HIV/AIDS. There were 38 respondents out of total 67 who were widows of men who had expired due to AIDS. There was one respondent who widowed at the age of 19 years; there were 17 respondents who got widowed when they were in the age group of 20-30 years. There were 16 respondents who got widowed in age group of 30-40 years and remaining four respondents became widow in age group of 40-50 years. These respondents came to know about HIV status of their husbands after their death or when their husbands were seriously ill. There were 14 married respondents living with their husbands. These women were socially and economically dependent on their husband. Even they knew that their husbands infected them, they could not leave them because of pressure of societal norms and their dependency on their husbands. There were seven respondents who remarried. It includes one prisoner who was married at the age of 16 years to 40 years old man. Her husband died after a prolonged illness. She had a daughter from her first marriage. After his death she was married to her husband's younger brother. There were two respondents who were divorced. The cause of divorce was their HIV status. There was one respondent whose husband deserted her after knowing her HIV status and he himself did not get his HIV test done.

**AGE AT MARRIAGE**

There is a very strong connection between HIV and the age at marriage. It is argued that women who are married at an early age are more likely to get the HIV infection because of lack of information about their safety. Clark (2004) examined a link between early marriage and risks of HIV infection among adolescent females. Bongaarts (2007) on other hand reported that higher age at marriage is associated with a longer period of premarital sex, which increases the infection risks. Information on age at marriage of the respondents was procured.

**Table 3 Age at marriage of the respondents**

| Age (in Years) | No. of Respondents |
|---|---|
| Below 15 | 03 |
| 15-20 | 32 |
| 20-25 | 25 |
| 25-30 | 02 |
| *Not Applicable | 05 |
| **Total** | **67** |

***N.A. includes 5 unmarried respondents.**

Table 3 indicates there were three respondents who got married when they were less than 15 years old, one respondent was 13 years old (case-13) and one was only 14 years old (case-32) at the time of marriage. There were 32 respondents who got married between age group of 15-20 years. Most of the respondents were married at legal age i.e. 18 years. There were 25 respondents who were married at age group of 20-25 years. There were two respondents who were married at age group of 25-30 years.

## RELIGIOUS AFFILIATION OF THE RESPONDENT

Religion is the set of beliefs, feelings and practices. It checks immoral behaviour. Religion keeps a check on the behaviour of persons and controls their immoral activities related to sex. According to Elifson et al. (2003) religion reduces HIV risk among women. They found that religious women are less likely to engage in high-risk behaviour. Shapiro et al. (1999) also reported that religiosity is associated with least risky sexual behaviour. Religion keeps a check on the behaviour of persons and controls their immoral activities related to sex and other issues. Thus, information on religious background of the respondents was procured.

**Table 4 Religious Affiliation of the respondents**

| **Religion** | **No. of Respondents** |
|---|---|
| Sikh | 43 |
| Hindu | 22 |
| Muslim | 1 |
| Christian | 1 |
| **Total** | **67** |

Table 4 shows that out of 67 cases, there were 43 respondents who belonged to Sikh religion. Sample for the present study was collected from ART centre at Ludhiana district in Punjab which is a Sikh dominated state. The second highest number was of Hindu respondents i.e. 22. There was one respondent who was a Christian and one was from a Muslim community who were detected HIV positive. Since Christian and Muslim population in Ludhiana is less therefore the number of HIV positive women from Christian and Muslim was very less as compared to Sikh and Hindu respondents.

## CASTE AFFILIATION OF THE RESPONDENT

Caste system is unique to Indian society. Therefore, it is essential to ascertain the significance of caste in HIV/AIDS. Chatterjee (2007) found that women, belonging to the Scheduled Castes and Scheduled tribes were most vulnerable to HIV/AIDS. Government of India has made provision of reservation for Scheduled castes, Scheduled Tribes and Other Backward Sections. Thus, respondents had been categorized in two broad divisions i.e. General and reserved.

**Table 5 Caste background of the respondents**

| **Caste** | **No. of Respondents** |
|---|---|
| General | 39 |
| Reserved | 28 |
| **Total** | **67** |

Above table shows that out of 67 respondents, there were 39 respondents who belonged to General category and remaining 28 belonged to reserved category. Data shows that respondents of general category were found to be more vulnerable to HIV/AIDS because of the risk behaviour of their husbands. Findings show that HIV has spread to all caste groups. Results show that not only women from reserved caste but also from general category are at risk of contracting HIV if their spouses indulge in high-risk behaviour. Results do not endorse the findings of Chatterjee (2007) that women of reserved category are more vulnerable to HIV/AIDS. Since the sample was drawn from ART Centre at Civil Hospital, Ludhiana, it can be argued that poverty and ignorance refrain members of reserved caste to seek treatment from Government run hospital.

**EDUCATION OF THE RESPONDENTS**

Education plays an important role in creating awareness about HIV/AIDS. Further education contributes in prevention of early marriage in girls. According to Bakilana et al. (2005) education has been called the 'social vaccine' against HIV/AIDS because of its effectiveness in reducing vulnerability to infection, especially for girls and women. Angrist (2006) reported that the well-educated people have a greater sense of control over their lives and their health, and they had higher levels of social support. Higher education level is associated with lower level of HIV/AIDS. Lack of education is associated with higher HIV infection rates (Baker et al. 2010). Information on educational qualification of the respondents was obtained.

**Table 6 Educational qualification of the respondents**

| **Education of Respondent** | **No. of Respondents** |
|---|---|
| Illiterate | 16 |
| Up to Primary Level | 07 |
| Middle | 17 |
| Matriculation | 13 |
| Senior Secondary | 11 |
| Graduation | 3 |
| **Total** | **67** |

It was observed that HIV positive women who visited ART Centre, most of them were from economically poor background, their parents didn't invest in education of their daughters. There were 16 respondents who were illiterate and seven respondents were educated up to primary level only, had never heard about HIV.

There were 17 respondents who had education up to middle level only. There was a middle school in their village; therefore, they had education up to middle level. Some of them didn't pass the 8thstandard due to lack of encouragement from parents. There were 13 respondents who were matriculate and 11 respondents had education up to plus 2 level. These respondents admitted that they had knowledge about HIV. There were only three respondents who were Graduates. They admitted awareness about HIV and its prevention. Results indicate that illiteracy makes women vulnerable to HIV/AIDS. Results partially support Bakilana et al. (2005) and Baker et al. (2010) since 24 respondents had education up to matriculation and above.

## OCCUPATIONAL STATUS OF THE RESPONDENTS

Occupation is an important variable that has direct relation with HIV/AIDS. It has been established that some occupations are called high risk occupations because individuals working in them are more vulnerable to HIV e.g. female sex work, wives of truck drivers, wives of IDUs, etc. Education and occupation are interrelated. When women are illiterate, they are engaged in low level of occupations thus exposing them to high-risk behaviour (Dunkle et al., 2004). Within Sub-Saharan Africa individuals with low-income jobs such as waitressing, barmaids, and prostitutes/commercial sex workers have been shown to be at increased HIV risk due to the likelihood of coming in contact with those who travel (Wojcicki, 2005). Information on occupational status of the respondents was obtained.

**Table 7 Occupational Status of the respondents**

| Occupation of Respondents | **No. of Respondents** |
|---|---|
| Housewives/ Not working | 35 |
| Service | 15 |
| Housemaid | 09 |
| Self Employed | 05 |
| Others | 03 |
| **Total** | **67** |

Out of 67 respondents, 35 respondents were not doing any type of paid work outside family, 12 of them were married and totally dependent on their husbands. There were nine respondents who were widows, five of them were living with their parents and two were living with their in laws, two of these were living with their sons (both in rural area) after the death of their husbands. These 35 respondents also included four students and one respondent who were in prison. The woman who was in prison was not a well-educated and was not working. She was dependent on her husband. There were 15 respondents who were in service and six of these respondents were working in health department on contract basis. There were two respondents who were graduates and working as school teachers. One respondent was a staff nurse in a private hospital. There was one respondent who was working as a housekeeper in a mall. Two respondents were workers in factories and one respondent worked as a machine operator. Nine respondents were housemaids. Five respondents were self-employed, four of them had their own boutique and one was running a beauty parlour from her residence. Three respondents were included in others category; one was an orchestra dancer and two were female sex workers.

## INCOME OF THE RESPONDENTS

Income of a person is an important variable to analyze the socio-economic status of a person. Income enables a person to access to good education, maintain good health and provide good future to the children. Lack of income has been found to be related to poor health. The relation between HIV and income is very complex. A number of researchers reported that higher rates of infection are expected among poor. Studies suggest that women have limited skills and opportunities; they often garner income through numerous legal and illegal sources, such as involvement in the drug economy, which may increase their risk for HIV (DeBeck et al., 2007; Miller & Neaigus, 2002). Women with low income also engage in risky sex practices

such as having a partner who is HIV positive or injects drugs (Ickovics et al., 2002). It is in this regard information on monthly income of the respondents was procured.

**Table 8 Income of the respondents**

| Income (per month) | No. of Respondents |
|---|---|
| No Income | 26 |
| Low (5,000-15,000) | 36 |
| Medium (15000-30,000) | 03 |
| High (more than 30,000) | 02 |
| **Total** | **67** |

Table 8 shows the income of respondents which is grouped into four categories, i.e. No income, low-, middle- and high-income group. Low-income group comprised of respondents whose income was below Rs 15,000 per month, middle income group included respondents having an income between Rs.15,000 - Rs 30,000 per month and high-income group included respondents with income above Rs 30,000 per month.

There were 36 respondents in the low-income group. A large number of respondents in the present study were poor, either they had no source of livelihood or were earning very minimal amount. Out of 67, there were 26 respondents admitted they had no income, it included 12 married housewives who were dependent on their husbands, nine widows - five of them were dependent on their parents, two were dependent on their in laws, and two were dependent on their sons. This category also included four students and one prisoner. Nine housewives had agriculture income. Five factory workers, one Asha workers, one Anganwadi worker, four paramedical staff, two school teachers, three self-employed, one Orchestra dancer and two female sex workers were earning up to Rs 15,000/- per month. There were three respondents, a widow of an army jawan who was getting pension along with her salary and another widow of an army jawan was getting pension along with income from agricultural land. Another respondent was earning more than Rs. 15000/- per month from her parlour. In high salary group, there were only two respondents, one of them was a staff nurse and another had a large agricultural land.

## SOCIAL CLASS OF THE RESPONDENTS

Social class of the respondent is a very important variable to measure the quality of life of a person. According to Giddens (2000), a class is a large group of people who share similar type of economic resources and it influences their life style. Women living in poorer households may experience difficulties before, during, and after childbirth that can place them at risk for HIV infection and complications. Women in low-income households may be less likely to access prenatal care that could allow them to be tested for HIV. According to Shaikh and Bhorat (2005) HIV positive women come from poorer households than imputed negative women. Poverty increases vulnerability to HIV/AIDS transmission through several channels such as increased migration, limited access to health care, nutrition and other basic services; limited access to education and information, sexual exploitation and gender inequality (Casale and Whiteside, 2006). Keeping in mind economic criteria respondents were divided into social class i.e. Lower class, working class, middle class and upper class.

**Table 9 Social class of the family of respondents**

| Social class | No. of Respondents |
|---|---|
| Lower Class | 50 |
| Working Class | 15 |
| Middle Class | 02 |
| TOTAL | **67** |

Findings show that out of 67 respondents, 50 respondents belonged to lower class. There were 22 respondents who had no paid job it includes one prisoner also, nine respondents were housemaids, eight respondents had agricultural income, four respondents were students, three respondents were self-employed and one respondent was an orchestra dancer.

**Working class** includes 15 respondents, seven respondents were working in health care centres, three respondents were factory employees, two respondents were school teachers, one respondent was a saleswoman in a shop, one respondent was worker in a mall and one respondent was an Anganwadi worker.

**Middle class** includes two respondents. There was one self-employed respondent who was running her own beauty parlour at home and there was one widow who had good agricultural income. There was no respondent in upper class category.

## Discussion

The present study offers a critical lens into the socio-economic profiles of women living with HIV/AIDS (WLHA) in Ludhiana, Punjab, thereby contributing to the limited but growing body of region-specific research on HIV-positive women in India. Consistent with global and national trends, a significant proportion of respondents in this study were in the 25–45 age group, aligning with previous research that identifies young and middle-aged women as highly vulnerable to HIV infection (Berkley et al., 1990; Karim et al., 2010). While earlier literature emphasized heightened vulnerability among women aged 15–24 (UNAIDS, 2010), this study reflects a shift toward older age groups, possibly indicating delayed diagnosis or the impact of earlier exposure becoming apparent later in life.

Marriage emerged as a key factor in HIV transmission. The study found that the majority of respondents were either widowed or had been previously married, with many discovering their HIV status only after the illness or death of their husbands. These findings corroborate Santhya and Jejeebhoy (2007), who argued that married adolescent girls, especially in patriarchal societies, often face greater risk due to unequal power dynamics, inability to negotiate safe sex, and the high-risk behavior of male partners. The data also support Bruce and Clark's (2004) assertion that marital status does not always offer protection from HIV in fact, it may compound risk in traditional settings.

Educational attainment showed a clear correlation with awareness and preventive behavior. Illiteracy and low levels of education were common among the respondents, echoing the findings of Bakilana et al. (2005) and Baker et al. (2010) that lack of education enhances vulnerability. However, this study adds nuance by showing that even women with secondary education can be at risk if they lack autonomy and access to reliable health information. These results partially support the argument by Williams et al. (2000)

that education alone is not a sufficient safeguard; structural inequalities and gender norms also play a vital role.

Socioeconomic status was a critical determinant of risk and resilience. A large number of respondents were from lower social and income classes, often working in informal sectors or not earning at all. This reinforces existing literature (Dunkle et al., 2004; Wojcicki, 2005) which links poverty and informal employment with higher HIV vulnerability, due to increased exposure to high-risk environments, gender-based violence, and transactional sex. However, a small number of middle-income respondents suggest, as Mishra et al. (2007) also noted, that wealth and urban exposure can carry their own set of risks, particularly through increased mobility and social networks that normalize multiple partnerships.

Cultural and religious factors were also significant. The majority of respondents identified as Sikh or Hindu, reflecting the regional demographics. While the data do not directly measure religiosity, the findings are in line with Hasnain (2005), Elifson et al. (2003), and Shapiro et al. (1999), who pointed out that while religious beliefs may reduce risky behavior, cultural taboos often restrict open discussions around sex, leading to misinformation and silence around HIV/AIDS.

Contrary to earlier studies such as Chatterjee & Sheron (2007), which emphasized caste-based vulnerability particularly among Scheduled Castes and Tribes, this study found that women from both general and reserved categories were at risk. This suggests that caste alone is not a definitive predictor of vulnerability; instead, it is the combination of low education, poor health awareness, economic dependence, and marital powerlessness that exposes women to greater risk, irrespective of caste.

## Conclusion

In conclusion, the study affirms many established global patterns but also adds important local insights. It highlights that the HIV epidemic among Indian women cannot be fully understood without accounting for intersecting socio-economic, cultural, and gender-based factors. While national and international literature has emphasized youth, poverty, and lack of education as drivers of vulnerability, this study illustrates that women across age groups, income brackets, and caste lines are susceptible if structural inequalities and gender norms remain unaddressed. Therefore, effective interventions must go beyond biomedical approaches to include education, economic empowerment, gender-sensitive counselling, and policy reforms that support women's autonomy in marriage and society. The findings underscore the urgency of targeted, region-specific, and socially inclusive strategies in combating the feminization of HIV in India.

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