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## Living environmental conditions of the HIV/AIDS infected persons in Kerala, India

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### ABSTRACTS

Historically, the princely rules of the State, made a small beginning to offer infrastructural facilities for a primary health care system of Kerala. Kerala has better health indicators such as Death rate, Infant mortality rate, expectation on of life at birth than most States in India. It is now nearly three decades since the emergence of the Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome (HIV/AIDS) and millions of people across the globe are still suffering from its impact. The varied dimension of male and female samples respondents personal status and living environmental condition analysed in detail. Majority of the male and female sample respondent comes under the category of age group (20-30). This means young people is mostly infected HIV/AIDS. Another interesting factor is that single occupied persons are mostly infected both male and female. Based on the factor analysis the major dimension are female status with HIV/AIDS dimension indicate the House wife (0.92) stay with family (0.85), marital life (5-10) years (0.70) and work experience (5-10 years) (0.65) and Hindu community (0.57) are highly correlated. vulnerable HIV infected people indicate that positive values of loading such as student (0.87), unmarried (0.75), other workers (0.62), marital experience of 5-10 years (0.60), 4 to 6 family members (0.59) Educational status of the infected people dimension comes under single (0.89), higher secondary education (0.78), university (0.74), out of station 7-14 days (0.73) and work experience of 10 years (0.45) occupational status of the infected persons dimension 20-29 age group (0.85), other workers (0.65), hotel staff (0.63) and work experience 10 years (0.44) and family members (4-6) (0.42) variables. Youth religion wise unemployed living with HIV/AIDS dimension illustrate below 20 (0.76), Muslim (0.58) high school (0.48) and unemployed (0.42). This indicates adequate information is not reached in the grass root level

**Key words:** Environment, HIV/AIDS, religion, educational status

### INTRODUCTION

Kerala has better health indicators such as, Infant mortality rate, Death rate expectation on of life at birth than most the States in India. These have been achieved due to a large number of factors such as pro-active intervention by the State, social mobilization by social political and religious groups and improvement in other social indicators such as female education. However recent trends indicate that health of the people of Kerala State face the threats of the HIV/AIDS infection in the grass root level. High levels of morbidity and high out of pocket payments for treatment are also a load on the economic well being of the people of the State.

It is now nearly three decades since the emergence of the Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome (HIV/AIDS) and millions of people across the globe are still suffering from its impact. HIV/AIDS impacts those that have it, their families, and their communities; this is especially true in developing countries. Families in developing regions of the world are normally left with, not only the burden of caring for the sick for a long period of time, but also the expenses incurred during the sickness and death of loved

ones infected with HIV/AIDS. This is an acute strain especially on households with extremely scarce resources in rural areas of developing countries. The history of HIV/AIDS epidemic in Kerala State started in 1987 when a few AIDS cases were reported from Pathanamthitta district. Since then, the number of people being infected yearly because of heterosexual transmission has grown geometrically and the social factors associated with sex work have influenced the pattern and severity of the epidemic in Kerala State.

### Study area

Kerala state extends from 8° 18' North to 12° 48' North latitude and 74° 52' East to 77° 02' East longitude along the coast in the south western part of India. The state is bounded by Karnataka in the north, Tamilnadu in the east and south and Lakshadweep Sea in the west. With an area of 38863sq km (1.27 percent of the total area of India) the population has about 3,33,87,677 as per 2011 census. The state comes into existence on 1<sup>st</sup> Nov 1956 as a result of the re-organization of Indian states, with some territorial adjustments. Presently, there are 14 districts and 63 Taluks.

## MATERIALS AND METHODS

A structured pretested questionnaire is used to collect reliable information from the HIV/AIDS persons. The finalised questionnaire is translated into the regional languages. The questionnaire was retranslated in English to ensure that the implications of the questions did not lose while translating in to regional languages. The bilingual questionnaires were also used for collecting information. A total 720 respondents have been contacted based on the secondary data of the People Living with HIV/AIDS cases from 14 districts. Accordingly 10 percent of the samples were collected from each district in Kerala State. The data are used to understand the living environmental condition of the people with the help of the factor analysis technique.

## RESULTS

The life style of the HIV positive and their living environmental conditions are assessed by considering the following variables/ character. HIV positive Male and Female, Age Structure, Marital status, Religion, Size of the family, Educational status, Occupation, Work experience and income. These are discussed in detail in the subsequent paragraphs.

### HIV positive Male /Female sample respondents

On the total 716 samples selected respondents (51%) are male and the remaining (49%) are female. The pattern of sex in the study area shows that Thiruvananthapuram and Palakkad districts have the highest number of male respondent (>50%) followed by Ernakulam, Thrissur and Kozhikkode districts occupy the medium range of (25-50%) number of male respondents, whereas in Malappuram, Kottayam, Kannur, Pathanamthitta Alappuzha Kasargod Kollam, Idukki and Wayanad districts have lowest male respondent (<25%). The female respondents are maximum numbers in Thiruvananthapuram, Thrissur, Palakkad and Ernakulam districts that is (35%-39%) persons. Whereas Kottayam, Kasargode, Alappuzha, Kannur, Pathanamthitta, Kollam, Kozhikkode, Malappuram and Idukki districts rank second with (15-30%). While Wayanad has less numbers of female respondents with HIV/AIDS (<15%) in the study area.

### Age structure

Age is a key determinant of health. An examination of age differentials of HIV/AIDS persons gives an understanding about how HIV Positive varies across various life cycles. Spatial distributions of age structure in the HIV/AIDS infected male respondents samples depict that adult with (20-29) age group are highest in Alappuzha district (82%) followed by Malappuram (75%) and lowest in Kasargod (31%). While old adults are more in Thiruvananthapuram (40%) and Ernakulam (38%) and the lowest in Kasargod district (7%).

Normally the incidence of HIV/AIDS infections are less than 20 and 20-39 age group of male. But in the Kasargod (62%) and Wayanad (37%) incident is more in the age group of less than 20. Similar to the case of male samples (62%) nearly three fifth female adults' samples are equally infected. Among the respondents in female samples adults the highest is in Kollam district followed by Pathanamthitta, Kottayam, Malappuram districts (>70%). The lowest proportion was in Wayanad district (34%). Other districts are in medium range. Nearly one by fourth female respondent are adolescent in the study area. Among the respondents adolescent are highest in Thiruvananthapuram district (32%) followed by Kasargod district (30%) and the lowest proportion is in Kollam (11%). While old adults in the age group of (30-39) are high distributed in Wayanad (50%) Kasargod had registered with (15%) the other districts have the ranges of (5 to 14%), lowest proportion is in Pathanamthitta district (5%). Among the male respondents larger samples with (HIV/AIDS) are in the age group of (20 to 30) and (30 to 39) but in the female samples largest share in the age group of less than 20 and (20 to 30) ages

**Marital status**

Marital status is one of the dominant factors for understanding the family life of the HIV/AIDS cases. Almost 3/5<sup>th</sup> of the male respondents are single in the study area. Comparatively higher incidences of single respondents are reported in Kannur (80%) and Palakkad (75%). Of the remaining respondent married constitute a considerable share of more than (18 %) in Kerala State. Whereas Kozhikkode and Malappuram ranked top among the districts in percent share of married respondent followed by Wayanad and Kottayam , Kannur district ranked lower share of (9 %). Unmarried male respondents are (13%) reported from the Kerala State, whereas as Thiruvananthapuram district following Alappuzha share is (>30%).The lowest is in Ernakulam district (3%) .Apparently divorced male respondent are only (8%) in the samples reported in Kerala. High percent of divorced are reported from Ernakulam district (20%) and Kollam district (17%) have high percent of divorced and the lowest in Palakkad and Kottayam districts with (10%).Out of the fourteen district in Kerala 6 district divorced respondents are not reported among the samples.

The Marital status among the female samples respondents indicates (46 %) are single in Kerala State .A fairly higher incidence of single respondents are reported in Kannur district (87%) followed by Kasargod district (61%) and the lowest proportion is in Kollam district (25%). There is no single female HIV/AIDS sample respondent in Ernakulam district .The Married respondents constitute a considerable share of more than (45%) in Kerala State. Idukki district (63%) followed by Kottayam district (56%) ranking top among the district in percent share of married respondent. Kannur district ranked lower with (13 %). Other district are in the range of (40 to 50%).Unmarried women respondent are only (9%) reported from the Kerala State. But Ernakulam districts rank very higher than state average (57%) Malappuram and Kollam districts ranks second the lowest in Kozhikkode district has the share of (15%).where as other districts not having any sample with HIV/AIDS than in married women group.

**Religion**

Religion is said to produce a distinct attitude towards life and religious orientation modify and affect the further development of the society. Religions strongly influence a society's socioeconomic institutions, political ethos and even the laws and personal way of life or moral behaviourism.

Nearly half of the male respondents are belongs to Hindus in the study area. Among the districts the highest is in Wayanad district (75%) following Idukki and Palakkad districts and others. In total 8 districts are more than the State averages. The lowest samples are reported from Pathanamthitta district (12%) .Among the total respondents in Kerala (23%) are Muslim religion. Muslim respondents are high in Pathanamthitta , Malappuram and Kozhikkode district While Thiruvananthapuram, Kottayam and Ernakulam districts have the least share less than (10%). The distribution of male Christian community respondents are (28%) in the Kerala State. In Kerala, Kasargod (50%), Alappuzha(45%) and Ernakulam(38%) are the districts with the maximum percentage share of Christian community and the lowest proportion was reported in Pathanamthitta district (17%).

Similar to the male categories(54%) female respondents belong to Hindu religion in Kerala State .Among the female respondents Hindus are above the State average in Alappuzha , Thiruvananthapuram,Kottayam, Thrissur,Wayanad district (54%) the lowest in proportion was in Malappuram district (35%). Others are rank in between.Virtually one third of the female respondents belong to Muslims religion in Kerala State. Among the respondents highest Muslim female respondents are found in Malappuram (47%) following this Wayanad ,Idukki and Kasargode districts register with more than the State average. The lowest proportion is found in Alappuzha district (16%).Female Christian respondents samples with HIV/AIDS are (15%) in the Kerala State. The distribution female Christians are in Ernakulam, Palakkad and Kannur district (>20%).Ensuing Thrissur, Kozhikkode Alappuzha except Thiruvananthapuram and Kozhikkode districts (10%).The proportion of religious status is a ban with the size of the population ratio and the concentration of the religious composition.

**Size of the family**

In Kerala among the male sample respondents, about (45%) are belongs to Medium size family with 4 to 6 members in the study area. It varies from (63%) in Thiruvananthapuram district to (34%) in Malappuram district. Other districts respectively are in between this range .One fifth of respondents considered as small family group with 2 to 4 members. It varies from (63%) in Wayanad district to the lowest of (4 %) in Kottayam district.Next one fifth of the respondents belong to big families with more than six members. Kollam district respondent are in maximum (36%).Whereas Kozhikkode district consists least share. Apparently (15%) of the respondents belong to single member family. It varies from (37%) in Wayanad district to (5%) in Pathanamthitta district.

In contrast to the samples of the female respondents belongs to big families with more than six members. It varies from (80 %) in Malappuram and (26%) in Kozhikkode districts.Next to this (36 %) female respondents belong to medium size family with 4 to 6 members in the State. Pathanamthitta district rank first (81%) followed by Thrissur

and Thiruvananthapuram and Kozhikkode district. Others are in between the range of (8 to 30%).(14%) female respondents are belongs to single similar to male. Alappuzha district has lower share (45% to 5%) in Pathanamthitta district register with least sample of (5%).Single female respondents are absent in 10 districts.

### Education

Literacy is one of the important indicators of social development and modification. Education improves the quality of life and develops better knowledge about health. The primary data regarding educational status of the samples are grouped in to four they are Elementary ,High School ,Higher Secondary and higher level of education. About (56%) of the male respondents at the State level samples are literate up to high school level and (30%) are higher secondary level followed by (13%) at elementary stage and only (1%) graduate and others. Pathanamthitta ,Thiruvananthapuram ,Kollam , Idukki, Ernakulam ,Thrissur, Malappuram districts more than (60%) HIV/AIDS respondents are high school level of education. Others are at medium range. The lowest reported (13%) in Wayanad district.This shows that lowest level education and highest level education contributed for higher awareness and moral code life values where as the high school level education less awareness and low life style.

At higher Secondary level the respondents are more than State average is in Alappuzha, Thrissur, Kozhikkode,Wayanad and Kannur Kasargode districts. The lowest is (17%) in Pathanamthitta district others rank in between.While elementary level of education, the highest percent reported from Wayanad district (50%) succeeding Kottayam and Palakkad the lowest is in Thrissur district with (3%).Other districts samples education level ranges between (5 to12%).Educational status in university level observed only (1%) in the State. That only observed in Kannur district (6%) and Palakkad (4%) district.

It shows that the female sample respondents are (74%) literate up to high school level in the State followed by elementary School level. There is no female sample respondents belongs to Higher Secondary and University level. Pathanamthitta Kollam,Palakkad, ,Malappuram,Kozhikkode Kottayam and Wayanad districts have more samples than State average of (74%) .Whereas the States also ranges from (65% to 74%) of the female samples respondents belongs to the high school level education.Remains respondents are literate up to elementary level in Kerala State . Thiruvananthapuram, Kasargode ,Kannur, Thrissur, Ernakulam, Idukki and Alappuzha districts female samples stood higher than the State average . The lowest proportion is in Kollam district (12%) while other district ranges between(12 to 25%) .Though Kerala is highly literate State in India, that desired behavioural change awareness about the sex education and about HIV/AIDS transmission has not reached in the grass root level.

### Occupation

Occupation is another important indicator for social development but it associated with education and socio economic background. Occasionally occupation of a person may lead to take part in unwanted sexual intercourse and get HIV infection. Especially in manual labour class and low level of job position, the people pay no attention to about precautions and safety measure at the time of sexual intercourse with the co-workers or employees due to illiteracy and lack of awareness. The distribution of respondent samples with HIV/AIDS in Kerala occupation is grouped in to ten categories they are ,Agriculture ,Unskilled workers ,truck, auto,taxi drivers factory workers, hotel staff ,service ,business ,unemployed ,students, housewife and others.

Among the samples male respondents in the State (18%) share is belongs to the other and business sector each followed by (13%) in unskilled occupation unemployed students share in HIV/AIDS infection share is (13 %)and (12%) respectively. It is followed by truck auto Taxi drivers and Hotel staff. The agricultural workers, factories and service sector share in minimum (3 to4%).Among the male sample respondents belongs to business category as occupation with higher incidental of HIV/AIDS infection is from the Wayanad Alappuzha ,Palakkad district Malappuram district has only (13%).While male other workers are the highest in Pathanamthitta district (42%) following Kottayam district (37%) and the lowest proportion was in Kannur district (7%). Male unemployed category occupied about (13%) in Kerala State. While among the respondent the highest was noticed in Kollam, Idukki and Wayanad districts (29 %)Malappuram district has only (13%).

Among the respondents other workers are the highest in number in Pathanamthitta district (42%) followed by Kottayam district (37%) the lowest proportion is in Kannur district (7%) the unemployed category of male respondents were (13%) in Kerala State, among them Kollam,Idukki,and Wayanad districts have (29%) in each district. This is followed by Kasargod,Thrissur,Kozhikkode districts. Other districts ranges from (10 to 2%) except Alapuzha,Kottayam and Ernakulam were no person was reported in this category.

Among the male respondents male students with HIV/AIDS infection in Kerala State is (12%). Kasargod (34 percent) succeeding Palakkad ,Kottayam and Wayanad district (>25 percent) have highest incidents followed by Pathanamthitta other district have below the State average.Male unskilled workers of the respondent in Kerala State



are (13%). Among the respondents Thiruvananthapuram district has large numbers (32%) following Alappuzha, Kottayam and Kasargod district (>20%) and the lowest proportion was in Malappuram and Ernakulam district (<10 percent). Other districts ranges in between.

Male Truck/Auto drivers with HIV/AIDS share is only (8%) in Kerala State. Among the respondents the highest was in Kozhikkode district (24%) followed by Ernakulam, Idukki and Kannur districts(14%). Kollam, Thiruvananthapuram, Palakkad and Wayanad rank next with less than (10%). HIV/AIDS infected persons belong to Agricultural workers in Kerala State is least that is (4%). Kollam (14%) and Wayanad district (12%) more numbers than Pathanamthitta and Thiruvananthapuram districts. From the sample other districts are not comes under this category of the State.

Factory workers represent (3%) percent in the State. Among the male respondents Factory workers in Thiruvananthapuram district (20 %) succeeding Alappuzha district (13 %) and Kannur(10%) While Kozhikkode district has minimum (4 %) other district has not reported in this category. (7%) of HIV/AIDS infected male sample belongs to hotel staff. Among the sample Thiruvananthapuram district (16%) , Alappuzha and Idukki districts (14 percent) respectively and Kannur and Pathanamthitta ranks higher than the State average. The respondents from other districts are less than State average. Whereas Kollam, Kasargode, Palakkad districts not reported any cases. Service sector shared 4 percent among the respondent occupation in Kerala State. Kozhikkode district has more numbers (12%) following Ernakulam, Malappuram, Kannur and Thiruvananthapuram districts. While Thrissur district has the minimum (4%). Other districts are not registered with any case.

The female sample of HIV/AIDS respondents (60%) are housewife in Kerala State. Kollam district (84%) followed by Idukki district (75 percent) register high percentage followed by Thiruvananthapuram, Pathanamthitta, Alappuzha, Ernakulam, Thrissur, Wayanad, Kannur all are registered with above the district average (60%) Kottayam (26%) other districts rank in between.

It is worth note fact that (25%) of the female samples are students in Kerala. Thiruvananthapuram district (32%) followed by Kasargod district (30%) Thrissur, Alappuzha, Ernakulam, Kannur rank above district average. The lowest proportion was in Kollam district (11 %). Other districts are in the range of (20 to 25%). About (15%) of the female sample respondents with HIV/AIDS engaged in to other works in the study area. the highest observed in Kottayam district (50%) followed by Kozhikkode district (30%) Palakkad and Kasargode districts and the lowest proportion are in Kollam and Thrissur districts (5%) than the other States.

### **Income**

Monthly income of the respondents is classified in to two groups. Since most of the sample respondents of HIV infected persons are belongs to unskilled workers, housewife and daily wage carriers, their income level is very poor, ranges from less than 2000/month and 2000-5000. The income profile of the male sample respondents in Kerala State. The data reveals that more than (70%) of male respondent's monthly income ranges from 2000-5000 rupees except Thiruvananthapuram, Alappuzha and Wayanad (60%), other districts more than samples have rupees 2000-5000 as monthly income. About (25%) of the male samples have a monthly income less than 2000 in almost all district except Wayanad (>30%).

In the case of female sample respondents (69%) have monthly income of less than 2000 is prevalent in all district except in Malappuram district (54%) all other district have higher than the district average. Monthly income (2000-5000) rupees, represents (31%) of the female sample respondents in Kerala State. High share is identified in Kollam and Kasargod district (100%) following Malappuram, Wayanad and Kozhikkode and Palakkad district. The lowest share of (6-15%) reported from other districts.

### **Marital experience**

Nearly four fifth of the male respondents are married life of 5-10 years before obtain this infection. Nine districts (100%) of the respondent have (5-10) years of married life they are Alappuzha, Kottayam, Idukki, Ernakulam, Thrissur, Wayanad, Kannur and Kasargod districts and the lowest in Kozhikkode district followed by Malappuram, Kollam and Kozhikkode districts. (21%) of the remaining male respondent have five years of married life experience. Thiruvananthapuram and Pathanamthitta districts (100%) of the sample belongs to this group followed by Kozhikkode. Kollam and Malappuram districts has number of samples are in less in percentage.

Nearly (64%) of the female respondents are married before (5-10) years in the study area. Almost (80%) of the respondents are married before 5-10 years i.e. Kollam, Pathanamthitta, Idukki, Palakkad, Kannur and Kasargod Thrissur, Malappuram, Kozhikkode, Wayanad, Kannur and Kasargod districts and the lowest is in Kozhikkode district (29%). While only five districts female samples with HIV incidence have below 5 years married life. Belongs

to the Thiruvananthapuram, Alappuzha, Ernakulam and Thrissur districts have high percent and the lowest is in Malappuram district (18%).

### Family life and their association

Living along with other family members and movement of the infected person of the respondent indicate the fear factor of spreading the disease to partner and the behaviour of the family members towards the HIV / AIDS . family life and their association nearly; (80%)

Table 1.1 Rotated component matrix of people living with HIV/AIDS

	1	2	3	4	5
Male	-0.8887	-0.04561	-0.06721	-0.22942	0.214607
Female	0.888695	0.045614	0.067207	0.229416	-0.21461
below20 age group	-0.38454	0.006296	0.133353	-0.31519	0.765482
20-29 age group	0.303091	0.031653	-0.1439	0.858675	-0.05173
30-39 age group	-0.01958	0.057245	-0.26224	-0.89353	-0.00549
Single	-0.02895	0.228238	0.898393	0.05949	-0.08468
Married	-0.19398	-0.67346	-0.4493	0.251858	0.256501
Unmarried	0.440418	0.758523	-0.07723	-0.30905	0.025148
4 to6 family member	0.050629	0.593665	0.213529	0.42037	0.194186
Hindu	0.574319	0.22876	0.111698	-0.00366	-0.13765
Muslim	-0.52732	-0.20802	-0.29249	-0.05256	0.587489
Christian	0.147694	0.000205	0.224129	0.085737	-0.83798
Elementary	0.190785	-0.17922	-0.06163	-0.38272	-0.71617
Highschool	-0.16865	-0.01204	-0.79796	0.269151	0.482967
higher secondary	-0.2002	-0.04488	0.787421	0.098369	0.317484
University	0.03982	-0.2831	0.745305	0.229259	-0.00676
Agriculture	0.059759	-0.02066	-0.07521	-0.48617	-0.17073
Unskilled worker	-0.18303	-0.80584	0.196181	-0.28136	0.045732
Truck auto drivers	-0.37765	-0.52526	-0.30257	-0.14458	0.220721
Hotel staff	-0.28437	-0.41153	-0.0535	0.638223	-0.45793
Service	0.126305	-0.02378	-0.0062	-0.16002	0.141784
Business	-0.04534	-0.06763	0.333156	-0.12271	-0.11095
Unemployed	-0.62612	-0.06723	-0.45482	0.320832	0.420588
Student	-0.00145	0.875885	0.096699	-0.14475	0.170174
Housewife	0.921038	0.175716	0.014027	-0.0147	-0.17416
Others	0.096548	0.624696	0.18426	0.654711	-0.08701
Work experience 5—10 years	0.655964	0.243624	0.452615	0.44584	0.217977
income<2000 rupees	0.314018	-0.01156	-0.1456	0.236181	-0.01042
Marital life 5—10 years	0.707251	0.604244	0.072187	0.149865	0.040768
stay with family	0.85426	0.177439	-0.2763	-0.31135	-0.04052
out station7—14	0.330651	0.383648	0.73496	0.338733	-0.15142

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization of male respondents with HIV/AIDS are staying with family in Kerala State. The samples of Malappuram, Kozhikkode Wayanad districts (100%) respondents were staying with the family followed by other districts. Kasargode and Ernakulam district has the least (<60%).Among the male respondents (20%) are not staying with family. Male respondents with HIV infection were living out of station with one to two weeks. The respondents out of station for a week (7 days) are high in Kozhikkode district( 65%) succeeding Thiruvananthapuram (49%) and other districts samples ranges from (17 to 39%).All female sample respondents are staying with their family. Among them nearly two third of the respondents said that they were out of station with one to two weeks especially (100%) respondents in Idukki district stay outside their family for two weeks for various reason.

In the case of female sample respondents in all districts have experience of out station stay. The respondent are out of station below 7 days also equally high especially Thiruvananthapuram, Pathanamthitta, Palakkad, Malappuram districts (100%) and the lowest proportion of the female sample reported in Kollam and Ernakulam districts (<40%) percent also stayed out station of at least 7 days in a month time as they acquired the infection.

## DISCUSSION

Living environmental condition of the infected people are revealed the table 1.1. in this section illustrate the condition of the infected people in Kerala state through various dimensions. As per the factor loading five factors are grouped for the analysis.

**Table 1.2 Total variance explained in the people living with HIV/AIDS**

Factors	Description	Eigen value	% of Variance	Cumulative %
1	Female status with HIV/AIDS	9.39425	30.304	30.30403122
2	Vulnerable groups and HIV/AIDS	4.69392	15.1417	45.44571017
3	Educational status of the infected people	4.02802	12.9936	58.43933775
4	occupational status	3.84145	12.3918	70.83112058
5	youth and the educational status	2.1466	6.92453	77.7556485

**Table 1.3 Female status and Vulnerable groups with HIV/AIDS**

1-Female status with HIV/AIDS		2-Vulnerable groups with HIV/AIDS	
Housewife	0.921037866	Student	0.875884941
Female	0.888695365	Unmarried	0.758522905
stay with family	0.854259707	Other workers	0.624696316
Marital status 5—10 years	0.707250573	Marital status 5—10 years	0.604243906
Work experience 5—10	0.655963621	4 to6 family members	0.593665494
Hindu	0.574318834		
		unskilled worker	-0.805836679
Male	-0.888695365	Married	-0.673459263
Muslim	-0.52731682	truck auto drivers	-0.525262453
Unemployed	-0.626115518	hotel staff	-0.411528695

Table 1.3 explains the female status with HIV/AIDS and Vulnerable groups with HIV/AIDS, the first component which explains 30.30 % of the total variance is significantly loaded with 5 variables (see table1.2).The factor loading values of 6 variables lies between 0.92 and 0.57 in both the directions. The variables with positive loadings cluster include house wife (0.92), female (0.88) and stay with family (0.85), marital life (5-10) years (0.70) and work experience (5-10 years) (0.65) and Hindu community (0.57). The variables with negative loadings are added with male (-0.88), Muslim (-0.52), unemployed (-0.62) as these are just opposite to the above cluster of variables by nature. Hence this component is called Female status with HIV/AIDS dimension.

The second component accounts for 15.14% of the total variance grouped with 9 variables with loading values between 0.87 and -0.41 in both the directions. Out of 9 variables 5 show positive values of loading such as student(0.87), unmarried (0.75), other workers(0.62), marital experience of 5-10 years (0.60), 4 to 6 family members(0.59) and negatively loaded variables are unskilled labours (-0.80),married (-0.67), truck and auto drivers (-0.52) and hotel staff (-0.411). Hence this component is called Vulnerable HIV infected people in Kerala State

**Table 1.4 Educational status , occupational status and youth religion wise unemployed HIV/AIDS dimension**

3-educational status of the HIV/AIDS infected people		4- occupational status of the people living with HIV/AIDS		5-youth religion wise unemployed HIV/AIDS status	
Single	0.898393183	20-29 age group	0.858675	below20 of age	0.7654816
higher secondary	0.787420788	other workers	0.654711	Muslim	0.5874893
University	0.745305325	hotel staff	0.638223	Highschool	0.4829667
out station7—14 days	0.734959751	work experience 10 years	0.44584	Unemployed	0.4205878
Work experience 5—10	0.452615266	family members 4 to6	0.42037	Christian	-0.8379822
Highschool	-0.797959516	30-39 age group	-0.893532	Elementary	-0.7161731
Unemployed	-0.454823812	agriculture workers	-0.486173	hotel staff	-0.4579308
Married	-0.44930166				

Table 1.4 shows the third component 12.99% of total variance is contributed by 5 variables with the loading values lying between 0.89 and 0.45 in both the directions. Among them single (0.89), higher secondary education (0.78), university (0.74), out of station 7-14 days (0.73) and work experience of 10 years (0.45) variables have positive loadings while the remaining 3 variable namely high school (-0.79) and unemployed (-0.45) and married (-0.44) variables are negatively loaded variables. This component is conveniently stated as Educational status of the infected people dimension.

Interestingly the fourth component explains 12.39% of total variance. It is loaded with 7 variables in both the directions. While 20-29 age group (0.85), other workers (0.65), hotel staff(0.63) and work experience 10 years(0.44) and family members (4-6)(0.42) variables are positively loaded, age group of 30-39 (-0.89) and agriculture workers (-0.48) are negatively loaded. So, it is stated as Occupational status of the infected persons dimension.

Similarly the fifth component explains 6.92% of total variance with regard to variables such as area of the age of below20 (0.76), Muslim (0.58) high school (0.48) and unemployed (0.42). While negatively loaded variable are

Christian community (-0.83), elementary school education (-0.71) and hotel staff (-0.45). hence this group of variable is termed as Youth religion wise unemployed living with HIV/AIDS

### CONCLUSION

The varied dimension of male and female samples respondents personal status and living environmental condition analysed in details up to now. Majority of the male and female sample respondent comes under the category of the variables with positive loadings cluster include the infected HIV/AIDS cases as house wife ,stay with family , continue the married life and work experience (5-10 years) and they are Hindu community . This means house wife stay with family is mostly infected HIV/AIDS. Female having HIV/AIDS reported highly from the field of housewife. This indicates they got this disease through the transmission from their partner. Another interesting factor is that vulnerable of HIV infected people are student, unmarried, other workers and they have marital experience of 5-10 years and 4 to 6 family members . While educational status of the infected people highlight they live as single , education qualification are higher secondary and university level, they are out of station 7-14 days and work experience of 10years .The fourth component occupational status of the infected persons dimension explains the working group of 20-29 age group and they engaged in other works , they are hotel staff, and their work experience 10 years, and they have large number of family members (4-6). Similarly the fifth component youth religion wise unemployed living with HIV/AIDS explains below 20 of age group of people in the muslim community and their education is upto ,highschool level , and now they are unemployed . This indicates adequate information is not reached in the grass root level. Educational status also points the same fact. In all the sectors HIV/AIDS infection identified both male and female. Economic status also very pathetic it is clear that they are struggling to meet their daily requirement. Majority of them are married and staying with family

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