

## HIV-MYTHS AND MISCONCEPTION AMONG ADULT POPULATION IN A RURAL AREA OF KANCHIPURAM DISTRICT

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### Abstract:

**Background:** There are lots of myths around, but the facts of how you can get HIV, and how you can protect yourself, are very simple. By knowing the facts about HIV, you can save yourself a lot of worry and help to bust myths and misconceptions. One of the most common myths people living with HIV hear is that they can be cured. There's no cure yet for HIV, but antiretroviral treatment works and will keep someone living with HIV healthy. **Objective :** The aim of this study is to explore the underpinnings of myths and MISCONCEPTION regarding HIV/AIDS. **Methodology:** This cross sectional descriptive study was carried out among adult population in Padappai, an rural area in Kanchipuram district, TamilNadu. Based on the study of prevalence of HIV estimated by the UNDP survey - 2017. The prevalence of HIV in Tamilnadu in 2017 was estimated to be 0.27. So the minimum required sample size was estimated to be 207. Keeping a non response of 10 percent my sample size was 225. **Results:** Among the study population, the knowledge about an existing disease called AIDS has a significant association with gender (**Chi square = 10.477 ; p value = 0.001**), it is more in females compared to males. **127(84%)** among 151 females have knowledge about an existing disease called AIDS/HIV. where as **25 (35%)** among 71 males have no knowledge about its existence. Around **70%** of the study population think HIV spreads through mosquitoes and **40 %** of my study population thinks HIV spreads only through sexual intercourse.

## INTRODUCTION

### HIV

Human Immuno Deficiency Virus is a virus that affects a person's Immune system. If not treated properly it will lead to Acquired Immuno Deficiency Syndrome. Knowing about the virus can help an individual stay healthy and also prevents the transmission of the virus. Currently there is no effective cure for the virus, once acquired it will stay lifelong inside the individual.<sup>[1]</sup>

### Origin of the virus

The virus first came into existence into human beings from chimpanzees. This virus in the chimpanzees was called as Simian Immuno Deficiency Virus. When the chimpanzee was hunted for its meat, it came into Human beings. It first started in the continent of Africa and later spread to other continents through various modes of transmission.<sup>[1]</sup>

### Stages of the HIV infection

There are three stages of HIV infection. The Acute stage, The Chronic stage and the Acquired Immuno Deficiency Virus. In the first stage that is the acute stage of HIV, the person is very contagious and has a large amount of viral load in the body. Few people will exhibit flu like symptoms and few will not have any symptoms at all. In the second stage of the infection that is the chronic stage, the stage is called subclinical stage or clinical latency, if not treated in this stage it will lead to Acquired Immuno Deficiency Syndrome, A person can transmit infection even at this stage. People who take HIV medicine at this stage may not progress to the stage of AIDS.<sup>[1]</sup> The next stage is the Acquired Immuno Deficiency Syndrome, This is the most severe phase of infection, the person will have a very high viral load. AIDS is diagnosed when the CD4 count drops below 200 cells/mm or if they develop certain opportunistic infections. The people with AIDS often develop a lot of Opportunistic infections.<sup>[1]</sup>

People around the world have various misconceptions about HIV and AIDS. Not only illiterate persons but also educated and literate persons, this leads to unwanted stigmatisation and discrimination to the victims who are affected by the disease. It was estimated that in 2018, around 37.9 million people globally were living with HIV.<sup>[2]</sup> Although there are no effective treatment for Acquired Immuno Deficiency Disease, with recent advances in the field of medicine, it is possible for the Acquired Immuno Deficiency Virus patients to have a good and healthy long life.

Mistaken ideas about HIV and AIDS have also led to unwanted spread of the virus, because of lack of awareness in the people's side. Although after a lot of time doing research about HIV and AIDS researchers have established that the Human Immuno Deficiency Virus acquired individual's life is not doomed and they are not dangerous to the society.<sup>[3]</sup>

New innovations in testing and treatment of the virus and the disease have helped the victims to live longer and healthier. These days, it is possible to reduce the viral load in a patient's body so that it goes undetectable and there by the patient cannot transmit the virus.<sup>[4]</sup>

To maintain this level however, the diseased have to take medicines throughout their life. There are also pre exposure prophylactic medicines available these days. So by clearing out the myths and misconception towards HIV or AIDS among the people, there are many advantages to the society like the transmission can be reduced as well as unwanted stigmatisation and discrimination towards the diseased can be reduced, thereby they can have a better and happy life.

One among the UNAIDS targets to eliminate Acquired Immuno Deficiency Syndrome was to reduce the number of newly infected Human Immunodeficiency Virus cases to lesser than 500 000 globally by the year 2020, as similar as the 90-90-90 target.<sup>[5]</sup> The indicator to achieve this target is to ensure that 90% of adult population should have the skills, knowledge, awareness and capacity to safeguard themselves from HIV and should have access to sexual and reproductive health services by the year 2020 in order to reduce the number of newly infected HIV patients.<sup>[6]</sup>

## MATERIALS AND METHODS

This is a cross sectional descriptive study. The study population composed of adult population in an urban area in Kanchipuram district and the study period was from January 2022 to April 2022. The study included members between 19 to 60 years of age. Physically handicapped and Members who were affected with STD's were excluded from the study. Based on the study, prevalence of HIV estimated by the UNDP survey - 2017. The prevalence of HIV in Tamilnadu in 2017 was estimated to be 0.27.<sup>[7]</sup> Based on the prevalence of HIV in tamilnadu (UNDP survey-2017)  $p = 0.27$

$$N = Z(1-\alpha) / 2P (1 - P)$$

$$d*d = 207$$

The minimum required sample size is 207.

The minimum required sample size was estimated to be 207. Keeping a non response rate of 10 percentage the sample size was rounded of to 225. A semi-structured questionnaire with most common myths was prepared and distributed as proforma's, and google forms were also mailed to some people for data collection. As a pilot project pretested questionnaire was distributed to 10 members among the study population, and its outcome was not included, based on the outcome of the pilot study, the current study's questionnaire was modified. The study was approved by the institutional ethics committee and informed consent was obtained from each participant before the interview. Data was analysed using SPSS 20 version.

## RESULTS

The study done to reveal the myths and misconception towards HIV/AIDS yielded interesting results which are presented below in the form of tables.

The age of the participants of the study ranged from 19 to 60 years of age. Among which 82% belonged to the age group of 19 to 30, 14% belonged to the age group of 30 to 45, 4% belonged to the age group of 45 to 60. There were totally 67.5% females, 31.5% males and 1% other population. [Table 1]

In the study population, 84% of the females had knowledge about an existing infection called HIV. Among the males only 64.7% had knew that there was an existing disease called HIV. So the questions on myths and misconceptions were asked among the 76.8% (173) of the people who knew that there was an infection called as HIV. [Table 2]

Among the study population, the knowledge about an existing disease called AIDS has a significant association with gender (Chi square = 10.477;  $p$  value = 0.001), it is more in females compared to males. 84% among 151 females have knowledge about an existing disease called AIDS/HIV. whereas 35% among 71 males have no knowledge about its existence. [Table 3]

Among the study population 76.8% knew about an existing infection called HIV, Among them 77.7% thought that mosquitoes spread HIV, 40.9 % of the people thought that HIV spread only through sexual intercourse, 3.7% believed that HIV can spread using the same kitchen utensils, by speaking to an affected individual and by breathing in the same air. 10% of the study population believed that HIV spreads by living in the same house hold with an affected individual. 87.1% thought that acquiring an HIV infection will always lead to AIDS. 9.3% of the study population believed HIV can spread by using the same water source. 12.8% thought that HIV will spread through pets/rodents and insects and 14% of

the population thought that HIV infection is totally curable. [Table 4]

**Table 1: Socio-demographic details of the study participants.**

S.no	Variables	Frequency	Percentage
1	AGE:		
	19 -30	184	82%
	30 -45	32	14%
	45 -60	9	4%
2	SEX:		
	Male	152	67.5%
	Female	71	31.5%
	Others	2	1%

**Table 2: Knowledge about an existing infection called HIV**

S.No	There is an existing disease called AIDS?	Female	Male	Others
1	Yes	127 (84%)	46(64.7)	-
2	No	24(15.7%)	25(35.2)	-
3	Not answered	1 (0.3%)	-	2(100%)

**Table 3: Association between knowledge about an existing infection called HIV with age and gender.**

S. No	Variable	Chi square value	P value
1	Age	10.477	0.001
2	Gender	6.014	0.198

**Table 4: Common Myths and Misconception revolving around HIV / AIDS**

S. No	Question	No. of people(N=171)	Percentage
1	Do you think mosquitoes spread by HIV?	133	77.7%
2	HIV will spread by breathing the same air?	7	3.7%
3.	HIV infection spreads only by sexual intercourse?	70	40.9%
4.	HIV spreads by using the same kitchen utensils?	7	3.7%
5.	HIV spreads by speaking to a affected person?	7	3.7%
6.	HIV spreads by living in the same house with an affected individual?	17	10%
7.	An HIV infection will always lead to AIDS.	149	87.1%
8.	HIV can spread by using the same water source?	16	9.3%
9.	HIV can spread through pets/rodents or insects?	22	12.8%
10.	HIV is totally curable?	10	14%

## DISCUSSION

With an estimate of more than 5 million people with HIV in India. India has become the second highest HIV populated country next to South Africa.<sup>[8]</sup>

In the study, it was found out that around 84% of the females had knowledge about an existing infection called HIV. Where as in the first round of NFHS survey in the year 1992-1993 only 17% of the women knew about HIV.<sup>[8]</sup> After that in 2004 , a study conducted by Rimjhim M Agarwal et all on Determinants of knowledge regarding HIV/AIDS among reproductive age group women in India was found to be 45%.<sup>[9]</sup> This shows as the years pass by knowledge among women regarding HIV is increasing.

In this study only around 66% of the males knew about an existing disease called HIV, which is a less percentage when compared to females. This could be due to increased awareness and knowledge among women implicated into them when they visit clinics or hospitals for any reproductive therapy including deliveries.

In this study 77% of the population though HIV spread through mosquitoes, where as in a study done by Shankar R et all on “Study of status of prevailing misconceptions of HIV/AIDS in a rural community in south india”. It was found out that 34% people believed that HIV spread by mosquitoes.<sup>[8]</sup> This

disparity might be due to the difference in the demographic details.

In this study 10 – 77% of the population believed in various myths revolving around HIV. In a cross sectional study by Meundi et all conducten in the year 2004 on Knowledge, Attitude and Practise towards HIV/AIDS 52% of the people believed in more myths.<sup>[10]</sup> The results obtained is almost similar.

## CONCLUSION

Among the study population, the knowledge about an existing disease called AIDS has a significant association with gender (Chi square = 10.477; p value = 0.001), it is more in females compared to males. 84% among 151 females have knowledge about an existing disease called AIDS/HIV. whereas 35% among 71 males have no knowledge about its existence. [Table 3]. This might be due to increased awareness among females is fed into their minds by either IEC materials or by the doctor when they visit the hospitals for reproductive therapies including deliveries, fertility treatment, gynaecological problems. To increase the same level of awareness among males awareness camps in public gathering places, putting up IEC materials in public places where they are well visible can be done.

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