



A Study on Awareness of Mother to Child Transmission of HIV/AIDS among Housewives of Urban Slums, Thiruvananthapuram, Kerala

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Abstract: *Mother to Child Transmission (MTCT) is the most significant route of transmission of HIV among individuals below fifteen years of age. 90% of the newly infected children with HIV are due to their mother's HIV positive status. Increasing HIV prevalence among women in turn increases HIV infection in children. The present study is a community based cross sectional study was conducted among housewives in the slum areas of Thiruvananthapuram city. Data was collected by personal interview using a pretested structured interview schedule and analyzed using excel and statistical measures such as mean, frequencies and proportions were used to summarize the data. The results show that the mean age of the study population is 26.28. Majority of the respondents belongs to the age group of 25-30 (49.73%). 45.36% have studied up to 10th class and (69.95%) have two children. Only 82.51% of the study populations were aware of MTCT. Among the respondents 71.53% were aware of ART to the pregnant women as a method of prevention of MTCT, 52.3% opined that delivery by caesarean section, 61.6% had the opinion that by giving ART to the new born child and 41.1% reported that avoidance of breast feeding is a preventive measure of MTCT. It is concluded that awareness regarding the routes of transmission of HIV/AIDS was good among the study population. But there exist some gaps on certain specific aspects of MTCT which indicates the need for repeated education session for the women.*

Keywords: Awareness, HIV/AIDS, Housewives, Mother to child transmission

Introduction: Women are at higher risk of contracting HIV/AIDS infection compared to men and it poses a formidable threat to their health. HIV positive women who are pregnant or lactating are at risk of transmitting HIV to their offspring. Mother to Child Transmission (MTCT) is the most significant route of transmission of HIV among individuals below fifteen years of age. 90% of the newly infected children with HIV are due to their mother's HIV

positive status (WHO 2010). Mother to child transmission can occur during pregnancy, at the time of delivery or through breast feeding. Increasing HIV prevalence among women in turn increases HIV infection in children.

Mother to child transmission has a deleterious effect on child survival; therefore its prevention is important. MTCT mainly depends on obstetric practices, mode of delivery, breastfeeding,



and the mother's level of viral loads (Moodely J, et al 2005). Most of these factors are determined by mother's knowledge and health seeking behavior. The risk of MTCT ranges from 20% to 45% without any intervention. This risk can be decreased to 2% and 5% in non-breastfeeding and breastfeeding women respectively with anti-retrovirals (WHO 2010). There was a remarkable reduction in MTCT of HIV in India since the proper implementation of National AIDS Control Programme. It involves free counseling and testing for HIV in pregnant women, detection of HIV positive pregnant women and administration of ARV drugs to them and their infants. In 2013, 75% of the HIV positive pregnant women and their babies received ARV prophylaxis for prevention of MTCT.

Literature Review: Awareness regarding the transmission of HIV/AIDS in general population, pregnant women, women in the reproductive age group, adolescents etc., were good, but vary for different modes. Most of the studies show that the participants were less aware about MTCT in comparison to other modes of transmission (Soumya Rastogi et,al 2012, Rogers A et,al 2006, Anderson JE et,al 2003, Trupti N Bodhare et, al 2014).

A descriptive cross sectional study among women living with HIV in Tamilnadu shows that 18.8% of women with HIV had not heard of MTCT and 40% did not know that ARVs can prevent MTCT. 39.3% were not aware of the timing of MTCT. (Soumya Rastogi et, al). In another study conducted among women in the reproductive age group attending ART clinics, 82.5% perceived that HIV can be transmitted from mother to child and MTCT can occur during

breast feeding (74.2%), pregnancy (72.72%) and labour (63.63%) (Trupti N Bodhare et, al).

Vijay Shree and R.R Prasad conducted a community based study among pregnant women of rural areas of Patna, shows that only 8% had heard of mother to child transmission, only 41% were aware about MTCT among women attending Antenatal clinic SIMMER, Surat. In a tribal district of Central India awareness regarding MTCT in ANC clients was 77.34 % (Udaykiran U et, al). In rural south India 48% pregnant women have no idea about the preventive measures of MTCT (Rogers A et,al). Women attending an antenatal clinic in Kolkata only 6.8% participants had heard about MTCT (Goswami S et,al). A study conducted in China, 60% of pregnant women were aware of MTCT (Luo et,al), and a study in USA only 58% of pregnant women of childbearing age knew about the prophylactic intervention for MTCT (Anderson JE et,al). A study conducted in Semy, Kazakhstan among 520 women, only 46% and 68% of the women pointed out breastfeeding and mother-to-child transmission during pregnancy or delivery as routes of transmission.

Objective: To study the awareness of mother to child transmission (MTCT) of HIV/AIDS among housewives of urban slums.

Materials and Methods: A community based cross sectional study was conducted among housewives in the slum areas of Thiruvananthapuram city from October 2015 to January 2016. Data was collected by personal interview using a pretested structured interview schedule from 183 housewives by visiting their houses. Three slums are selected from



the Corporation list of 211 slums using convenience sampling. The interview schedule contains variables such as age, religion, educational status, parity, sources of information, routes of transmission of HIV, and specific questions such as awareness regarding mother to child transmission and prevention for that. Housewives between the age group of 18 to 35 years and willing to give the information are included for the study. They are the active group in the reproductive age and there is every possibility to receive counseling and testing for HIV/AIDS during their antenatal period. Those who are employed, below 18 years and above 35 years are excluded. Data was analyzed using excel and statistical measures such as mean, frequencies and proportions were used to summarize the data.

Results and Discussions

Table 1: Socio-demographic characteristics of the study population (N=183)

Demographic Variables	No:	%
Age (years)		
≤ 20	11	6.01
21-25	62	33.88
26-30	91	49.73
31-35	19	10.38
Total	183	100
Religion		
Hindu	132	72.13
Christian	23	12.57
Muslim	28	15.3
Total	183	100
Education		
Primary	8	4.35
Upper primary	64	34.96
SSLC	83	45.36
PDC/+2/Technical	24	13.11

UG & PG	4	2.2
Total	183	100
No. of children		
0	5	2.73
1	31	16.94
2	128	69.95
3&above	19	10.38
Total	183	100

Mean age of the study population is 26.28. Majority of the respondents belongs to the age group of 25-30 (49.73%), 33.88% from 21-25 age group, 10.38 from 31-35 and 6.01% from ≤ 20 age group. Coming to religion, 72.13% are Hindus, 12.57% are christens and 15.3% are Muslim's. Out of the 183 respondents, 45.36% have studied up to 10th class, 34.96% up to upper primary level, 13.11% up to higher secondary level, 4.37% up to primary level and 2.2% are graduates. Majority of the respondents (69.95%) have two children, 16.94% have only one child, 10.38% have more than two children, and five respondents (2.73%) have no child of which three women were pregnant at the time of data collection.

94.53% of the respondents were aware of sexual contact with infected person as a route of transmission of HIV infection. When asked about MTCT 82.51% of the study population responded positively. 86.88% of women reported that infected blood and blood products as an important route of transmission, and 80.33% opined that used needles and syringes also as a route of transmission.

All the respondents had heard about HIV. The main source of information was Television (87.98%), followed by health workers (61.21%), friends (53.55%), radio (51.37%), and newspaper (31.15%).



Table 2: Awareness regarding routes of transmission of HIV/AIDS

Awareness regarding routes of transmission	No:	%
Sexual intercourse with infected person	173	94.53
From infected blood & blood products	159	86.88
Reusing syringes and needles	147	80.33
From mother to child	151	82.51

Table 3: Sources of information about HIV/AIDS

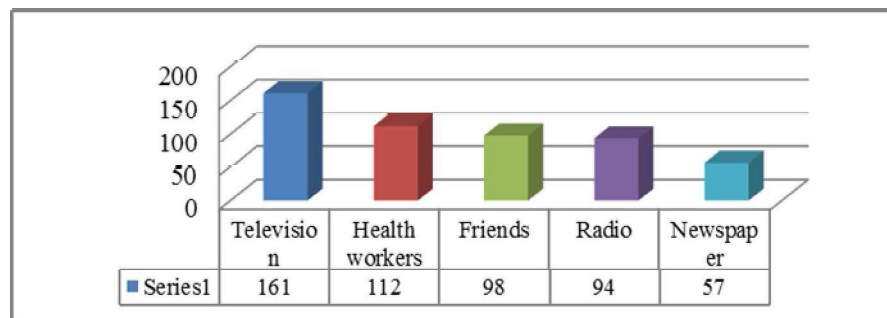


Table 4: Awareness on routes of mother to child of transmission (N=151)

Routes of mother to child transmission	Yes (%)	No (%)	Don't know (%)	Total
During pregnancy	117 (77.5)	23 (15.2)	11 (7.3)	151
During delivery	105 (69.5)	38 (25.2)	8 (5.3)	151
Through breast feeding	86 (56.9)	54 (35.8)	11 (7.3)	151

Out of 151 respondents 77.5% opined that MTCT of HIV infection can occur during pregnancy, 69.5% are of the opinion that it can occur during delivery and 56.9% opined it can take place through breast feeding. More than 40% of the respondents were not aware that breast feeding is a route of transmission of MTCT. Similarly 22.5% and 30.5% of the respondents were not aware that MTCT can take place at the time of pregnancy and delivery respectively.

Among the respondents 71.53% were aware of ART to the pregnant women as a method of prevention of MTCT, 52.3% opined that delivery by caesarean section, 61.6% had the opinion that by giving ART to the new born child and 41.1% reported that avoidance of breast feeding is a preventive measure of MTCT.



Table 5: Awareness of prevention of mother to child transmission (N=151)

Awareness of prevention of mother to child transmission	Yes (%)	No (%)	Don't know (%)	Total
ART during pregnancy	108(71.53)	28(18.54)	15(9.93)	151
Delivery by Caesarean section	79(52.3)	26(17.2)	46(30.5)	151
ART to the newborn child	93(61.6)	16(10.6)	48(27.8)	151
Avoid breast feeding	62(41.1)	22(14.6)	67(44.3)	151

Conclusion and Recommendations

Awareness regarding the routes of transmission of HIV/AIDS was good among the study population but vary for different modes. All the women except two had undergone counseling and testing for HIV during their Antenatal period. More than 70% of the respondents had undergone testing two or more times, and then also there exists a gap regarding certain aspects of MTCT. This indicates the need for repeated education sessions for women after childbirth also. Prevention of MTCT not only aims at preventing infection to the unborn child but also prevent the women from HIV infection. As women are the vulnerable group of the society and they are always engaged with household activities, child care, caring of others in the family, they usually ignore their health. So repeated counseling is required to keep up high level of awareness, preventive measures and thus improve the quality of life, because for most women marriage is the risk factor and the prevention of husband to wife transmission is unaddressed and the women continue to be at risk (Shyamala Nataraj et, al, 2014).

Health /ASHA workers can give proper training regarding the important aspects of HIV/AIDS along with

reproductive health training and they in turn can educate the women in the community. Self-help groups functioning in the areas can also organize awareness classes in coordination with the PHC of the concerned areas.

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