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AWARENESS ABOUT HIV/AIDS AMONG KARNATAKA WOMEN: AN ANALYSIS OF RCH 2002-04 DATA

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Abstract

This study focuses on women in the 15-44 years age group who are more likely to be vulnerable to HIV infection. The analysis is primarily based on secondary data collected in Reproductive and Child Health project II 2002-2004. The findings of the study reveal that there is a wide gap between awareness and knowledge of HIV/AIDS. Many women are not aware of the modes through which HIV/AIDS spreads, and the precautions to be taken to check further spread of the disease. More than one- fourth of the women expressed misconceptions about the spread of HIV/AIDS. The study clearly indicates that knowledge of HIV/AIDS is directly related to the social and economic background of the target group. It is encouraging to note that a higher percentage of women who go to an institution for delivery and who use spacing methods of contraception are aware of HIV/AIDS.

Introduction

As per UNAIDS estimates, India has the highest number of HIV cases in the world with 3.9 million people infected with HIV in 2002 (UNAIDS 2002). However, in 2007, using a more effective surveillance system, UNAIDS and NACO agreed on a new estimate – between 2 million and 3.6 million people living with HIV. This puts India behind South Africa and Nigeria in numbers living with HIV (UNAIDS 2007). In terms of AIDS cases, the most recent estimate was in August 2006, at which stage the total number of AIDS cases reported to NACO was 124,995. Of this number, 29 percent were women, and 36 percent under the age of 30. These

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figures are not accurate reflections of the actual situation because large numbers of AIDS cases go unreported (NACO August 2006).

Karnataka is one of the six states in india with high prevalence of HIV/AIDS. The annual sentinel surveillance programme is the main source of data regarding HIV infectons in Karnataka. Based on this data, it is estimated that, in 2004, more than 500,000 adults in Karnataka are infected with HIV. Prevalence levels of HIV ranged from 1.5 per cent among women at Ante Natal Clinics to 21.6 per cent among Female Sex Workers in 2004 (KSAPS 2004). The average HIV prevalence at ANCs in Karnataka has exceeded 1 percent in recent years. As per NFHS-3 (2005-2006) (IIPS and Macro 2007) survey, HIV prevalence is 0.69 per cent in Karnataka.

Devastatingly, HIV/AIDS has a disproportionate impact on the most vulnerable population: women and children. Around 90 per cent of the total reported AIDS cases occur among the sexually active and economically productive group of 15-44 years (KSAPS 2004, Aarti 2004). The rate of infection is increasing among women. Women, as a proportion of all adults living with HIV/AIDS, increased from 43 per cent in 1998 to 48 per cent in 2003 and the proportion continues to rise. Around the world, an estimated 7,000 women are infected with HIV everyday, mostly young, school-age girls living in poverty. The pandemic has affected more than 14 million children worldwide affecting their childhood, and their families. The impact is overwhelming because it just does not affect individuals, rather it breaks up the families, uproots children and could even destroy communities. Parents cannot go to work and earn money to feed the family. Stigma and discrimination isolate people vulnerable to infection and those who are HIV positive (UNAIDS 2004).

HIV not only has serious repercussions on women, its consequences can cause avoidable strain on the already over-burdened public health system (NACO1995). In terms of numbers dying, the AIDS epidemic might overtake all other historic epidemics, if left unchecked,

because of its open-endedness. Earlier epidemics prevailed for shorter durations, whereas the AIDS epidemic is already a quarter of a century old, and the level of infection continues to rise. So far its likely duration is not evident (Caldwell c John 1997). If women are not fully aware of AIDS and do take necessary preventive steps, they not only get infected but also infect children through vertical transmission. It is documented that the chances of passing the infection to the newborn during pregnancy or birth is 15 to 30 per cent (Italian Multicentre Study 1998 and European collaborative Study 1992). As per NACO (NACO 2002), the reported rate of mother-to-child transmission in India ranges from 13-60 per cent. Among women, infection of HIV from men is nearly 2.5 per cent more compared to men getting infected by women and its transmission is three to five times more when she has STD infection (Wasserheit 1991, Laga 1992). It is very relevant to note that, 21 per cent of new HIV infections are among women, a majority of who are married and living with their husbands and are not exposed to any other risk factor (Srikanth et al., 1997).

In the absence of the availability of a cure or a viable vaccine, the HIV/AIDS pandemic will claim 65 million lives by 2020 (UNAIDS 2007). Looking at the seriousness of the pandemic the international community has pledged to roll back the rates. Several steps are being taken to achieve this goal by the affected countries. Awareness and accurate knowledge could be one of the best measures to control the disease, and this is found to reduce the risk of individuals contacting and spreading HIV (World Bank 1997, United Nations 2002, Sambamoorthi, et al., 2004). Accurate knowledge is found to reduce the risk of individuals contacting and spreading HIV (World Bank 1997)

This study focuses on a group of women who are married and currently living with their husbands. They are women who are more vulnerable to HIV infection even though their sex life is confined to their husbands alone (KSAPS 2004). Women become victims of HIV because

of their husband's extramarital relationships (Chattergee, 1999). One of the studies conducted in south India has proved that, in case of married women one of the most common sources of HIV infection was their husbands (Srikanth et al., 1997). Women who are confined to their family getting infected by HIV, irrespective or their residence (rural or urban) point us towards the gender inequalities and the importance of empowering women to prevent infection from her life partner (Solomon et al., 1998).

In India the social status of women also nurtures subordination of women, leading to lack of choice even in personal matters like sex. Hence, the study of awareness of HIV/AIDS among women in the reproductive age group is important in the context of more and more such women getting infected with the HIV. Women's awareness and knowledge level is important to identify the areas for improvement. Further, assessing the knowledge of these women will help programmers and planners evolve new strategies that can directly touch these women and enlighten them about HIV/AIDS.

Objectives

The major objective of this study is to understand the level and differentials in the knowledge of HIV/AIDS among women in Karnataka. The specific objectives are as follows:

1. To study the level of awareness of HIV/AIDS, sources of information and modes of transmission of HIV/AIDS, ways to prevent HIV/AIDS, misconceptions about HIV/AIDS and knowledge of curability of HIV/AIDS among married women of Karnataka.
2. To examine the differentials in the level of awareness of HIV/AIDS, sources of information and modes of transmission of HIV/AIDS, ways to prevent HIV/AIDS, misconceptions about HIV/AIDS and knowledge of curability of HIV/AIDS based on selected background characteristics of currently married women of Karnataka.

3. To assess the principal determinants of awareness of HIV /AIDS among currently married women of Karnataka.

Data, Methodology and Limitations

Data for the present study on HIV/AIDS are drawn from the District Level Household Survey of Reproductive and Child Health (RCH) 2002-04 Round-II in Karnataka. The RCH survey generated district level data on various health indicators of women and children. The study covered a sample of 28,167 households throughout Karnataka, of which 66.5 per cent were from rural areas. Out of these households 22,655 currently married women aged 15-44 years (whose marriage is consummated and who is a usual resident or a visitor who stayed in this household during the last night) were selected for individual interviews (IIPS and MOHFW 2006).

Initially two-way tables were generated to understand the awareness level of the sample women based on the background characteristics. However, these cross-classifications were not adequate to tell whether each of these factors influence the awareness level independently. In order to identify the net impact of different variables on awareness level, an appropriate statistical technique was needed to assess the effect of a given variable on awareness level when controlled for the rest of the independent variables. The Logistic Regression technique was used to measure the relationship between awareness level and background variables.

The RCH study covers many issues related to women and children; HIV/AIDS is one of them. A study carried out on a small sample of individuals, who have the right knowledge of the disease and its spread, will enlighten us on the strategies required to impart the right knowledge of HIV/AIDS among the general population. Instead of adopting a survey method, a focus-group discussion with the high risk groups will throw some light on the burning issue of the level of knowledge and spread of this disease.

Theoretical Framework and Earlier Research

The differentials in awareness of HIV/AIDS, source of information and modes of transmission of HIV/AIDS, ways to prevent HIV/AIDS, misconceptions about HIV/AIDS and knowledge of curability of HIV/AIDS was studied with the background characteristics of the women like age, education, residence, caste, births, husband's education, place of delivery, standard of living index and current family planning methods used. Women were grouped into two categories based on their age, younger women in the age group of 15-29 years and older women in the age group of 30-44 years. The education of women and their husbands was classified as illiterate (respondents who cannot read and write), 0-4 years of schooling ('0' refers to respondents who have not passed any standard but can read and write), the other two categories refers to their respective years of schooling.

Over the years it was well documented that knowledge level will be positively linked to the educational level of the respondent, economic status, residence and caste. However, in this study knowledge of HIV/AIDS was also assessed by the other few variables, i.e., husbands' education, births of the respondent, place of delivery and current use of contraceptive method. It was also documented that irrespective of the fact whether the respondent was educated or not her husband's education would have some impact on her knowledge level. The logic behind the use of the other variables like births of the respondent, place of delivery and current use of contraceptive method was based on the assumption that women who have children are likely to have some interaction with the health personnel and more so when the HIV test is made mandatory for pregnant women. Having the delivery in an institution, enable women to have much more interaction with the staff and an opportunity to browse the posters and wall hoardings that give some idea of the government programmes. Similarly women who are using contraception, specially spacing methods, will have regular interaction with health personnel

and might have acquired more knowledge of HIV/AIDS compared to those who use permanent methods or those who have home delivery. Overall the government of India embarked on comprehensive educational and awareness programmes with mandates to increase prevention and control of HIV/AIDS in the country after the establishment of NACO in 1992. The educational programmes of the government focused on enhancing people's knowledge of HIV/AIDS and building behavioral skills to enhance prevention practices (NACO August 2006).

In spite of the efforts made by the different organisations (NACO, NGO's and other international agencies) to create awareness of HIV/ AIDS in the country, individual level data with small size samples, have found that many Indians do not have adequate knowledge. A study based on NFHS-2 data (Sambamoorthi Usha et.al., 2004), examining the relationship between antenatal care and knowledge of HIV/AIDS reveals that, in general, only 36 per cent of the women had heard about AIDS. Studies have brought out systematic variation in awareness and knowledge based on socio-economic background characteristics and also variations in the knowledge among high risk populations (Rao et al., 1994; UNAIDS and IOM, 1998, Consultancy Group for Research and Forecasting 2002). However, in this paper an attempt has been made to analyse the large-scale data (for the Karnataka State as a whole) on HIV/AIDS and related aspects aiming not only on the patterns (which were mostly observed earlier), but also examining the differentials and determinants with suitable statistical technique. Earlier studies did not highlight the gap between awareness and knowledge of HIV/AIDS.

Throughout this study the word 'awareness' meant just having been familiar (heard) about HIV/AIDS and not beyond that. However, when the word 'knowledge' is used it refers to having knowledge of specific facts about HIV/AIDS.

A composite measure, *viz.*, standard of living index (SLI) was derived for classifying women by considering the household amenities

such as source of drinking water, type of house, source of lighting, fuel used for cooking, toilet facility available and ownership of durable goods. The standard of living index was calculated by giving points for respective facilities.

a) Low- total score was less than or equal to 9.
b) Medium- total score was greater than 9 but less than or equal to 19 and
c) High- total score was greater than 19.

Source: (For details see, IIPS and MOHFW, 2006: 23-24)

Awareness of HIV/AIDS and its Differentials

On the whole, 68 per cent of women reported that they had heard about HIV/AIDS in Karnataka (Table 1). When gross differentials in awareness of HIV/AIDS among women was examined, it was conspicuous that awareness of HIV/AIDS was slightly lower among younger women (67 per cent), compared to older women (69.5 per cent). Though these differentials were not very large, it only indicate that the mass communication programme was reaching all women irrespective of age and education

Table-1: percentage of currently Married Women heard about HIV/ AIDS by their Background Characteristics, RCH-II, Karnataka

	Percent Heard About HIV/AIDS	Number of women
RESIDENCE		
Rural	63.0	15,326
Urban	79.4	7,328
RELIGION		
Hindu	68.6	19,025
Muslim	64.2	3,131
Others	83.5	497
CASTE		
SC/ST	57.0	5,689
OBC	70.2	10,573
Others	75.7	6,199
Education		
0-4 Years	66.3	1,606
5-9 Years	79.0	5,743
Above 10 Years	92.8	4,954
Husband Education		
0-4	62.0	1,849
5-9	71.7	5,523
10+	84.5	7,593
Standard of Living Index (SLI)		
Low	54.6	9,518
Medium	72.2	8,133
High	88.0	5,003
Age		
15-29	67.1	11,786
30-44	69.5	10,868
Births		
Had Live Births	68.0	19,963
No Live Births	70.6	2,688
Place of Delivery		
Government Institutions	70.8	2,122
Private Institutions	81.5	2,084
Home	50.0	3,337
Non Acceptors of FP	64.4	7,776
Contraceptive Use		
Permanent FP Methods	68.4	11,930
Spacing Methods	88.9	1,447
Karnataka	68.3	22,654

Source: Micro data files of RCH-II 2002-04.

As expected education and awareness of HIV/AIDS had a positive relationship. Nearly 93 per cent of women who had completed 10 or more years of schooling had heard about HIV/AIDS compared to 66 per cent of women with primary education. To measure the impact of husbands' education on women's awareness, husband' education was cross tabulated with women's awareness on HIV/AIDS. Husband's education also had a positive impact on women's awareness of HIV/AIDS; the awareness level varies from 62 per cent among primary educated to 85 per cent among women whose husbands had 10 or more years of schooling. Awareness of HIV/AIDS was much lower among Muslim women, SC/ST and women from low standard of living households.

Table 1 also reveals that women giving births or not giving births do not have significant impact on awareness of HIV/AIDS. Further, women who had delivery in private hospitals had higher awareness (82 per cent) of HIV/AIDS compared to women who delivered in government hospital or home (71 and 50 per cent respectively). Similarly women using the spacing methods had higher awareness of HIV/AIDS (89 per cent) compared to women who were using permanent methods (68 per cent) of family planning.

Determinants of Awareness on HIV/AIDS

Differentials in HIV/AIDS awareness based on socio-economic variables that are considered in the analysis helped us identify the relevant variables which are likely to operate in determining the level of awareness on HIV/AIDS. But these cross-classifications are not adequate to tell whether each of these factors influence the awareness level independently. This is because a number of background variables are interrelated and the differentials do not necessarily imply net effect. In order to identify the net impact of these variables on awareness level, it was necessary to run an appropriate statistical technique that assessed the effect of

a given variable on awareness level when controlled for the rest of the independent variables. The commonly used statistical procedure for such an analysis was the technique of Logistic Regression, since the dependent variable 'heard about HIV/AIDS' (awareness) is bivariate('Yes' or 'No') in nature. The most convenient feature of Logistic Regression is that it handles the categorical independent variables. The effect of each category of the independent variable is compared to the reference category. Thus, we can identify sub-sects of independent variables which are good predictors of the dependent variable.

The variables considered for running the Logistic Regression technique were residence, religion, age, caste, respondent's and husband's education, contraceptive use and standard of living index. Births and place of delivery were not considered in this analysis because the sample included all women irrespective of births, and the sample size would reduce with the inclusion of these two variables.

The logistic analysis results on awareness of HIV/AIDS based on the background characteristics of women are shown in Table 2. All the selected variables are significant in explaining the awareness of HIV/AIDS. The awareness level is more or less same in terms of residence. The awareness level of Muslim women is significantly lower than the reference category Hindus. A higher percentage of women belonging to other religious groups had awareness of HIV/AIDS compared to the reference category Hindus, although the relationship was not statistically significant. Among the caste categories, OBC and other caste women were significantly more likely (20 per cent) to have awareness of HIV/AIDS than women who belong to SC/ST.

Table 2: Logistic Regression Results on Women's Awareness of HIV/AIDS, Karnataka, RCH 2002-04

Exploratory Variables	B - Value	Significance	Exp (B) (Odd- Ratios)	Frequency
Residence				
Rural (Ref.)	0.1400	0.0007	1.15030	15,241
Urban				7,220
Religion				
Hindu (Ref.)				18,978
Muslim	-0.3987	0.0000	0.67120	3,012
Others	0.2081	0.1348	1.23130	471
Caste				
SC/ST (Ref.)				5,689
OBC	0.1843	0.0000	1.20230	10,573
Others	0.2587	0.0000	1.29530	6,199
Age of Women				
15-29 (Ref.)	0.1246	0.0003	1.13270	11,681
30-44				10,780
Education				
Illiterate (Ref.)				10,258
0-4	0.4352	0.0000	1.54530	1,590
5-9	0.9959	0.0000	2.70720	5,694
10+	1.9355	0.0000	6.92720	4,919
Husband Education				
Illiterate (Ref.)				7,514
0-4	0.1645	0.0000	1.17880	1,832
5-9	0.3605	0.0000	1.43400	5,483
10+	0.4013	0.0000	1.49380	7,632
Standard of Living Index (SLI)				
Low (Ref.)				9,463
Medium	0.2754	0.0000	1.3171	8,039
High	0.5116	0.0000	1.6679	4,959
Contraceptive Use				
Non-acceptors (Ref.)				7,776
Permanent method users	0.3312	0.0000	1.39260	11,830
Spacing method users	0.5902	0.0000	1.80440	1,435
Constant	-0.5835	0.0000		

Note: -2 Loglikelihood 23978.2: Chi-Square 4042.4: Degree of Freedom 16: No. of Women 22,461.

Women with higher education (10 and above years of schooling) were significantly, more aware of HIV/AIDS than women with middle school and primary education and illiterate women. Further, women's awareness level also depended on the husbands' educational level which was, significantly, linked to middle and higher levels of education. Awareness was significantly higher among women who were currently using spacing methods of contraception compared to women who were using permanent methods like female and male sterilisations when compared to non-users. Women with high standard of living had significantly higher awareness of HIV/AIDS compared to women with medium and low standard of living. However, the magnitude of significance as revealed by the odds ratio was not very large.

Sources of Information on HIV/AIDS and their Differentials

Women, who said they have heard about HIV/AIDS, were queried on the sources of their information on HIV/AIDS. Table 3 shows the percentage of currently married women who became aware of HIV/AIDS from different sources. For people, whether rural or urban, mass media, i.e., radio and television was one of the important sources of information. Studies conducted elsewhere also have proved that television, followed by radio was the most common source of information on HIV/AIDS (Shyam Thapa and Vinod Mishra 2003).

About 20 per cent of rural women and 30 per cent of urban women cited both radio and TV as the source of knowledge on HIV/ AIDS. About 36 per cent of rural women and 53 per cent of urban women said either TV or radio was the source of their knowledge of HIV/AIDS. The print media (newspaper, books or magazines) was the source of knowledge on HIV/AIDS for only 16 per cent of women in the state. The print media-newspaper/ books and slogan/ pamphlets

as a source of knowledge was expressed more by women of other religious groups, other castes and high standard of living households.

The data also indicated that doctors and paramedics had not really contributed much in imparting knowledge of HIV/AIDS. Only 12 per cent of the women mentioned either doctor or health worker as the source of information on HIV/AIDS. Here again other religions, other castes, better educated, and women belonging to high standard of living households were more benefited. The other source of information regarding HIV/AIDS was mouth- to- mouth i.e., teachers, community meetings, relatives and friends. Teachers and community meetings played a minimal role in imparting awareness of HIV/AIDS. However, relatives and friends were more responsible in spreading this awareness; nearly 70 per cent of the women gained awareness form them.

Table 3: Percentage of Currently Married Women by Source of Knowledge about HIV/AIDS by their Background Characteristics, RCH-II, Karnatala

Background Characteristics	Mass Media (Radio and TV)		Print Media News Paper/ Books and Slogan/ Pamphlet/Etc.		Health Personnel Doctor and H.W.		Mouth to mouth Relatives/ Friends and Community Meeting and School Teacher				Number of Women
	At l least One yes	At least Two yes	At least One yes	At least Two yes	At least One yes	At least Two yes	At least One yes	At least Two yes	At least Three yes	All yes	
RESIDENCE											
Rural	35.5	19.6	11.7	5.6	11.8	5.3	75.3	6.7	1.7	0.2	9,651
Urban	52.9	29.9	22.1	16.8	13.2	8.6	60.3	6.1	4.0	0.2	5,815
RELIGION											
Hindu	40.9	23.5	15.7	9.8	12.5	6.5	70.2	6.7	2.6	0.2	13,040
Muslim	48.6	20.9	14.5	7.4	10.0	5.0	68.8	4.4	1.9	00	2,010
Others	46.1	35.7	19.3	21.7	17.1	12.8	58.8	7.5	4.3	0.2	415
CASTE											
SC/ST	36.3	14.8	9.8	5.3	10.9	3.9	76.8	5.9	1.4	0.1	3,243
OBC	40.9	25.0	16.7	8.9	11.7	5.1	68.6	5.8	2.1	0.1	7,424
Others	47.2	27.4	17.9	14.5	14.0	10.4	66.6	8.0	4.1	0.3	4,695
Education											
0-4 Years	43.3	21.3	10.2	2.4	12.3	5.4	74.4	5.0	2.1	0.1	1,064
5-9 Years	47.6	24.6	15.6	7.6	13.5	5.0	68.9	5.6	1.7	0.1	4,537
Above 10 Years	51.3	39.1	31.2	24.4	16.8	13.8	53.9	9.0	6.1	0.4	4,594
Husband Education											
0-4 Years	38.7	16.3	8.6	2.4	11.6	4.1	73.6	7.4	1.2	00	1,146
5-9 Years	41.9	23.4	13.4	6.2	12.1	4.8	71.3	5.0	1.8	0.1	3,961
Above 10 Years	49.7	32.9	24.5	18.1	14.7	10.3	60.9	7.6	4.3	0.3	6,413
Standard of Living Index (SLI)											
Low	25.1	12.7	7.0	2.3	9.5	3.2	81.7	6.1	0.7	0.1	5,194
Medium	47.4	23.5	14.9	7.2	12.6	4.7	70.5	6.4	1.6	0.1	5,869
High	54.9	36.2	26.7	22.1	15.0	12.8	54.4	6.9	6.0	0.4	4403
Age											
15-29	42.0	22.8	15.8	9.2	12.8	5.7	69.9	6.4	2.0	0.1	7,911
30-44	42.1	24.2	15.4	10.5	11.8	7.4	69.5	6.5	3.1	0.2	7,555

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Background Characteristics	Mass Media (Radio and TV)		Print Media News Paper/ Books and Slogan/ Pamphlet/Etc.		Health Personnel Doctor and H.W.		Mouth to mouth Relatives/ Friends and Community Meeting and School Teacher				Number of Women
	At l least One yes	At least Two yes	At least One yes	At least Two yes	At least One yes	At least Two yes	At least One yes	At least Two yes	At least Three yes	All yes	
Births											
Had Live Births	41.9	23.1	15.2	9.6	12.3	6.5	70.1	6.4	2.5	0.1	13,565
No Live Births	43.4	26.5	18.8	11.5	12.5	6.9	66.6	7.1	3.0	0.3	1,899
Place of Delivery											
Government Institutions	43.1	22.6	15.3	8.9	15.4	6.6	68.0	7.1	2.2	0.1	1,502
Private Institutions	50.1	32.9	25.3	17.6	15.1	9.4	58.2	7.4	4.2	0.2	1,698
Home	31.4	13.7	8.6	3.1	10.4	3.1	79.5	5.5	1.0	00	1,669
Non Acceptors of FP	41.9	23.8	15.5	10.1	11.7	6.7	67.8	6.8	2.9	0.1	5,004
Contraceptive Use											
Permanent FP Methods	41.1	20.6	13.2	7.1	11.7	5.5	73.4	6.2	1.9	0.1	8,158
Spacing Methods	50.2	39.0	30.6	25.7	18.2	12.9	53.7	7.6	5.5	0.3	1,286
Karnataka	34.4	42.1	15.6	9.8	12.3	6.5	69.7	6.5	2.6	0.2	
	6,504	3,635	2,419	1,515	1,900	1,007	10,779	998	397	25	15,467

Source: Micro data files of RCH-II 2002-04. # Total figure might not add to N due to 'don't know' and 'missing cases'.

Mode of transmission of HIV/AIDS and Their Differentials

In order to find out the accuracy of knowledge of HIV/AIDS, women who were aware of HIV/AIDS were asked, "*How is HIV/AIDS transmitted?"* It was an open-ended question, what ever answers were given were recorded. Responses to this question are presented in Table 4. Around 17 per cent of the women reported homosexual intercourse as one of the ways through which HIV/AIDS spreads.

Table 4: Percentage of Currently Married Women by Mode of Transmission of HIV/AIDS by their Background Characteristics, RCH-II, Karnataka

Background Characteristics	Homo sexual Inter course	Hetero sexual Inter course	Needles /Skin Punc-ture	Mother to child	Trans fusion of Infec-ted Blood	Others	Don't Know	Num-ber of Wo-men
Residence								
Rural	13.8	71.7	48.7	16.0	33.2	3.1	35.6	8,222
Urban	20.6	78.0	64.8	26.2	51.5	3.5	20.7	5,304
RELIGION								
Hindu	16.9	74.5	54.8	19.9	40.8	3.2	29.1	11,426
Muslim	13.5	70.9	53.2	18.7	33.9	3.2	37.0	1,707
Others	16.8	79.1	68.1	30.9	55.6	4.1	17.6	392
CASTE								
SC/ST	12.2	70.4	44.6	13.5	32.0	2.3	44.1	2,616
OBC	15.8	71.2	49.7	16.2	36.5	3.0	28.1	6,789
Others	20.0	81.6	70.2	30.6	51.9	4.3	23.1	4,044
Education								
0-4 Years	15.1	72.2	51.9	17.6	31.6	3.0	36.3	876
5-9 Years	15.4	75.6	56.1	16.7	39.4	3.0	26.6	4,040
Above 10 Years	23.1	85.3	75.7	33.8	63.0	4.6	7.3	4,471
Husband Education								
0-4 Years	14.4	68.2	46.8	14.8	27.8	2.4	40.5	948
5-9 Years	14.2	73.3	50.4	16.2	34.6	2.8	30.7	3,466
Above 10 Years	20.7	79.9	67.7	27.5	54.3	4.1	16.2	6,021
Standard of Living Index (SLI)								
Low	11.8	64.4	37.4	10.9	24.0	2.4	50.1	4,150
Medium	15.7	75.1	55.0	18.2	38.9	2.9	28.2	5,166
High	22.1	82.6	72.3	31.3	58.4	4.4	11.8	4,210

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Background Characteristics	Homo sexual Inter course	Hetero sexual Inter course	Needles /Skin Punc-ture	Mother to child	Trans fusion of Infec-ted Blood	Others	Don't Know	Num-ber of Wo-men
Age								
15-29	16.1	73.5	53.9	19.3	39.6	3.3	30.4	6,916
30-44	16.9	74.8	56.2	20.8	41.2	3.2	29.1	6,60
Births Had Live Births	16.2	74.2	55.0	19.9	40.0	3.1	30.1	11,838
No Live Births	18.3	73.7	55.2	20.7	43.4	4.1	27.6	1,687
Place of Delivery								
Government Institutions	17.6	74.3	53.7	19.1	41.1	2.3	28.0	1,332
Private Institutions	18.8	79.9	67.6	29.0	53.8	4.1	17.5	1,581
Home	13.5	64.2	40.7	11.6	25.8	3.2	47.8	1,359
Non Acceptors of FP	17.4	72.0	53.9	20.6	40.8	4.0	0.0	4,367
Contraceptive Use								
Permanent FP Methods	15.4	73.7	52.3	17.0	36.5	2.6	31.9	7,050
Spacing Methods	20.2	84.2	74.5	36.2	60.6	4.4	10.9	1,237
Karnataka	16.5	74.1	55.0	20.0	40.4	3.2	29.8	
	2,229	10,026	7,441	2,710	5,464	437	4,030	

Source: Micro data files of RCH-II 2002-04. #Total figure might not add to N due to 'don't know' and 'missing cases'.

Fewer rural women (14 per cent) said homosexual intercourse was one of the modes of transmission of HIV/AIDS compared to urban women (21 per cent). The proportion of women reporting homosexual intercourse was higher among other castes, Hindus, other religions,

more educated women, and women with 10 or more years of schooling. A higher proportion of women who delivered in institutions, using spacing methods and hailing from high standard of living households also cited homosexual intercourse. Fifty Five per cent of women in Karnataka reported needles/blades/skin-puncture as another mode through which HIV/AIDS was transmitted. Illiterate women, women residing in *kachha* houses, women who had home delivery, women using permanent methods of planning were less aware of the spread of HIV/AIDS through needles/blades/skin puncture when compared to women belonging to other socio-economic groups.

Among the women who reported different ways of transmission of HIV/AIDS, a large chunk of women (74 per cent) in Karnataka reported heterosexual intercourse as a mode of transmission of HIV/AIDS. Irrespective of the background of the women this was referred to as the main mode of transmission.

Other modes reported by the women were mother to child (20 per cent), transfusion of infected blood (40 per cent), and about 3 per cent of the women mentioned that there were other modes of transmission of HIV/AIDS. Around 30 per cent of the women did not know about the modes of transmission of HIV/AIDS.

Ways to prevent HIV/AIDS and their Differentials

Women, who were aware of HIV/AIDS, were further asked, "How can one avoid HIV/AIDS?" Women who said that HIV/AIDS could be prevented by adopting different measures are presented in Table 5 based on selected background characteristics.

About 73 per cent of the women in Karnataka reported that HIV/AIDS could be prevented by following chastity. This notion was expressed by most of the women irrespective of their background. However, this percentage was lower for SC/ST and OBC women, women who delivered at home, and women belonging to low standard of living households. Other ways mentioned by women were sterilising needles and syringes before using (50 per cent) testing blood prior to

transfusion (40 per cent), using condoms correctly during each intercourse (20 per cent), and avoiding pregnancy when having HIV/ AIDS (14 per cent). About 3 per cent of the women gave other ways through which HIV/AIDS can be prevented. Further it is very important to note that about 38 per cent of the women did not know of the ways through which HIV/AIDS can be prevented.

Table 5: Percentage of Currently Married Women by Knowledge on Ways to Prevent HIV/AIDS by their Background Characteristics, RCH-II, Karnataka

Background Characteristics	Only One Sex Partner	Using Condoms Correctly during Sexual Inter course	Check-ing Blood Prior to Trans-fusion	Steri lizing Need les & Syrin-ges for Injection	Avoid-ing Preg-nancy when Having HIV(AIDS)	Others	Don't Know	Num-ber of Wo-men
Residence								
Rural	70.4	15.4	33.7	44.6	11.4	3.2	44.3	8,075
Urban	77.3	26.4	50.7	59.4	18.9	3.5	28.5	5,240
RELIGION								
Hindu	73.4	20.0	40.7	50.4	14.4	3.4	37.7	11,240
Muslim	69.6	15.8	34.7	46.6	11.7	2.8	44.6	1,685
Others	79.4	29.3	57.8	65.8	24.2	5.1	21.1	389
CASTE								
SC/ST	67.1	12.3	31.4	40.0	11.2	3.4	54.0	2,563
OBC	67.6	18.3	35.6	44.7	11.3	3.1	38.5	6,680
Others	86.0	26.8	53.7	66.1	21.5	3.7	26.7	4,001
Education								
0-4 Years	75.0	13.6	33.9	47.3	12.9	2.5	42.9	869
5-9 Years	71.9	16.1	39.9	50.5	11.2	2.5	37.8	3,950
Above 10 Years	85.9	35.9	62.2	70.7	24.8	5.2	12.2	4,432
Husband' Education								
0-4 Years	70.5	13.1	30.6	43.5	9.7	2.0	47.5	936
5-9 Years	70.0	15.1	35.6	45.2	11.5	2.8	42.1	3,392
Above 10 Years	80.1	29.5	53.5	63.0	19.8	4.2	22.2	5,956

Continued...

Background Characteristics	Only One Sex Partner	Using Condoms Correctly during Sexual Inter course	Check-ing Blood Prior to Trans-fusion	Steri lizing Need les & Syrin-ges for Injection	Avoid-ing Preg-nancy when Having HIV(AIDS)	Others	Don't Know	Num-ber of Wo-men
Standard of Living Index (SLI)								
Low	64.0	9.5	23.9	33.5	7.8	2.5	58.9	4,070
Medium	72.9	16.9	39.0	50.4	12.7	3.4	37.4	5,074
High	82.2	33.1	58.2	66.9	22.8	4.1	18.4	4,171
Age								
15-29	71.9	19.5	39.2	49.0	13.8	3.5	38.3	6,822
30-44	74.4	19.9	41.7	51.8	15.0	3.2	37.7	6,493
Births								
Had Live Births	73.1	19.4	40.0	50.2	14.3	3.4	38.5	11,643
No Live Births	73.1	21.8	43.1	51.4	15.0	3.2	34.9	1,671
Place of Delivery								
Government Institutions	73.4	18.8	40.3	49.3	14.2	3.2	37.7	1,302
Private Institutions	79.6	30.9	53.8	62.7	19.7	3.2	23.7	1,565
Home	61.7	10.0	24.5	35.8	8.4	4.1	55.9	1,341
Non Acceptors of FP	72.0	19.6	41.5	50.1	14.6	3.5	0.0	4,326
Contraceptive Use								
Permanent FP Methods	71.5	16.4	36.1	47.4	12.4	2.8	41.7	6,907
Spacing Methods	86.8	39.1	61.1	69.9	25.8	6.0	15.1	1,221
Karnataka	73.1	19.7	40.4	50.4	14.4	3.3	38.1	
	9,739	2,624	5,381	6,710	1,915	445	5,067	

Source: Micro data files of RCH-II 2002-04. #Total figure might not add to N due to 'don't know' and 'missing cases'.

Misconceptions about HIV/AIDS and their Differentials

Knowing that HIV/AIDS is not curable, people had a number of misconceptions about the spread of the disease. Misconceptions about the spread of HIV/AIDS varied from touching, shaking hands, hugging, kissing, sharing clothes/ utensils and stepping on urine/stools of the diseased person. Each of these misconceptions was put forth to the respondents and answers sought. Again, to repeat, these questions were posed to women who had heard about HIV/AIDS. Table 6 presents the responses of women on myths about HIV/AIDS based on the socio-economic and demographic background of the respondents. Nearly 48 per cent of the women in Karnataka said mosquito/flea/ bedbug bites was one of the ways through which HIV/AIDS spreads. This idea was cherished by almost all women irrespective of their background.

Table 6: Percentage of Currently Married Women by Myths about the transmission of HIV/AIDS by their Background Characteristics, RCH-II, Karnataka

Background Characteristics	Shaking Hands Partner	Hugging	Kissing	Sharing Clothes	Sharing Eating Utensils	Stepping on Urine/ Stools	Mosquito/ Flea/ Bedbug Bites	Number of Women
Residence								
Rural	27.9	30.6	35.2	33.8	35.9	40.3	53.1	5,849
Urban	17.2	18.0	22.3	19.9	21.1	25.9	40.0	4,096
RELIGION								
Hindu	24.5	26.3	30.8	29.2	31.0	35.5	49.0	8,439
Muslim	18.8	20.4	25.6	22.4	24.0	28.5	42.8	1,191
Others	15.5	18.0	19.6	18.0	18.7	23.7	33.1	314
CASTE								
SC/ST	32.0	35.2	39.1	38.1	39.9	44.8	55.7	1,836
OBC	26.9	28.4	33.4	30.8	33.1	38.2	51.2	4,812
Others	13.9	15.5	19.7	18.5	19.5	23.0	38.1	3,236
Education								
0-4 Years	26.1	28.3	34.5	32.2	34.2	38.6	49.8	627
5-9 Years	24.7	26.4	30.8	29.0	30.8	36.7	50.2	2,986
Above 10 Years	12.1	12.4	16.5	14.3	15.0	18.6	34.8	3,737
Husband Education								
0-4 Years	24.2	27.2	34.1	31.7	34.0	39.4	49.8	636
5-9 Years	27.7	29.7	34.1	32.1	33.5	39.4	52.7	2,516
Above 10 Years	15.9	16.7	20.7	18.4	19.7	23.5	38.9	4,761
Standard of Living Index (SLI)								
Low	36.0	39.7	44.7	44.1	46.6	50.4	60.5	2,748
Medium	24.2	25.8	30.4	28.1	29.8	35.5	50.1	3,774
High	12.7	13.6	17.8	15.6	16.7	20.4	34.9	3,423

Continued...

Background Characteristics	Shaking Hands Partner	Hugging	Kissing	Sharing Clothes	Sharing Eating Utensils	Stepping on Urine/ Stools	Mosquito/ Flea/ Bed-bug Bites	Number of Women
Age								
15-29	24.2	25.5	30.0	28.3	30.1	34.6	48.7	5,085
30-44	22.8	25.1	29.7	27.7	29.5	34.0	46.8	4,860
Births								
Had Live Births	23.8	25.9	30.4	28.7	30.5	35.2	48.3	8,671
No Live Births	21.0	21.6	26.0	23.5	25.0	28.3	43.6	1,273
Place of Delivery								
Government Institutions	24.0	24.0	29.6	28.3	29.4	35.5	49.0	997
Private Institutions	13.9	15.1	19.1	16.3	18.3	22.1	37.6	1,233
Home	32.4	34.7	39.6	38.9	41.5	46.3	58.0	876
Non Acceptors of FP	22.3	23.4	27.9	25.7	27.6	31.3	46.0	3,456
Contraceptive Use								
Permanent FP Methods	26.8	29.6	34.1	32.6	34.3	39.3	52.1	5,087
Spacing Methods	12.1	12.5	16.9	13.9	16.0	20.2	33.1	1,022
Karnataka	23.5	25.3	29.8	28.0	29.8	34.3	47.7	
	2,533	2,666	3,082	2,899	3,066	3,392	4,747	

Source: Micro data files of RCH-II 2002-04. #Total figure might not add to N due to 'don't know' and 'missing cases'.

However, a higher percentage of women belonging to low standard of living households, rural women, SC/ST women, women using permanent family planning methods, women who had home deliveries and Hindu women mentioned this mode of transmission. Other misconceptions about the spread of HIV/AIDS were 'stepping on urine/stools' (34 per cent), 'sharing utensils', 'kissing' (30 per cent each), 'sharing clothes' (28 per cent), 'hugging' (25 per cent), and 'shaking hands" (24 per cent). Again, these misconceptions were mentioned by a higher percentage of rural women, women who belonged to low standard of living households, SC/ST women, Hindu women, and women who were illiterate or had only primary education.

Knowledge on Curability of HIV/AIDS and its Differentials

Women were also asked another question on curability of HIV/AIDS to understand their knowledge level of HIV/AIDS. Table 7 shows the percentage distribution of women about the curability of the disease based on their background characteristics. Around 6 per cent of the women said that HIV/AIDS was curable, and 73 per cent of the women said that the disease was not curable. However, nearly 21 per cent of the women in Karnataka said they did not have any idea about the curability of the disease.

The women who said that HIV/AIDS was curable (6 per cent) and women, who said that they did not have any knowledge of the curability of the disease (21 per cent), are of concern to us. These are the women who said that they were aware of HIV/AIDS. Their awareness was confined to hearing of the term and not much beyond that. Further, fewer Muslim and SC/ST women, and women who had home delivery reported that HIV/AIDS was not curable.

Table 7: Percentage of Currently Married Women by Curability of HIV/AIDS by their Background Characteristics, RCH-II, Karnataka

Background Characteristics	Yes	No	DK	Number of Women
Residence				
Rural	5.7	71.8	22.5	9,655
Urban	7.2	74.9	18.0	5,816
RELIGION				
Hindu	6.1	73.5	20.4	13,045
Muslim	7.2	68.1	24.7	2,010
Others	6.5	79.5	14.0	415
CASTE				
SC/ST	5.5	67.7	26.8	3,245
OBC	6.4	72.3	21.3	7,425
Others	6.5	77.7	15.8	4,697
Education				
0-4 Years	4.2	72.0	23.8	1,064
5-9 Years	7.1	73.5	19.5	4,539
Above 10 Years	7.1	73.5	19.5	4,539
Husband Education				
0-4 Years	5.6	68.0	26.4	1,146
5-9 Years	6.3	72.1	21.6	3,964
Above 10 Years	7.3	78.1	14.5	6,414
Standard of Living Index (SLI)				
Low	5.1	66.7	28.2	5,195
Medium	7.1	72.2	20.7	5,871
High	6.5	81.3	12.2	4,405
Age				
15-29	6.9	72.5	20.6	7,913
30-44	5.6	73.4	21.0	7,558

Continued...

Background Characteristics	Yes	No	DK	Number of Women
Births				
Had Live Births	5.9	73.1	21.0	13,570
No Live Births	8.5	72.2	19.3	1,899
Place of Delivery				
Government Institutions	6.5	74.7	18.8	1,503
Private Institutions	5.5	77.8	16.7	1,698
Home	6.6	65.3	28.1	1,670
Non Acceptors of FP	9.0	91.0	0.0	3,898
Contraceptive Use				
Permanent FP Methods	5.6	72.7	21.6	8,160
Spacing Methods	6.1	83.4	10.5	1,287
Karnataka	6.2	72.9	20.8	
	966	11,286	3,219	

Source: Micro data files of RCH-II 2002-04. #Total figure might not add to N due to 'don't know' and 'missing cases'.

Discussion/ Findings

This study clearly brings out the fact that awareness of HIV/AIDS does not mean having knowledge about the disease. When it comes to the modes through which the disease spreads, misconceptions about the spread of the disease and knowledge about the curability of the disease, the knowledge level was much below 68 per cent (percentages vary for each of the sub categories in each variable).

To combat this deadly disease it is essential that every individual should have knowledge of HIV/AIDS. Studies carried out on PLHIV (People living with HIV/AIDS) reveals that it is medical professionals (who are supposed to root out the stigma attached to the disease)

themselves who maintain a distance from the patients. The study reveals that persons who can impart knowledge like doctors, health workers, teachers and, of course the media, have played a lesser role in imparting knowledge of HIV/AIDS.

The findings reveal that most of the respondent women gathered information from relatives/friends, that is word of mouth. This source of knowledge is always very risky; it is possible for individual bias to creep into oral messages.

The existing illiteracy and health awareness levels among women in the country indicate that HIV awareness interventions will take longer time to have the desired effect (Diksha Rajavanshi 2005). Awareness about the disease should be created among the younger generation at the school and college level to bring about drastic changes in a short duration. After all this is the group which will be vulnerable to the disease in the coming years. Further, vertical transmission of HIV/AIDS (mother to child) can be checked only if 'mothers-to-be' are educated in this regard.

Urban residence, education and the standard of living have a strong positive association with knowledge of AIDS. Exposure to the mass media increases women's knowledge of AIDS considerably. All these avenues are only accessible to women with higher standard of living. People, who do not have access to these things, should be the focus of our programme.

The media is used extensively only to create awareness or fear among the public about the disease. Adequate efforts are not made to make people understand the real crux of the issue. Now games are also used to impart knowledge of the disease. Studies should be carried out to find out the best strategies to impart knowledge and should come out with the best possible way to reach the illiterate or less educated, economically backward and socially suppressed groups in the society.

Now that NRHM is giving more impetus to institutional deliveries and aiming for all deliveries to be institutional deliveries in the future, knowledge of HIV/AIDS is also expected to be widespread in the coming years.

Conclusions and Policy Implications

There is a large gap between awareness and knowledge of HIV/AIDS. Awareness more or less is confined to hearing the term HIV/AIDS and not much beyond that. There are hardly any women who have complete knowledge of HIV/AIDS. When we say complete knowledge we mean awareness of the mode of transmission of HIV/AIDS, precautions to be taken to avoid getting HIV/AIDS and no misconceptions on HIV/AIDS. In the present study though 68 per cent of the women said they had heard about HIV/AIDS, for the subsequent questions put forth to check the completeness of their knowledge on HIV/AIDS, majority could not give correct answers. Less than three-fourths of the women mentioned heterosexual relationship (74 per cent) as one of the modes through which HIV/AIDS spreads and having sex with only one partner (73 per cent) as a measure through which the disease could be checked. Twenty to fifty per cent of the women carried myths about the spread of the disease. Above all, 6 per cent of the women said HIV/AIDS could an be cured and 21 per cent did not have any idea about the curability of the disease.

Even a small group of individuals with partial or no knowledge of HIV/AIDS, can damage the whole social system by exposing themselves to the disease or by their behavior towards the affected individuals. Spreading the right and complete knowledge of HIV/AIDS is what is required in the current situation to combat the further spread of the disease and also bring about a behavioral change towards the infected individuals.

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