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Knowledge and Opinion Preferences on HIV/AIDS in Affected Rural Women Undergoing Antiretro Viral drug Therapy

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The present study uses a cross sectional small group (n: 60) survey design to determine the extent of knowledge and opinion about HIV/AIDS in infected rural women on anti retro viral drug therapy. After a review of available 'knowledge-opinion scales', a 30-item two-part inventory to measure 'knowledge' (Part A) and 'opinion' (Part B) was exclusively developed for use in this study with sub-section for eliciting personal-social demographic details of each respondent. Open ended non-directive interview techniques were supplemented during data collection. Results show a mean knowledge score of 7.53 (SD: 2.00) out of 15. It is seen that 'high economic status' and 'joint type of family' background significantly influence high 'knowledge' scores ($p<0.05$); while other socio-demographic variables are not significant in determining their knowledge status on or about HIV/ AIDS ($p>0.05$). With regard to 'opinion' component, statistically significant inter item respondent difference across all studied socio-demographic variables ($p<0.05$) indicate heterogeneity in their views. This suggests the need for common agenda on facts or figures about HIV/AIDS that must be delivered for the affected women from rural areas. A content analysis of individual items reveals sparse knowledge on or about their disease combined with a strong sense of reserve, reticence and reluctance to discuss openly on a subject matter which is viewed as personal, intimate and tabooed. These trends are presented and discussed against the backdrop of an already relegated social status of the typical rural Indian women afflicted with the double disadvantage of having a deadly disease.

Keywords: HIV/AIDS Knowledge, Rural Women, Opinion Preferences, ARVT

When HIV/AIDS was first reported in 1980s, the initial impression was that it is the disease of homosexuals, drug abusers, or those who receive infected blood transfusions or blood products. It is now clear that the malady is prevalent even in heterosexuals, women as well as children (Newman et al, 2000). Recent reports on prevalence for AIDS indicate a dip by almost half compared to figures from earlier years (UNAIDS, 2009). Although some consolation the challenge posed by the disease has not dwindled. As on 31st August, 2007, the number of patients on official registers across ART centers, inter-sector partners, and others was close to over a lakh. The country's adult AIDS prevalence rate is now estimated at 0.36 % measuring around 2.5 million. The number of people living with HIV/AIDS in India continues to be largest in the world after South Africa and Nigeria. The situation in the country continues to be grim despite being under control (NACO, 2010). Women are under greater risk than men for contracting this deadly disease. Their prevalence rates are 0.29 % compared to 0.43 % for Indian males. This means that for

every 100 people living with HIV/AIDS, there are 61 men and 39 women. Certain age groups (15-49) are reported to have high rates of prevalence (88.7 %). Young women are getting infected more rapidly than elder ones (Steinbrook, 2007; Ruxrungtham, Brown & Phanuphak, 2004).

There are many studies on knowledge, attitudes, information, opinions, or perception of risk about the illness in various target groups, such as, teachers-school/college students (Merakou et al, 2002; Brook, 1999; Brook et al, 1994; Holtzman et al, 1994; Brown & Fritz, 1988), infected patients (Benotsch et al, 2003; Pinkerton et al, 2003), incarcerated adolescents (Di Clemente at al, 1991), adolescent mothers (Brown et al, 1998), youth (Eaton & Flischer, 2000), urban-rural inhabitants (Rich, Holmes & Hodges, 1996; Sikand, Fischer & Friedman, 1996) and members of the general public (Leili, Elham & Farkhondeh, 2008) across continents (Peltzer & Promtussananon, 2005; Krasnik & Wangel, 1990), countries (Ayranci, 2005; Tavoosi et al, 2004; Montazeri, 1995; Green et al, 1991) and communities all the world over (Pattullo et al, 1994). Pinkerton et al (2003), for example, examined HIV/AIDS knowledge, attitudes towards condoms, and sources of information about HIV in 200 male and 200 female Russian STD clinic patients to discover substantial knowledge deficits on AIDS and HIV transmission. Mc Daniel et al (1995) surveyed knowledge and attitudes about HIV and AIDS among medical students using a 25-item survey schedule to find mean score on knowledge scale as 6.25 (SD =1.63) out of 10. Factor analysis suggested three major groupings of medical students with regard to attitudes. The largest group had generally positive attitudes about patients with HIV/ AIDS; two subgroups reported feeling uncomfortable with homosexual behavior and with HIV seropositive patients than they did with patients having other infectious diseases. They expressed discomfort touching HIV seropositive clients or while taking a patient's sexual history.

Related studies on knowledge-attitude on HIV/AIDS in India have focussed on teacher-school/ college students in various parts of the country (Lal et al, 2008; Bhalla et al, 2005; Ganguli et al, 2002; Chatterjee et al, 2001; Agarwal et al 1999; Sodhi and Mehta, 1997; Aggarwal and Kumar, 1996). Others have targeted general rural populations (Chuttani, Gupta and Chaturvedi, 1999). There is dearth of studies on rural infected women and those undergoing treatment. A community survey of women in rural Tamilnadu using qualitative techniques to elicit their understanding about HIV/ AIDS found that about 28 % of the women respondents had not heard about the disease. This appalling lack of information combined even for other details like, causes, signs or symptoms, and prevention (Subramanian, Ezhil & Gupte, 2004). Research on HIV/AIDS in India continues to grapple on known risk groups like sex workers, STI clinic attendees, homosexuals, transgenders and long distance truck drivers from urban areas. The affected rural women are ignored. Many knowledge-attitude surveys in west have used standardized tools and instruments, structured interview schedules, checklists, inventories, or formal questionnaires (Easpada et al, 2009; Carey and Schroder, 2002; Basen-Engquist et al, 1999; Froman, Owen and Daisy, 1991; Kelly et al, 1989). Eaton and Flisher (2000) found that respondents show less knowledge when assessed with open-ended rather than set choice questions, suggesting low levels of spontaneous memory for AIDS information. A challenge for investigators addressing rural Indian women is their abject illiteracy, inability to respond to survey instruments or paper-pencil tests. To overcome this issue, Pallikadavath et al (2005a) used in-depth personal interviews and focus group discussions to collect experiences of testing

and treatment, the social impact of living with HIV and differential impact on women and men. Many women were not allowed to take decisions about their bodies, use contraception, adopt a given style of living or even answer to questions posed by field investigators without the prior permission of their husbands or other elders in the family (Sharma, Sujay and Sharma, 1998; George et al, 1997). Against this backdrop, the present investigation seeks to determine the extent of knowledge that rural infected women hold about HIV/AIDS, its nature, course, characteristics, prevalence, and route of transmission, prevention and treatment. This objective is coupled with another part of this study which seeks to elicit their opinion preferences related to the disease, stigma or discrimination attached with it.

Based on a comprehensive review of the above mentioned 'knowledge-attitude scales'; and also by taking into account the local cultural factors regarding gender and sexuality, a 30-item two-part inventory to measure 'Knowledge' (Part A) and 'Opinion' (Part B) was exclusively developed for use in this study on the sample of 60 rural women affected by HIV/AIDS and regularly attending as out patients for ART. The inventory also had a section for eliciting personal, social demographic details of each respondent, such as, age, marital status, educational qualifications, occupation, income, type of family, status of the HIV infection, route of transmission and clinical stage. Along with the twin inventory, an open ended non-directive interview was also used in this study. To establish face and content validity for the inventory, an initial draft of the instrument was distributed to an experienced multidisciplinary team of health professionals working in a general hospital. Their critical appraisal allowed revision for clarity and reliability. The first 15 items of the tool assessed general 'knowledge' about transmission, contagion, epidemiology, and medical treatment of HIV/AIDS. Responses to these items were 'right/true', 'wrong/false' or 'cannot say/don't know'. The remaining 15 items were 'opinion' statements scored on a 3-point scale, ranging from 'agree', 'disagree' and 'no opinion/cannot say'.

Thereafter, for the main study on larger sample, the frequencies for each of the 30 items were determined. In addition, an overall 'knowledge score' and 'opinion score' was computed by giving each respondent 1 point for each of the knowledge items that was answered correctly, and counting 'don't know/cannot say' as incorrect response. The possible range for knowledge scale score was from 0 to 15 for any single individual respondent. Higher the score indicated superior knowledge. The questionnaire was pre-tested in a local language and to establish 2-week test retest reliability measure on a sample of 15 participants (not a part of the main sample) from different sub populations of the rural areas. After analyzing the data, Cronbach's alpha was calculated to assess internal consistency of the questions. Alpha coefficients were found to be 0.81 and 0.75 for 'knowledge' and 'opinion' on HIV/AIDS respectively. The test retest reliability coefficient was measured at 0.83. Responses to all items were converted to a number score indicating the magnitude of correct responses. The SPSS version 18.0 was used to enter and analyze the data on a personal computer. Obtained data was analyzed by frequency and non-parametric statistics such as t tests, chi-square and Kruskal-Wallis test. The measure for statistical significance was established a priori as P: <0.05.

Operational Terms

'Knowledge' as operationally defined in this study refers to 'a theoretical or practical familiarity, awareness or understanding of the subject matter pertaining to HIV/AIDS including the sum totality of facts, figures, and information gained by experience'.

Responses to 'knowledge' questions were subsumed as 'right', 'wrong' and/or 'cannot say'. 'Opinion' was defined as 'a message, expression, personal belief, sentiment or judgment about something that is not founded on proof or certainty'. It is a subjective statement or thought about an issue or topic and is the result of feeling, emotion or interpretation of facts. The 'opinion' responses to statements must be viewed as 'agree', 'disagree' and/or 'cannot say', rather than as 'right' or 'wrong'.

Method

Participants:

The sample in the present investigation comprised of 60 rural women identified/ diagnosed as affected by HIV/AIDS and those who were regularly attending as out patients in Department of ART Clinics at Krishna Raja Hospital, Mysore Medical College, Mysore, Karnataka, as well as those who visited VCTC in the districts of Mysore and Chamrajnagar, Karnataka, during April-December, 2009.

Tools:

HIV-Knowledge Questionnaire-18 (Carey and Schroder, 2002): The original questionnaire is psychometrically strong and contains 45 items. It has been truncated into smaller set of 18 items with a selected representative domain of items requiring to be responded as 'true/right', 'false/wrong' or 'cannot say'. The reliability analyses of the HIV-KQ indicate that it is internally consistent (alpha: 0.91) and stable over 1- (r: 0.83), 2- (r: 0.91), and 12-week (r: 0.90) intervals. Sample items are: 'Coughing and sneezing do not spread HIV', 'A person can get HIV by sharing a glass of water with someone who has HIV', 'Pulling out the penis before a man climaxes keeps a woman from getting HIV during sex', 'A woman can get HIV if she has anal sex', 'Showering or washing one's genital/private parts after sex keeps a person from getting HIV', etc. Espada et al (2009) describe the development, factor structure, reliability and validity of another multidimensional scale to measure HIV/AIDS-related knowledge for adolescents (HIV/AIDS Knowledge Scale, HIV-KS). The final version of this 10 item scale is distributed across three major factors: (1) HIV oral transmission, (2) HIV effects, and (3) other HIV transmission methods. The HIV-KS is invariant across gender and age and shows good validity and internal reliability. It is shown to be a capable and parsimonious self-report scale for assessing main aspects of HIV/AIDS-related knowledge for adolescents.

AIDS Attitude Scale (AAS) (Froman, Owen & Daisy, 1991): It is a 6-point Likert scale that can be used with various subjects to identify people's attitudes towards HIV/ AIDS. The scale allows the researcher to classify subjects as having either empathy or avoidance towards people with HIV/AIDS, depending on their agreement or disagreement with the item statement. The range of scores is 1 for "strongly disagree" to 6 for "strongly agree". Seven items deal with empathy, while 14 items deal with avoidance. The scale has a high degree of validity and reliability in its original form. This instrument has been used in different cultural settings. Experts have agreed upon its content and face validity. The test-retest reliability is reported as r: 0.82, which is acceptable for an attitude scale. Kelly et al (1989) describe the construction of another standardized 40-item test of AIDS risk behavior knowledge and presents data on the validity, reliability, and psychometric characteristics of the measure in addition to norms for several populations.

Procedure

By following the ethical guidelines stipulated for such research activities (Venkatesan, 2009), the field work for the present investigation comprised of individually interviewing target respondents using semi-structured questionnaires in the native tongue. The interviews were carried

out in a quiet, undisturbed, private and confidential milieu after obtaining the informed consent of the respondents. Wherein women respondents were unwilling to discuss related issues with male investigator, a female interviewer was present to ease inter-personal communication and data collection. Home visits and interviews were not undertaken because of the risk of a breach of confidentiality. On an average, each interview took about half an hour. Some respondents, especially, women recently widowed or others as well, became distressed, wept, or tended to remain silent sometimes at certain points of the interviewing process. Under such circumstances, the situations were handled tactfully by not precipitating greater grief or distress; and where possible, by taking an alternative line of questioning for the remainder of the interview. The areas or topics covered in the questionnaire or interview schedule included demographic details, their current knowledge and opinion on or about various aspects of the HIV/AIDS illness.

Results and Discussion

Results of the present study with respect to knowledge and opinion on HIV/AIDS by affected rural women respondents are presented and discussed sequentially under the following three sections/headings: (a) Analysis of 'Knowledge'; (b) Analysis of 'Opinion Preferences'; and, (c) 'Individual Item/Content Analysis' respectively.

(a) Analysis of 'Knowledge':

On the whole, the rural women respondents in the present sample (N= 60) earn a mean score of 7.53 (SD= 2.00) out of 15 on the 'knowledge' component of the administered questionnaire (Table 1). Against this point of reference, when various individual personal and socio-demographic parameters are studied, it is seen that only 'economic status' and 'type of family' are the two variables which significantly influence the 'knowledge' scores of these women ($p<0.05$). The rural women from low socio-economic status groups (N= 32; Mean: 6.43; SD=1.89) show comparatively lower 'knowledge' scores about HIV/AIDS as compared to similar women from higher socio-economic status groups (N= 17; Mean= 7.21; SD= 5.27)($F= 3.18139$; $p=0.049$). Likewise, the HIV/AIDS affected rural women from 'joint family' backgrounds (N=20; Mean=7.65; SD=2.06) show better 'knowledge' about their disease than their counterparts from 'nuclear family' backgrounds (N=40; Mean=6.37; SD=1.90) ($t=2.3921$; df=58; SEM=0.535; $p= 0.200$). Other socio-demographic variables like education, occupation, age, clinical stage of the disease/therapy, or route of transmission are not significant variables in influencing the knowledge status of the infected rural women in the sample of this study ($p>0.05$).

In a related investigation, Pallikadavath et al (2005b) studied the socio-cultural and reproductive health correlates of knowledge about AIDS among rural women using multivariate analysis of 1998-99 National Family Health Survey (NFHS) data from Maharashtra and Tamilnadu. Their analysis used multiple logistic regression to investigate the rural women's knowledge of AIDS, of whether the disease can be avoided, and of effective means of protection. Although 47 % of all rural women in Maharashtra were aware of AIDS/HIV, only about 28 % knew that one can avoid it and only about 16 % possessed correct knowledge about its transmission. In Tamilnadu, where overall 82 % of rural women were aware of AIDS/HIV, about 71 % knew that one can avoid the disease; and, only 31 % of them had correct knowledge about its transmission. In both states, women from socially and economically backward groups had lower awareness about AIDS/HIV and of ways to avoid getting the disease. Associations with socio-cultural and reproductive variables and impact of contact with family planning services differed in the two states.

Table 1. Distribution of Mean and SD for 'Knowledge Scores' in Rural Women in relation to different variables

NO	VARIABLE	N	MAX	ACTUAL	MEAN	SD	PROBABILITY
	Overall	60	900	452	7.533	2.00	
1	ARV THERAPY						
	ARV I & II	47	705	356	6.67	2.20	T: 0.3911; Df: 58; SEM: 0.639; p: 0.69972; NS
	ARV III & IV	13	195	96	6.92	1.25	
2	MONTHLY INCOME						
	LOW	39	495	254	6.75	2.20	T: 0.1776; Df: 58; SEM: 0.563; p: 0.8596; NS
	HIGH	21	405	198	6.85	1.83	
3	EDUCATION						
	NIL	15	225	114	6.13	2.06	Variation Between: 5.97; Variation Within: 2.03; F: 2.94; p: 0.06; NS
	SCHOOL	17	255	128	6.44	2.12	
	COLLEGE	28	420	210	7.16	1.96	
4	AGE						
	BELOW30	36	540	279	6.94	1.73	T: 0.3615; Df: 58; SEM: 0.526; p: 0.7190; NS
	ABOVE30	24	360	173	6.75	2.34	
5	ECONIMIC STATUS						
	LOW	32	480	245	6.43	1.89	Variation Between: 6.5419425; Variation Within: 2.0563158; F: 3.18139; p: 0.04949; S
	MIDDLE	17	255	122	7.21	2.57	
	HIGH	11	165	85	7.54	1.75	
6	FAMILY						
	JOINT	20	300	306	7.65	2.06	T: 2.3921; Df: 58; SEM: 0.535; p: 0.0200; S
	NUCLEAR	40	600	146	6.37	1.90	
7	ROUTE OF TRANSMISSION						
	SEXUAL	48	720	357	6.70	2.05	T: 0.6991; Df: 58; SEM: 0.658; p: 0.4873; NS
	NON	12	180	95	7.16	1.99	
8	OCCUPATION						
	SKILLED	16	240	339	7.43	2.06	T: 1.4839; Df: 58; SEM: 0.586; p: 0.1433; NS
	UN SKILLED	44	660	113	6.56	1.99	
9	CLINICAL STAGES						

Table 3. Actual Test Statements in 'Knowledge-Opinion Scale'

KNOWLEDGE INVENTORY

1	STD's are curable. But, there is no cure for HIV/AIDS	R	W	CS
2	A person infected with HIV/AIDS can be recognized by their looks	R	W	CS
3	People with AIDS die of any illness	R	W	CS
4	HIV/AIDS can be avoided through PPTCT program.	R	W	CS
5	People with AIDS should be made to live far away from others	R	W	CS
6	One can get HIV by hugging or touching a person who has HIV/AIDS	R	W	CS
7	HIV is transmitted through semen, vaginal fluids and blood	R	W	CS
8	Multiple sex partnerships increase the risk of infection for HIV/STDs	R	W	CS
9	A person can get HIV infection by donating blood	R	W	CS
10	One can get HIV even if he/she has sex only once with an infected person	R	W	CS
11	Use of condom reduces the risk of HIV/AIDS.	R	W	CS
12	Breast feeding by infected mother spreads HIV/AIDS	R	W	CS
13	An AIDS patient should not to be allowed to donate blood	R	W	CS
14	HIV/AIDS virus is detected through blood test	R	W	CS
15	Gonorrhea is a Sexually Transmitted Disease (STD)	R	W	CS

(KEY: R-Right; W-Wrong; CS-Can't Say)

B. OPINION INVENTORY

1	People hesitate to discuses about sex	A	D	CS
2	Sexual relationship between two men and one women is not natural	A	D	CS
3	HIV/AIDS is the punishment given by God.	A	D	CS
4	HIV infected children can learn with non infected children in school.	A	D	CS
5	Treatment is not required for HIV/AIDS patients because it is anyway not curable.	A	D	CS
6	Women should perform only traditional tasks (cook, make home or being good mother/ wife)	A	D	CS
7	During initial stage of the HIV/AIDS infection a person does not exhibit any symptoms	A	D	CS
8	Sex education helps to control STDs	A	D	CS
9	Open discussion on sex related matters is harmful to society	A	D	CS
10	It is embarrassing for parent to teach about sex to teenagers	A	D	CS
11	Personal and social behaviors of women are always in conflict with family values.	A	D	CS
12	Knowledge of sex is the best defense against sexual crimes	A	D	CS
13	Sex is instinctive and there is nothing to learn about it	A	D	CS
14	Girl must be taught sex education only by women teachers	A	D	CS
15	Parents should provide information to adolescents on sex related matters	A	D	CS

(Key: A-Agree; D-Disagree; CS-Can't Say)

Table 2A. Distribution of Mean and SD for 'Opinion Preferences' in Rural Women in relation to different variables

Qno				ARV Stages						Age						Income						Family					
	Overall (N: 60)			I & II (N: 47)			III & IV (N: 13)			< 30 (N: 36)			> 30 (N: 24)			Lo (N: 39)			Hi (N: 21)			Nuclear (N: 40)			Joint (N: 20)		
	A	D	CS	A	D	CS	A	D	CS	A	D	CS	A	D	CS	A	D	CS	A	D	CS	A	D	C	A	D	CS
1	31	17	12	20	16	11	11	1	1	19	9	8	12	8	4	21	10	8	10	7	4	19	13	8	12	4	4
2	26	29	5	20	23	4	6	6	1	15	19	2	11	10	3	17	19	3	9	10	2	9	27	4	17	2	1
3	49	3	8	40	1	6	9	2	2	31	1	4	18	2	4	33	2	4	16	1	4	39	1	7	10	2	1
4	45	10	5	34	10	3	11	0	2	28	7	1	17	3	4	28	8	4	17	2	1	29	9	2	16	1	3
5	34	11	15	25	9	13	9	2	2	26	6	5	8	5	10	21	7	11	13	4	4	12	3	5	22	8	10
6	17	42	1	4	42	1	13	0	0	2	34	0	1	22	1	15	23	1	2	19	0	1	18	1	2	38	0
7	53	3	4	43	2	2	10	1	2	32	2	2	21	1	2	34	3	2	21	0	0	18	1	1	35	2	3
8	6	3	51	6	1	40	0	2	11	6	1	29	0	2	22	6	3	30	0	0	21	0	2	18	6	2	32
9	9	1	50	8	1	38	1	0	12	6	0	30	3	1	20	7	1	31	2	0	19	0	1	19	6	0	34
10	51	1	8	39	0	8	12	1	0	31	0	5	20	1	3	1	1	37	7	0	14	15	1	4	36	0	4
11	25	24	11	19	17	11	6	7	0	14	15	7	11	9	4	24	2	13	11	9	1	10	8	2	15	16	9
12	38	20	2	29	17	1	9	3	1	25	10	1	13	10	1	22	17	0	16	3	2	16	2	2	22	18	0
13	38	11	11	27	9	11	11	2	0	24	6	6	14	5	5	24	10	5	14	1	6	15	1	4	23	10	7
14	23	32	5	17	26	4	6	6	1	18	15	3	5	17	2	5	32	2	8	10	3	7	12	1	16	20	4
15	39	16	5	29	14	4	10	2	1	24	11	1	15	6	3	24	11	4	15	5	1	19	0	1	20	17	3
Mean	33	19	17	32	20	18	33	19	17	32	20	16	29	21	19	30	20	19	31	19	20	29	20	20	31	20	18
H	12.75			10.17			13.63			12.18			5.26			6.52			7.5			5.34			9.26		
df	2			2			2			2						2			2			2			2		
p	0.0017*			0.0062*			0.0011*			0.0023*			0.0721			0.0384*			0.0235*			0.0693			0.0098*		

Table 2B. Distribution of Mean and SD for 'Opinion Preferences' in Rural Women in relation to different variables

Qno	Occupation						Route of Transmission						Education Status									Stages					
	Skilled (N:16)			Unskilled (N:48)			Sexual (N:48)			Non-Sexual (N:48)			Nil (N:15)			School (N:17)			College (N:28)			Stage I&II (N:38)			Stage III&IV (N:22)		
	A	D	CS	A	D	CS	A	D	CS	A	D	CS	A	D	CS	A	D	CS	A	D	CS	A	D	CS	A	D	CS
1	6	6	4	25	11	8	24	13	11	7	4	1	7	4	4	7	5	5	17	8	3	19	12	7	12	5	5
2	13	2	1	23	17	4	23	20	5	3	9	0	7	6	2	12	7	6	12	4	4	17	20	1	9	9	4
3	12	2	2	37	1	6	40	2	6	9	1	2	10	1	4	14	1	1	25	1	3	32	2	4	17	1	4
4	12	2	2	33	8	3	35	10	3	10	0	2	10	4	1	14	3	0	21	3	4	29	6	3	16	3	3
5	8	2	6	26	9	9	27	9	12	7	2	3	12	4	0	4	4	8	18	3	7	23	5	10	11	5	6
6	1	14	1	16	28	0	3	44	1	0	12	0	1	14	0	1	16	0	1	26	1	2	36	0	1	20	1
7	14	1	1	39	2	3	44	1	3	9	2	1	13	1	1	13	1	2	27	1	1	34	2	2	19	1	2
8	2	3	11	4	0	40	4	3	41	2	0	10	0	1	13	6	1	14	0	1	24	6	0	32	0	3	19
9	1	1	14	8	0	36	9	0	39	0	1	11	2	0	13	4	0	13	3	1	24	8	0	30	1	1	20
10	11	1	2	40	0	4	44	1	3	7	0	5	11	0	2	15	0	4	25	1	2	36	0	3	15	1	5
11	8	7	1	17	17	10	21	16	11	4	8	0	5	7	3	7	2	7	13	15	1	15	15	8	10	9	3
12	14	1	1	24	19	1	29	18	1	9	2	1	7	8	0	9	7	1	22	5	1	28	10	0	10	9	3
13	11	1	4	27	10	7	29	9	10	9	2	1	7	4	4	9	6	2	22	1	5	24	6	8	14	5	3
14	7	6	3	16	27	1	21	24	3	2	8	2	7	5	3	8	9	0	8	18	2	17	19	2	6	13	3
15	14	1	1	25	15	4	30	15	3	9	1	2	8	5	2	9	8	0	22	4	2	25	11	2	14	6	2
	31.9	18.3	18.8	32.6	19.8	16.6	32.2	19.5	17.3	29	20.8	19.2	30.3	21.4	17.3	31.4	19.9	17.8	30.9	19.2	19	32.4	19.8	16.8	29.2	20.6	19.2
H	10.35			12.56			11.18			4.85			7.66			9.32			8.07			11.83			5.1		
Df	2			2			2			2			2			2			2			2			2		
P	0.0057*			0.0019*			0.0037*			0.0885			0.0217*			0.0095*			0.0177*			0.0027*			0.0781		

(b) Analysis of 'Opinion Preferences':

For the overall sample (N=60), it was seen that there is a statistically significant differences within the group of rural women respondents across each or all of 15 statements under 'opinion preferences' (H=12.73; df=2; p=0.001). Similar inter item respondent differences are also found in relation to personal and socio-demographic variables like rural women from lower age groups (< 30 years), both low and high income groups, those from joint family background alone, those involved in skilled and unskilled occupations, and those from all levels of education. In short, opinions vary across the whole sample of female rural respondents ($p<0.05$). This heterogeneity of 'opinion preferences' beckon attention towards a common agenda on facts or figures about HIV/AIDS that is needed for affected women from rural areas in our country (Table 2A and 2B).

(c) Individual Item/Content Analysis:

An analysis of responses on individual items show greatest unawareness on statements like 'People with AIDS should be made to live far away from others' (Item #5; N=60; Right: 46; Wrong: 9; Can't Say: 5). There are doubts on or about statements like 'a person can get HIV infection by donating blood' (Item #9; N: 60; Right: 15; Wrong: 25; Can't Say: 20). There is belief that 'HIV is transmitted through semen, vaginal fluids and blood' (Item# 7; N=60; Right=12; Wrong=43; Can't Say=5). A content analysis of individual statements under 'opinion' inventory reveals greatest agreement for items like 'During initial stage of the HIV/AIDS infection, a person does not exhibit any symptoms' (Item #7; N=53 out of 60), followed by items on 'It is embarrassing for parents to teach about sex to teenagers' (Item #10; N=51 out of 60), and that 'HIV/AIDS is the punishment given by God' (Item# 3; N=49 out of 60), etc. It is noted that a sizeable section of the women respondents in this study are undecided on statements like 'Sex education helps to control STDs' (Item# 8; N=51 out of 60), and 'Open discussion on sex related matters is harmful to society' (Item# 9; N=50 out of 60) (Table 3).

During this survey, it was noticed that the respondent rural women with HIV/AIDS have sparse information about the disease that has affected them. They are in dark or have misconceptions on the possibilities for a person to contract HIV infection by donating blood, or through semen, vaginal fluids and blood or that a person infected with HIV/AIDS can be recognized by their looks. Despite efforts by the field investigator/s, there was no knowledge or opinion expressed on key issues whether the infection can occur through other commonly apprehended routes of transmission, such as, contact with sweat or tears, coughs or sneezes, insect bites, sharing facilities like swimming pools, telephones, toilets, saunas or hot tubs with HIV-infected people. Similar explorations on knowledge and beliefs on other frequently feared routes of transmission by kissing or whether they come through sharing the same utensils, food from the same bowl, drinking water from the same cup or glass, or sharing towels, bedding, razors, tooth brushes, etc. were not openly responded. Further, there are often questions people ask or discuss whether using two condoms protect one from AIDS than using one condom, or whether a person can still get infected if one has sex with HIV positive person even after sterilization, or whether masturbation can transmit or give rise to HIV/AIDS, or whether HIV/AIDS is hereditary and so on. The respondents of the present study were too inhibited to get into such intricate or intimate details on these commonly held notions, frequently asked questions, or doubts in the people.

Further, with regards their opinion preferences, the studied sample of women affected by HIV/AIDS show greater agreement for statements like 'It is embarrassing for

parents to teach about sex to teenagers'. There is a streak of moral-religious dilemma whether their quandary is the consequence of the punishment given by god. This predicament is typically reflected as indecision or vacillation with regards to statements on 'sex education to help control STDs', or about having 'open discussions on sex related matters is harmful to society'. It is evident that there are no linkages between knowledge or awareness and held opinion preferences about HIV/AID in this sample as also suggested elsewhere (Morton, 1986). Although intended as exploratory, it must be admitted that the statements included in the 'opinion' inventory of the present study is only tentative. It cannot be construed as all-inclusive or exhaustive. There is scope, for example, to explore on use of condoms or certain aphrodisiacs, multiple partnership sex, coitus with animals, virgins or disabled, or about sex on certain auspicious or inauspicious days, oral/anal sex, etc which are customarily linked as 'cures' for HIV/AIDS. They have not been admittedly not included, elicited or reported even informally by the rural women respondents during the data collection in this study.

Conclusion

In conclusion, the objective study of knowledge, opinion, information, attitudes and/or perceptions of various segments of population including various groups of affected individuals themselves must be viewed as an important, needed, periodic, continuing and dynamic research exercise. It cannot and must not be viewed as single-time or solitary activity. Rather, the findings are to be closely interwoven with action plans and programs directed towards enabling attitude changes, dispensing of accurate information and positive opinion formation to the target groups of individuals. Moreover, the spread of the epidemic to rural areas presents a need to actively disseminate AIDS related knowledge for health protection.

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