ORIGINAL RESEARCH PAPER

Volume-7 | Issue-9 | September-2018 | PRINT ISSN No 2277 - 8179

INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

IS DIFFERENCES IN MARITAL STATUS AN IMPORTANT FACTOR FOR KAP RELATED TO HIV/AIDS IN RURAL AREA?

Community Medicine

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ABSTRACT

Aim: To assess the marital status differences in the level of knowledge, attitude and practices related to HIV/AIDS in patients and their relatives coming to Saoner Rural Hospital as well as primary health centers and sub-centers under Saoner Rural Hospital.

Materials and Methods: The cross sectional study was performed through a self-administered questionnaire in local Marathi dialect to 500 people between 20-30 years of age. SAS version of 9.1.3 was used for descriptive statistical analysis.

Results: There was a significant difference (p value <0.0001) in the levels of knowledge among singles vs. married where singles were better knowledgeable compared to married. This put married at high risk for practices in contrast to singles (p value 0.0002). However married demonstrated statistically significant positive attitude against singles (p value <0.0001). The people who did not ask doctor to use disposable needle and syringes differ significantly (p value 0.0003) in marital status.

Conclusion: Marital Status is an important factor for Knowledge, Attitude and Practices related to HIV/ AIDS in Rural Area.

KEYWORDS

HIV/AIDS, KAP, Marital, Rural.

INTRODUCTION:

Acquired Immune Deficiency Syndrome (AIDS), caused by Human Immunodeficiency Virus (HIV), has been increasing at an alarming rate since the index cases were reported in the early 1980s (Negash, Y; Gebre, B; Benti, 2003) . With about 1.8 million new cases being recorded every year, the management of HIV/AIDS pandemic is currently very challenging and has several ramifications (UNAIDS, 2017). A large proportion of the population in India has a heavy burden of disease mainly from preventable diseases including HIV/AIDS (Cohen, 2013). A number of secondary infections invade and attack HIV positive individuals leading to enormous costs of treatment of these opportunistic infections and adversely affecting the quality of people living with HIV/AIDS (Kumar, S; Wanchu, A; Chakrabarti, A; Sharma, A; Bambery, P; Singh, 2008). The prevention of HIV/AIDS hinges on the knowledge, attitude, and practices that individuals have about HIV/AIDS (Kalasagar, M; Sivapathasundharam, B; Einstein, 2006). Hence the appropriate KAP is even more important in the wake of the fact today. AIDS vaccine is not a reality yet and anti-retroviral therapy is restricted only for an advanced stage and after a thorough patient counseling (Selvaratnam, 1988).

In India women work on low-paying and low- status jobs compared to men (Benebo, Schumann, & Vaezghasemi, 2018; Silverman, J; Decker, M; Saggurti, 2008). This fact motivates many women into marriage as a source of living. In addition, husbands are final decision makers in the households, thus making them dominant over their wives. This has made many women susceptible to domestic violence from their husbands putting them at risk of acquiring HIV infection from unfaithful husbands whom they cannot question because of infidelity. This violence is both physical and sexual (Benebo et al., 2018; Silverman, J; Decker, M; Saggurti, 2008). Therefore marital status is an important risk factor among the behavioral risk factors.

This study was therefore carried out to assess differences in knowledge, attitude and practices (KAP) towards HIV/AIDS among a selected population of different marital status in India. Assessment of the KAP of the population in India is of paramount importance in identifying existing gaps that may lead to unsafe sex behavior. This will give insights for planning appropriate interventions by the health care system and policy makers in India. Perhaps the results of the study will generate questions that may provide avenues for future focused research.

MATERIALS AND METHODS:

The study setting was Saoner Rural Hospital and the Primary health Centers that serve the catchment area of the rural hospital. The study population comprised of the Out Patients Department (OPD) patients and their relatives aged 20-30 years who visited the Saoner Rural Hospital or the following Primary Health Centers: Saleghat, Risala, Badegao, Kelvad, Waghoda, Khapa and Khubala. At least 100 patients were daily visiting OPD along with accompanying relatives. Patients who were outside the 20-30 years age bracket were excluded from the study.

The data collection tool comprised of questionnaire having both open closed ended questions that were developed based on previous studies as well as Indian culture norms (Konde-Lule, Berkley, & Downing, 1989; Pitts, Jackson, & Wilson, 1990; Wilson & Mehryar, 1991). The questionnaire was divided into 4 parts, namely: socio-demographic characters, knowledge, attitude and practices concerning HIV/AIDS. Central government of India classified caste based on social and economic conditions namely Open, Other Backward Class (OBC), Scheduled caste (SC), Sheduled tribes (ST) etc (Chandramouli & General, 2011). For classification of occupations we used a criteria based on the National Classification of Occupations. Marital status was divided into single (never married) and married (ever married).

A pilot study using the above questionnaire was carried out among 50 subjects in the Fiskuti village. The designed questions were later modified after experts' opinion. The questionnaire was first designed in English which was later translated into local Marathi dialect. After data collection it was back translated into English.

The survey was conducted on 750 individuals. According to 2011 census average age of marriage in Maharashtra state in India is 19 years for females and 24 years for males (Desai & Andrist, 2010). Therefore we selected the age group between 20-30 years of age. Since we administered the questionnaire to OPD patients and their relatives separately and simultaneously, we minimized the bias from cross information exchange.

Questionnaire was distributed to the different Primary Health Centers under Saoner Rural Hospital. Data collectors comprised of Medical interns and students who were trained prior to data collection. Questionnaire was administered to the female respondents by female

nurses, since there is stigma related to disease. Thorough training on the objectives of survey sampling methods and administration of questionnaire was given to minimize inter and intra examiner bias. The knowledge of respondents on the modes of transmission of HIV was assessed by asking them if AIDS is spread by mosquito bites or dog bites. Those who answered "yes" were graded as having incomplete knowledge. The informed consent was obtained from participants before giving the questionnaire. The study was approved by Government Medical College's Ethical Committee.

Though our target was 750 participants, many participants filled out the questionnaire incompletely and some quit the survey meanwhile therefore these participants were omitted from the study. That is why our sample size was reduced to 500.

STATISTICALANALYSIS:

The data was entered in Microsoft office excels 2003 and then imported to SAS version of 9.1.3 for data analysis. The descriptive statistics such as mean, mode, median, standard deviation (SD), min-max, frequency and percentage distribution was used. Chi-square test was performed to obtain differences in proportion of outcomes among participants of different marital status. Difference in proportion of outcomes among participants of different marital status was statistically significant at p- value less than 0.05.

RESULTS:

TABLE 1: Social And Demographic Characters By Marital Status, Saoner, India.

Sociodemographic Characteristics	Single N (%)	Married N (%)	Total* N (%)	p-value	Missing
Age (in completed years)				<0.0001	0
20-23	128 (25.60)	94 (18.80)	222 (44.40)		
24-27	46 (9.20)	102 (20.40)	148 (29.60)		
28-30	15 (3.00)	115 (23.00)	130 (26.00)		
mean	22.45	25.6			
median	22	25			
Stand. Deviation	2.66	3.41			
Min-Max	20-30	20-30			
Education (completed standards)				<0.0001	2
Illiterate	9 (1.81)	37 (7.43)	46 (9.24)		
Primary	2 (0.40)	19 (3.82)	21 (4.22)		
Middle	13 (2.61)	46 (9.24)	59 (11.85)		
Secondary	78 (15.66)	136 (27.31)	214 (42.97)		
College and above	86 (17.27)	72 (14.46)	158 (31.73)		
mean	10.37	8.18			
median	10	10			
Stand. Deviation	3.41	4.02			
Min-Max	0-17	0-15			
Occupation (govt. classification)				<0.0001	4
Housewife	1 (0.20)	109 (21.98)	110 (22.18)		
Unskilled	72 (14.52)	111 (22.38)	183 (36.90)		
Skilled	15 (3.02)	31 (6.25)	46 (9.27)		
Trader	7 (1.41)	11 (2.22)	18 (3.63)		
Machine operators	17 (3.43)	15 (3.02)	32 (6.45)		
Service	11 (2.22)	11 (2.22)	22 (4.44)		
Professional	8 (1.61)	12 (2.42)	20 (4.03)		
Unclassified	55 (11.09)	10 (2.02)	65 (13.10)		
Total monthly household income				<0.0001	19
<1000	11 (2.29)	39 (8.11)	50 (10.40)		
1000-1999	82 (17.05)	124 (25.78)	206 (42.83)		
2000-4999	33 (6.86)	115 (23.91)	148 (30.77)		
>4999	8 (1.66)	19 (3.95)	27 (5.61)		
Students	49 (10.19)	1 (0.21)	50 (10.40)		
mean	1978.36	2085.19			
median	1500	1500			
Stand. Deviation	1406.18	1667.36			
Min-Max	400-10000	200-13000			
Rural_urban				0.1967	0
Rural	142 (28.40)	217 (43.40)	359 (71.80)		
Urban	47 (9.40)	94 (18.80)	141 (28.20)		
Sex				<0.0001	0
Male	174 (34.80)	123 (24.60)	297 (59.40)		
Female	15 (3.00)	188 (37.60)	203 (40.60)		
Caste (govt. classification)				0.7168	2
Open	6 (1.20)	10 (2.01)	16 (3.21)		
OBC	84 (16.87)	148 (29.72)	232 (46.59)		
SC	49 (9.84)	72 (14.46)	121 (24.30)		
ST	27 (5.42)	38 (7.63)	65 (13.05)		
NT	7 (1.41)	20 (4.02)	27 (5.42)		
VJ	2 (0.40)	2 (0.40)	4 (0.80)		
Muslim	7 (1.41)	15 (3.01)	22 (4.42)		
Unknown	6 (1.20)	5 (1.00)	11 (2.21)		

*There are few missing values; therefore values may not add up to 100%.

TABLE-1: Socio-demographic characteristics

About majority (44%) of people were between 20-23 years of age. Marital status was significant (p <0.0001) for the age group. About 25.60 % people were single and 18.8 % were married in the age group 20-23 years. Similarly 9.2% (single) and 20.4% (married) were between 24-27 years of age. There was again marital status difference between 28-30 years age group where 3% single and 23% married.

The illiterate people were 1.81% single and 7.43% married. The people who attended the primary school were 0.4% single and 3.82% married. The middle school education was found to be 2.61% single and 9.24% married. The secondary school was attended by 15.66% of singles and 27.31% of married. It was found that people who attended college and above were 17.27% of singles against 14.46% of married. Thus there was significant (p <0.0001) difference in the marital status in the education of people of Saoner area. Out of all 500 people only 2 people did not report their education.

Research participants were housewives, out of them 0.2% single and 21.98% married. The unskilled workers were 14.52% single and 22.38% married, whereas skilled workers were 3.02% single and 6.25% married. The people occupied as traders were 1.41% single against 2.22% married. The 1.61% singles compared to 2.42% married belong to Professional group. In the unclassified group 11.09% were singles in contrast with 2.02% married. Thus except the occupations machine operators and service there is a significant ($p < 0.0001$) differences in the marital status in all the other groups.

The total monthly household income from all the resources categorized into 5 groups was highly significant ($p < 0.0001$) in both of the strata of marital status. The students did not report any income so they had a separate group in which singles were 10.19% versus 0.21% married. Unfortunately 19 respondents refused to report their income. In the group less than 1000 rupees there were 2.29% singles compared to 8.11% married. Another group having income between 1000 –1999 rupees had 17.05% singles against 25.78% married. The third group (2000-4999 rupees) had 6.86 % singles contrary to 23.91% married. There were 1.66% singles verses 3.95% married in the group monthly income more than 4999 rupees.

Lastly marital status was highly significant (<0.0001) in the gender. Males were 60% and females were 40%. According to 2011 census average age of marriage in Maharashtra state in India is 19 years for females and 24 years for males (12). It was expected that since we selected 20-30 years age group, we would have got more married females than singles as well as more single males than married. This was true. We got about 38% married females in contrast to 3% singles. On other hand males were 35% singles compared to 25% married. Thus single males were nearly equal to the married females.

TABLE 2: Marital Status Differences In Knowledge Related To Hiv/aids, Saoner, India.

Knowledge Questions	Single N (%)	Married N (%)	Total N (%)	p-value
Heard about AIDS?				<0.0001
No	8 (1.60)	51(10.20)	59(11.80)	
Yes	181(36.20)	260(52.00)	441(88.20)	
Know symptoms of AIDS?				0.2244
No	160(32.00)	275(55.00)	435(87.00)	
Yes	29 (5.80)	36 (7.20)	65(13.00)	
Healthy person getting AIDS?				<0.0001
Do not know	33 (6.60)	126(25.20)	159(31.80)	
Yes	131(26.20)	149(29.80)	280(56.00)	
No	25 (5.00)	36 (7.20)	61(12.20)	
How can one know, if somebody has AIDS?				0.2349
Do not know	82(16.40)	153(30.60)	235(47.00)	
Blood test	102(20.40)	145(29.00)	247(49.40)	
Others	5 (1.00)	13 (2.60)	18 (3.60)	
Where is AIDS blood test done?				0.0784
Do not know	94(18.80)	185(37.00)	279(55.80)	
Hospital	94(18.80)	123(24.60)	217(43.40)	
Lab	1 (0.20)	3 (0.60)	4 (0.80)	
Can AIDS be treated?				<0.0001
Do not know	46 (9.20)	139(27.80)	185(37.00)	
Yes	39 (7.80)	62(12.40)	101(20.20)	
No	104(20.80)	110(22.00)	214(42.80)	
By pregnant mother to baby?				<0.0001
Do not know	27 (5.40)	107(21.40)	134(26.80)	
Yes	136(27.20)	172(34.40)	308(61.60)	
No	26 (5.20)	32 (6.40)	58(11.60)	
Transmission through breast milk?				<0.0001
Do not know	44 (8.80)	135(27.00)	179(35.80)	
Yes	111(22.20)	138(27.60)	249(49.80)	
No	34 (6.80)	38 (7.60)	72(14.40)	
Source of Information?				<0.0001
Friend	104(20.80)	87(17.40)	191(38.20)	
Relatives	19 (3.80)	36 (7.20)	55(11.00)	
Books	40 (8.00)	30 (6.00)	70(14.00)	
Television	173(34.60)	235(47.00)	408(81.60)	
Radio	130(26.00)	150(30.00)	280(56.00)	
Newspaper	101(20.20)	91(18.20)	192(38.40)	
AIDS awareness program	43 (8.60)	32 (6.40)	75(15.00)	
Doctor	43 (8.60)	40 (8.00)	83(16.60)	
Health Worker	14 (2.80)	27 (5.40)	41 (8.20)	
Transmission of HIV virus?				<0.0001
Unprotected sexual intercourse	162(32.40)	204(40.80)	366(73.20)	
Infected blood transfusion	138(27.60)	158(31.60)	296(59.20)	
Infected mother to baby	110(22.00)	130(26.00)	240(48.00)	
Shaking hands with AIDS patient	6 (1.20)	8 (1.60)	14 (2.80)	
Meals with AIDS patient	8 (1.60)	10 (2.00)	18 (3.60)	
Kissing AIDS patient	15 (3.00)	16 (3.20)	31 (6.20)	
Wearing clothes of AIDS patient	3 (0.60)	19 (3.80)	22 (4.40)	
Food or Water	5 (1.00)	9 (1.80)	14 (2.80)	
Mosquito bite	21 (4.20)	25 (5.00)	46 (9.20)	
Infected syringe and needles	141(28.20)	154(30.80)	295(59.00)	
Infected shaving razors	117(23.40)	84(16.80)	201(40.20)	
Dog bite	8 (1.60)	10 (2.00)	18 (3.60)	
Levels of Knowledge				<0.0001
Poor	66(13.20)	184(36.80)	250(50.00)	
Good	20 (4.00)	12 (2.40)	32 (6.40)	
Fair	103(20.60)	115(23.00)	218(43.60)	

Table-2: Knowledge

There was significant ($p<0.0001$) difference in the marital status for the people who said they have heard about AIDS (singles 36.2% vs. married 52%) and people who did not hear anything about AIDS (singles 1.6% vs. married 10.2%). When asked if healthy person can get AIDS, people who "did not know" were 6.6% singles against 25.2% married. In another group who said "Yes" to the same question we got 26.2% singles in contrast to 29.8% married. For the third group, 5% singles versus 7.2% married people answered "No". Here again p value was highly significant i.e. <0.0001. People really did not have any idea (56%) where the blood test for AIDS is done. Many said in the hospital (43.4%) and about 1% correctly answered in the laboratory. Here the p-value for the marital status difference was marginally significant ($p = 0.0784$). Furthermore when asked about the treatment of AIDS 9.2% singles vs. 27.8% married did not have any knowledge. About 7.8% singles against 12.4% married said that AIDS can be treated. The people who said AIDS cannot be treated were 20.8% singles compared to 22% married. Here the level of significance was $p<0.0001$. The perinatal transmission of HIV is an important question. About 5.4% singles and 21.4% married were ignorant of perinatal transmission of AIDS whereas 27.2% singles in contrast to 34.4% married were knowledgeable about this fact. There were 5.2% singles contrary to 6.4% married who said "No" to this question. Again the marital status was significant with the p value of <0.0001. AIDS can be transmitted by breast milk from infected mother to her baby (Nduati et al., 2000). This fact was known to 22.2% singles in contrary to 27.6% married. The people who did not know were 8.8% singles compared to 27% married whereas people who said "No" were 6.8% singles in contrast to 7.6% married. The overall level of significance (p value) was <0.0001 which is highly significant for the marital status. Television remained important source of information. Next to that was Radio and Newspaper. About 73% people knew that HIV is transmitted through unprotected sexual intercourse. About 60% people knew that

infected needles and syringes as well as blood transfusion can transmit the HIV virus. Whereas only 50% people knew HIV is transmitted through mother to baby. There is significant (p <0.0001) difference in marital status for sources of information and transmission of HIV virus. At the end we assessed the level of knowledge. People having poor level of Knowledge answered <60% of correct answers (13.2% singles vs. 36.8% married). People having Good level of knowledge answered >80% of correct answers (4% single vs. 2.4% married) and the last group was classified as fair level of knowledge where people answered 60-80% of correct answers (20.6% singles vs. 23% married). The overall levels of knowledge was again significant (p<0.0001).

TABLE 3: Marital Status Differences In Attitude Related To Hiv/aids, Saoner, India.

Attitude Questions	Single	Married	Total	p -value
	N (%)	N (%)	N (%)	
Eating foods with AIDS patient?				0.0047
Cannot tell	8 (1.60)	27 (5.40)	35 (7.00)	
Yes	117(23.40)	148(29.60)	265(53.00)	
No	64(12.80)	136(27.20)	200(40.00)	
Working with AIDS patient?				0.0002
Cannot tell	2 (0.40)	19 (3.80)	21 (4.20)	
Yes	138(27.60)	175(35.00)	313(62.60)	
No	49 (9.80)	117(23.40)	166(33.20)	
Sexual promiscuity of AIDS patients?				0.0234
Cannot tell	20 (4.00)	62(12.40)	82(16.40)	
Yes	53(10.60)	77(15.40)	130(26.00)	
No	116(23.20)	172(34.40)	288(57.60)	
Mandatory HIV blood test before marriage?				<.0001
Cannot tell	2 (0.40)	18 (3.60)	20 (4.00)	
Yes	177(35.40)	242(48.40)	419(83.80)	
No	10 (2.00)	51(10.20)	61(12.20)	
Sexual partner getting AIDS?				0.334
Cannot tell	4 (0.80)	8 (1.60)	12 (2.40)	
Treat	173(34.60)	292(58.40)	465(93.00)	
Abandon	12 (2.40)	11 (2.20)	23 (4.60)	
Abortion in pregnant AIDS mother?				0.0373
Cannot tell	24 (4.80)	25 (5.00)	49 (9.80)	
Yes	82(16.40)	169(33.80)	251(50.20)	
No	83(16.60)	117(23.40)	200(40.00)	
Levels of Attitude				<.0001
Negative (<40% of correct answers)	17 (3.40)	75(15.00)	92(18.40)	
Positive (>70% of correct answers)	85(17.00)	100(20.00)	185(37.00)	
Neutral (40-70% of correct answers)	87(17.40)	136(27.20)	223(44.60)	

TABLE-3: Attitude

The marital status was found to be significant in all the attitude questions except one where we asked if the partner gets AIDS, what will one do. In eating food with AIDS patient 53% (23.4% single vs. 29.6% married) did not have any problem but 40% (12.8% singles vs. 27.2% married) people said they will not do that. About 7% (1.6% singles vs. 5.4% married) were equivocal. The p-value was highly significant 0.0047. Another question which involved working with AIDS patient, 27.6% singles verses 35% married were of positive attitude whereas 9.8% singles against 23.4% married were of negative attitude and the last group was equivocal (0.4% singles versus 3.8% married). The p-value was highly significant 0.0002. The third question asked about sexual promiscuity of AIDS patients where 10.6% singles versus 15.4% married said that all AIDS patients are unfaithful to their sexual partners. About 23.2% singles vs. 34.4% married did not agree with the statement that all AIDS patients are sexually promiscuous. About 16.4% (4% single vs. 12.4% married) people stayed neutral. The p-value was significant (0.0234). The fourth question asked about the mandatory HIV blood test before marriage. Majority 83.8% (35.4% single and 48.4% married) agreed. Only few 12.2% (2% single vs. 10.2% married) disagreed and 4% could not tell. P-value was highly significant <0.0001. In the last question 16.4% singles vs. 33.8% married said that if the AIDS patient becomes pregnant then her fetus has to be aborted. Contrary to this view only 16.6% vs. 23.4% singles and married respectively disagreed where as 9.8% could not tell. The significance was tested with p-value of 0.037. Lastly we assessed levels of attitude and we found that Negative (<40% of correct answers) had 3.4% singles against 15% married, Positive (>70% of correct answers) had 17% singles against 20% married whereas Neutrals (40-70% of correct answers) had 17.4% singles against 27.2% married. The overall marital status was highly significant (p-value <0.0001) for all the levels of Attitude.

TABLE 4: Marital Status Differences In Practices Related To Hiv/aids, Saoner, India.

Practices Questions	Single	Married	Total*	p-value
	N (%)	N (%)	N (%)	
Sexual relationship with more than one partner?				<0.0001
Yes+Cannot tell	88(17.60)	45 (9.00)	133(26.60)	
No	101(20.20)	266(53.20)	367(73.40)	
If yes to above question, used condom?				0.3622
Yes+Cannot tell	48(35.29)	20(14.71)	68(50.00)	
No	43(31.62)	25(18.38)	68(50.00)	
Injection from a doctor or nurse?				0.4979
Yes	180(36.00)	300(60.00)	480(96.00)	
No	9 (1.80)	11 (2.20)	20 (4.00)	
If yes to above question, disposable needle & syringe use?				0.0003
Yes	114(23.75)	139(28.96)	253(52.71)	
No	66(13.75)	161(33.54)	227(47.29)	
Barber's shop for shaving?				0.0041
Yes	148(49.66)	121(40.60)	269(90.27)	
No	24 (8.05)	5 (1.68)	29 (9.73)	
If yes, did barber change the blade?				0.1495
Yes	123(45.72)	92(34.20)	215(79.93)	
No	25 (9.29)	29(10.78)	54(20.07)	
Know any AIDS patient?				0.1576
Yes+Cannot tell	26 (5.20)	30 (6.00)	56(11.20)	
No	163(32.60)	281(56.20)	444(88.80)	
If yes did you meet?				0.3377
Yes+No response	15(26.79)	21(37.50)	36(64.29)	
No	11(19.64)	9(16.07)	20(35.71)	
Levels of Practices				0.0002
Low risk group (>70% of correct answers)	5 (1.00)	6 (1.20)	11 (2.20)	
High risk group (<40% of correct answers)	45 (9.00)	130(26.00)	175(35.00)	
Moderate risk group (40-70% of correct answers)	139(27.80)	175(35.00)	314(62.80)	

*There are few not-applicable; therefore values may not add up to 100%.

TABLE- 4: Practices

Out of 8 practices questions the marital status was found to be significant only in 3 questions. When asked about the sexual relationship with more than one partner 17.6% singles versus 9% married people answered "Yes" or "cannot tell" to the question whereas 20.2% singles versus 53.2% married answered "No" to the stated question. Thus there was a significant difference (p-value <0.0001) in the marital status for this question. The people who said they had taken injections from local doctors when asked about disposable needle or syringe use about half (total 47.29% with singles 13.75% and married 33.54%) answered "No" to above question. The remaining half (total 52.71% with singles 23.75% and 28.96% married) said "Yes" to above question.

DISCUSSIONS:

Socio-demographic:

This study pointed out many important features. About half of the respondents were in very young group i.e. 20-23 years of age. Our study found out 10% people who never attended any primary school. About 75% population at least attended the secondary school. 60% people belong to non-productive group i.e. housewives and unskilled employees. This reflects the fact why marital status is so important to point out the differences. 85% of the people had total monthly income from all resources between 1000-5000. Out of the 70% rural people about half were married. Majority (50%) respondent belong to Other Backward Class (OBC). Next to that (25%) was Scheduled caste (SC). Only 5% Muslims participated in the study.

KNOWLEDGE:

About 12% people were not aware of AIDS at all. Almost all i.e. 87% people did not know the symptoms of AIDS. About half of people did not know that HIV virus can be detected in the blood. When asked about the blood test 1% answered correctly that it is done in the lab otherwise 43% said in the hospital and 56% did not know anything. Television was the source of information for majority (82%). There should be more hours given with the subject like AIDS. The popular TV serials should include HIV/AIDS in their subject. Next to that was Radio and Newspaper. Surprisingly least information was given by the health workers. Therefore health workers including doctors and nurses should be encouraged to give information of AIDS to every patient they come across. Doctors should have charts hanged on the wall explaining modes of transmission, blood test centers for the ELISA in the vicinity, primary prevention of AIDS, secondary prevention with HAART therapy (since 80% people did not know about HAART therapy), symptoms of AIDS etc. People who had good level of knowledge were only 6% which is alarming figure. Therefore health education programs should be implemented starting from the high school in India.

Attitude:

84% people affirmed that there should be a mandatory premarital HIV test. As there is wide debate going on over this issue and country seems to be positive for this, all religious leaders along with popular stars should unite for this purpose (Keenan, 2006). There is the stigma in the society, that is why people are not ready to work (33%) and eat (40%) with AIDS patient. Social cognitive theory should be implemented where the role models eating and working with AIDS patient can be readily accepted by the people (Bandura, 2004).

Practices:

We combined the respondents who did not tell their sexual relationship with multiple partners with those who had multiple sexual partners in the analysis. This is because many people hide the fact and those who stayed equivocal were not comfortable answering this. If we would have analyzed this ambiguous category using fisher exact then we would not have justified the study. That is why they were combined. There was no question adding them to "No" group since many people in this group might have lied due to stigma. The same thing was done for condom use, knowing and meeting any AIDS patient. Those people who had multiple sexual partners about 50% did not use a condom which is shocking. For patients satisfaction doctors give injections in India and it is the common practice. That is why 96% had taken injections at least once in their lifetime. About 4% people who did not have taken any injections were excluded from analysis for the further question. This is because at least once in their life people have taken injections may be in the childhood for vaccinations which they may not know. But at that time vaccination was not that rampant as today and even if people were vaccinated there was no such thing like disposable needles and syringes at that time. Doctors were boiling the needles and syringes after each injection. Since many homeopathic, Ayurvedic and others also were allowed to practice allopathy (Rohde & Viswanathan, 2004), they were ignorant of what a sterile needle or syringe means. Though doctors other than MBBS are banned to practice allopathy, government does not take any action against those doctors because of scarcity of Medical doctors in India. That is why they might have boiled needles and syringes at suboptimum temperature. Though boiling only means high level of disinfection (HDL) but not sterilization. HDL is accepted where the sterilization is not possible (Huezo, 1991). Taking this fact into account we can further say that injections by local doctors might have also contributed to the spread of AIDS epidemic. It has been found that sharing of razor blades is risk factor for HIV transmission (Simooya, O; Sanjobo, 2001). Though about 90% people went to Barber shop for shaving about 20% people did not ask for the change of razor blades.

Limitations:

The fact that this study was cross sectional in design was a limitation. According to the hierarchy of evidence pyramid (Balshem et al., 2011), though cross sectional studies are superior to ecologic study and case reports, they are not superior to case control. This is because they simply give prevalence and the effect-causal relationship cannot be determined. Furthermore this study used descriptive statistics so qualitative study was not done. We limited the study to 20-30 years old population. Therefore findings of this study cannot be generalized to other age groups. The study population selected from particular regions. If we could have included other regions in Maharashtra like Marathwada, Kokan, Western Maharashtra etc., we would have got better results.

We could not give the questionnaire to all respondents and ask to fill it out. This is because some of the participants were illiterate. Though some had primary education, they were not good in reading and writing. Where we were confident about the respondent's level of education, we asked them to fill the questionnaire by themselves. Unlike other industrialized countries, India has mixed health care system of private and government as an alternative. Though government system is open to all, high socioeconomic group is reluctant to go to government run hospitals because of quality of health care. People of high socioeconomic status go to private practitioner to get better health care. This is because government hospitals charges are negligible compared to private practitioner and people believe that one which is of low cost is of low quality (Biritwum, 2001). Patients coming to OPD at rural hospital have low socioeconomic status. We kept this fact in mind as a possible source of bias before starting the survey.

CONCLUSION:

There was significant difference in the marital status in about 21 groups that is including all socio-demographic characters and KAP questions. In most of the groups married people were more than the singles. In knowledge questions those who answered "yes", married exceeded singles. The same applies for the attitude questions. However regarding practices, in half of the questions married exceeded singles while for the other half singles exceeded married. Those who had good level of knowledge singles were more than married. That is why more married were at high level of risk contrast to singles. But more married people had positive attitudes compared to singles. In conclusion there has to be separate education packages for both singles and married since there is significant difference in singles and married.

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