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Original Research Article

Public Perception about HIV/AIDS Transmission and Concern about Use of Medical and Dental Services Among Bhil Tribes and General Castes in India- A Comparison

Dr Suresh Bhambhani[1], Dr Dhiraj Bhambhani[2], Dr Garima Bhambhani[3], Dr Tarun Pratap Singh[3], Dr Ami Desai[4], Dr Swapnil Parlani[5]

[1]Assistant Professor, Chirayu Medical College, Bhopal
[2]Student, MBBS, Chirayu Medical College, Bhopal
[3]Reader, Public Health Dentistry, PCDS & RC, Bhopal
[4]Reader, Oral Pathology and Microbiology, PCDS & RC, Bhopal
[5]Professor and HOD, Department of Prosthodontics, Crown and Bridge, PCDS & RC, Bhopal.

Corresponding Author: Dr Garima Bhambhani

ABSTRACT

Aims and Objective: The aim of the present study was to assess current status of general caste and Bhil tribes subject's knowledge and attitude towards HIV/AIDS transmission and their concern about use of health services.
Methods: A Cross Sectional questionnaire based survey was conducted among 625 subjects, out of which 325 are of general cast and 325 are of Bhil tribes of Bhopal, Madhya Pradesh. Self prepared questionnaire were used which comprised of 30 closed ended questions. The data were coded and analyzed with SPSS software Version 17.
Results: Association was seen between public perception and concern about AIDS transmission.
Racial differences were demonstrated in both knowledge and concerns. The barriers were patient acceptance, availability and also lack of knowledge. The overall result reveals a negative response in case of Bhil tribes and comparatively, almost a positive awareness in case of General caste.
Conclusion: Over all knowledge and attitude among Bhil tribes subjects was found to be unsatisfactory.
Keywords: Bhil Tribes, Knowledge, Attitude, HIV/AIDS.

INTRODUCTION

The tribes in India carry a very interesting history of customs, origin and social practices.
So much so that even today they are far distinct from the 'civilized' society around them.
There are many tribes in India, Bhils being the third largest and widely scattered group. They are categorized into central or 'pure' Bhils and the eastern or part-Rajput Bhils.

Very little is known regarding the origin of these tribes. In Madhya Pradesh there is no recorded history of Bhils and almost no light on them is thrown by the ancient inscriptions or literary workers. But it is certain that Bhils who inhibit this part of country were recognised as separate ethnic group as early as 500 B.C.

The tribes are inaccessible as they are isolated and away from civilization with their traditional values, customs, beliefs and myth intact.

'HIV infection is one of the most devastating health problem that mankind has ever faced. AIDS is the serious epidemic problem in India. HIV spreads primarily through sexual contact (85.34%). [1-3]

60% of the respondents in the Glasgow reason questionnaire survey reported that gloves should be worn by dentist routinely, and most of them thought that the gloves were for the dentist's own protection. One third was ignorant about sterilization methods used in dentistry. [4]

Bowden et al. reported that most patients felt that gloves and mask should be worn routinely. [5] They found that patients undergoing treatment in a hospital were more concerned than patients in general practice about cross – infection control. [6]

In the model described by Schulaman et al. the estimated risk of acquiring HIV transmission from an infected surgeon to patients is less than one per million procedures, which they appropriately categorize as extremely low. [7]

In 1999 a national telephone survey in the states reported that 30% of users of dental services had thought about the possibility of contracting HIV through dental treatment and almost two-thirds of them expressed concern about it. This was more among anxious patients, very frequent attenders, and those living in areas of high AIDS prevalence. [8] In a striking parallel with both the Scottish and American studies, one third of patients perceived a risk of HIV infection from dental care, and a woman were seen to be more of the fear of dental risk as compared to men. [9] The aim of this study is to analyse the knowledge and attitudes of patients reported to hospital towards cross infection control measures in medical and dental practice. To study factors influencing knowledge and attitude of dental patients towards cross infection. [6]

METHODS

A cross sectional questionnaire based survey was conducted among 325 Bhil tribes and 325 General population subjects during Feb.2018 in Bhopal, Madhya Pradesh. Out of which, 22 Bhil tribe subjects and 28 general caste subjects did not respond so they are excluded from the study. Sample was selected randomly from four villages of Bhopal district. Before starting the study Ethical clearance was obtained from Ethical committee of Chirayu Medical College, Bhopal and PCDS & RC, Bhopal. Prior permission was taken from Higher Authority of Bhil tribes before commencing the examination.

Informed consent was obtained from respective subject. The pretest of questionnaire was done before starting the study. A specially designed questionnaire consisting of 30 closed ended questions was spread among subjects to measure knowledge and attitude towards HIV/AIDS of subjects. Out of 30 questions 24 question represents knowledge of subjects like "Consuming food in a restaurant where the cook has the AIDS virus" and "Being coughed/sneezed on may lead to AIDS. Is it true?"and 6 questions represents attitude of subjects towards HIV/AIDS like "Let the patient die of AIDS: Is it: according to you". Chi-square test was applied by using SPSS Software Version 17.

RESULTS

Table 1 shows the knowledge of subjects regarding HIV infection from different sources. As shown, general population had good knowledge but certain misconception was prevalent. About 40 % of both general and Bhil tribes subjects were not sure about treated by dentist or medical doctor who has the AIDS virus. 33 % of Bhil tribes subjects were not sure about risk of donating blood without checked and also 38% of Bhil tribes subjects respondents were unaware about the unprotected sex with a person who has the AIDS virus. While approximately equivalent to Bhil tribes subjects, the general caste subjects were aware about all these facts. 32% subjects of Bhil tribes believed that virus

would be transmitted if cook in the restaurant has HIV/AIDS.

Table 2 depicts the healthcare utilization variables and response categories. About 50% subjects in case of Bhil tribes don't know about catching any disease or AIDS from the dentist while around 25% subjects of general population were somewhat concerned about it but they will continue visiting the same dentist if he had AIDS virus or was treating someone with AIDS virus, but 27% of Bhil tribes subjects respond that they would go to another office.

Table 3 shows knowledge about AIDS and its transmission. 31.5% Bhil tribe subjects believed that HIV virus spread through kissing or shaking hands while only 20% of general caste subjects agreed for this fact. About 30% of Bhil tribe subjects were not sure about transmission of AIDS virus from infected mother to foetus while only 39% of general caste subjects about it.

Only 8.5% of Bhil tribes, agreed for condom usage that can halt the transmission of AIDS while 24.5% of general caste agreed for it. So again depicts lack of knowledge in Bhil tribes. 34.0% of general caste subjects agreed about the increment or spread of other infection because of AIDS virus while only 18.5% Bhil tribe subjects were aware about this fact. Maximum 28.5% of general caste subjects agreed for the drug abuse while 35.5% of Bhil tribe subjects were not sure and only 12.5% agreed for it so this table clearly depicts an overall negative knowledge and perception of Bhil tribes subjects.

Table 4 shows attitude of subjects towards HIV/AIDS. A very low percentage of subjects of both castes showed attitude that let the patients die of AIDS than to try keep him alive. Maximum 52% of general caste preferred to work in AIDS free unit while only 16.5% of Bhil tribes were ready to work in that environment , so shows their lack of knowledge as compared to general castes. Only 13% of Bhil tribes agreed that precaution can prevent spread of AIDS while a bulk of 68.0% general castes was ready to take precaution, so that can prevent spread of AIDS.

62% of general castes were against the marriage of AIDS patients while only 15.0% of Bhil tribes were against the marriage so they had kept their lives in dangers. A major fact about the illiteracy in India again proved in lower caste mainly in Bhil tribes because only 18.0% of Bhil tribes think that educating the patients can halt the spread of AIDS while maximum 75.5% of general castes were ready for educating the patients so that the spread of AIDS can prevented.

Table 1. Respondent's knowledge/perceptions of the likelihood of becoming HIV infected from different sources (%)

Source		Very likely	Somewhat likely	Somewhat unlikely	Very unlikely	Definitely not possible	Not sure
Being treated by a dentist who has the AIDS virus*	Bhil tribes General castes	2% 1.5%	4% 6.5%	0.5% 0.5%	1.0% _	2.5% 1.5%	40.5% 39.5%
Being treated by a medical doctor who has the AIDS-Virus.*	Bhil tribes General castes	1.0%	3.5% 4.5%	0.5% -	1.0% -	6.5% 4.5%	38% 40.5%
Being working near someone with the AIDS virus.*	Bhil tribes General castes	1.0% 2.0%	4.5% 3.5%	- 1.5%	1.0% -	6.0% 2.0%	38.0% 40.5%
Being treated in a dental office*	Bhil tribes General castes	2.0% 1.5%	3.0% 9.0%	- 0.5%	1.5% -	9.5% 3.5%	34.5% 35.0%
Donating or giving blood*	Bhil tribes General castes	1.5% 7.0%	13.5% 27.5%	- 2.5%	2.0% 1.5%	0.5% -	33.0% 11.0%
Having unprotected Sex with person who has the AIDS Virus.*	Bhil tribes General castes	- -	10.5% 27.0%	- -	- 5.0%	- 2.0%	38.5% 15.5%
Eating in a restaurant were the cook has the AIDS Virus*	Bhil tribes General castes	- -	9.0% 18.0%	- -	2.0% 3.0%	7.5% 5.0%	32% 23.5%

* <0.05(HS)

Table 2. Percent dental utilization variables and response categories

1. Concerned about catching any disease at the hospital	Bhil tribes	General cast		p-Value
	1.yes -	0	6.0%	0.000
	2.don't know -	50.5%	43.5%	
2. concerned about the possibility of				
getting the AIDS Virus while at the dentist.	1.very concerned-	0.5%	3.5%	
	2. Somewhat concerened -	26.5%	25.0%	0.000
	3. not at all concerened -	1.5%	3.5%	
	4. don't know -	42%	17.5%	
3. How much you think the medical experts	1. a lot -	7.0%	19.0%	
Know about AIDS transmission	2. A little -	34.5%	26.5%	0.000
	3. not very much-	1.5%	1.5%	
	4. don't know -	7.5%	2.5%	

Table 3. Shows Knowledge about HIV AIDS and its transmission

1. Is Condom usage can prevent	Bhil tribes	General cast	
the transmission of AIDS *	1. 40.0%	24.5%	
	2. 8.5%	24.5%	
	3. 3.0	0.5%	
2. Can boiling kill HIV *	1. 38.0%	40.5%	
	2.11.0%	5.5%	
	3. 1.5%	3.5%	
3. No drugs to kill AIDS Virus.	1. 40.0%	41.5%	
	2. 9.5%	6.5%	
	3. 1.0%	1.5%	
4. Protection from AIDS by double	1.38.0%	34.0%	
gloving	2 11.0%	12.5%	
	3. 1.5%	3.0%	
5. AIDS Virus increases other	1. 31.5%	14.5%	infection*
	2. 18.5%	34.0%	
	3. 0.5%	1.0%	
6. Kissing, with exchange of saliva *	1. 1.35.5%	17.5%	
7. Sharing needles for drug used lead	1.13.0%	8.0%	
to AIDS*	2.36.5%	40.0%	
	3.1.0%	1.5%	
8. Being coughed/sneezed on may	1. 29.0%	22.5%	
lead to AIDS Is it true.*	2.20.0%	20.0%	
	3. 1.5%	7.0%	
9. Drug abuse can be a leading factor	1.37.5%	19.5%	
for causing AIDS.*	2.12.5%	28.5%	
	3. 0.5%	1.5%	
10. Can AIDS Virus transmit from	1 . 30.0%	9.0%	
Infected mother to foetus.*	2. 20.0%	39.0%	
	3. 0.5%	1.5%	
11. Is Kissing or touching on cheeks.	1.12.0%	14.0%	
shaking hands infective to other	2 31.5.0%	20.0%	
if one has AIDS. *	3. 7.0%	15.0%	

1. not sure 2. agree 3. Disagree
*** < 0.05 (HS)**

Table 4. Shows attitude towards HIV AIDS

	(1) Bhil tribes	(2) General Casts	P-Value
1.Let the patients die of AIDS	1. 2.5%	1.0%	
	2. 2.0%	5.0%	. 003
	3. 46%	43.5%	
2. Precaution can prevent spread of	1. 2.5%	4.5%	
AIDS, is it, according to you.	2. 13.0%	68.0%	.000
	3. 4.5%	7.5%	
3. Patients with HIV should not marry	1. 1.0%	5.0%	
	2. 15.0%	62.0%	.098
	3. 4.0%	13.0%	
4. Avoidance of casual contact	1. 3.0%	7.0%	
with AIDS patients can prevent	2. 16.5%	62.5%	.000
spread of AIDS	3. 0.5%	10.5%	
5. Is educating the patients can prevent	1. 1.5%	2.5%	.000
the spread of AIDS	2. 18.0%	75.5%	
	3. 0.5%	2%	
6. Do you prefer to work in AIDS free	1. 1.0%	1.5%	.000
Unit.	2. 16.5%	52.0%	
	3. 2.5%	26.5%	

DISCUSSION

The public and even the scientific community are often confused about the division between fact, knowledge, perceptions, and opinion. [11] In fact public misunderstanding of scientists' use of probabilistic statements in describing the risk posed by AIDS further exacerbates the problem. [12]

The findings related to the subjects' knowledge about the transmission of AIDS were, in general, similar to the findings reported by the centre for disease control. [10] Both surveys found that greater attained formal education of subjects was associated with more accurate knowledge of AIDS transmission, and that Bhil tribes generally had more misperceptions about the disease than did general respondents.

The proportion of the subjects who were concerned about their instruments sterilization procedure is lower than expected. [8-14] Females were more likely in the current study than males to report avoiding or delaying dental visiting due to their perceived risk of cross infection. [15] The multivariate findings offer some insight into the shaping of community concern about cross infection control in medical field.

It is also possible that problems in communication may reduce their exposure to reliable sources of information about cross infection control. [9] No statistically significant difference was seen in term of mean level knowledge and attitude towards HIV AIDS between the different ages. [16] Faris R and Showman A in their study conducted in 1994 among Egyptian health care workers, 83.5% reported that AIDS patients should be isolated in quarantine. Hentgen V, Jaureguiberry S, Ramiliarisoa A et al in their study in 2002 among health care workers of T amative (Madagascar), 20% mentioned that AIDS patients should be isolated in quarantine while in our study only 7% reported that AIDS patients should isolated in quarantine. [17]

In the present survey, among general caste subjects who were most knowledgeable about the likelihood, various routes for the transmission of the AIDS virus were less concerned about contracting infectious diseases in the dental office. Further, more knowledgeable subjects were less expected to report that they would change doctor because of a fear of AIDS and were more likely to respect both patients as well as provider confidentiality.

In our study 76.5% had correct knowledge about sharing needles, which increases the risk of acquiring AIDS and transmission of HIV. This finding consistent in the study conducted by Barbara Gerbert in 1987 among California healthcare students. [16]

Alarmingly, approximately 59.5% of the subjects did not believe that expert were telling everything they know about the transmission of AIDS and these subjects were more likely to change doctors, resulting that public misconception shows lack of confidence in medical information, erode expert credibility, and negative the positive effects associated with public education. [12]

A prime issue is the message which the profession should take from the findings of this study. Subjects' perceptions of issue such as cross infection risk in dentistry are simply the risks as they interpret them in the light of their own knowledge and its sources. They are inherently neither accurate nor inaccurate. [18] More knowledgeable Bhil tribes subjects also expected to report that they would change dentist because of a fear of AIDS. These findings support the contention that consumer education may be an important influence in fostering public understanding and appropriate behavior related to the uptake of dental services.

CONCLUSION

Empathy is important in the doctor patient's relationship and the unfavourable attitude lead to compromised care. There is need to cultivate non judgmental attitude towards the care of people infected with HIV/AIDS among Bhil tribes. This requires

systemic and sensitive educational programmes. Hence for maximum effectiveness, CME/CDE Programs need to be held on a continuous basis as it has been well documented that such programs can have great impact on Bhil tribes and General caste's AIDS related knowledge and attitude. This study assessed the attitudes of people who were relatively inaccessible; however more studies need to be done at a larger scale to evaluate their attitude.

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