

THE TANZANIA DENTAL TEAM'S VIEWS ON HIV - INFECTION AND AIDS AS A THREAT

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Introduction

Dental personnel have received considerably new information from literature 1-3 related to protection against HIV-infection in the Dental Profession. A low occupational risk among health care workers has been reported 4-6.* In the professional literature 7,8* available, dentists have also been considered as a high-risk group because in clinical practice they are regularly in contact with blood and saliva. Both these body fluids can contain the human immunodeficiency virus (HIV) if a person is infected with HIV 9-11.*

The majority of practising dental professionals and other health care providers in the USA have shown concern about AIDS being a health risk and a public health problem 12-14.*

Some reports have suggested that Sub-Saharan African countries in particular have a large number of HIV seropositive cases 15-17.* This information might have an effect on dental professionals' attitudes towards HIV-infection and AIDS as a threat in these countries. The AIDS epidemic may have caused widespread concern in the dental community world wide.

The aim of this study was to analyse the concern of Tanzanian dental professionals about HIV-infection and AIDS as a threat. Also their opinions about different groups' and authorities' possibilities and responsibilities for controlling and preventing the spread of HIV-infection were compared.

Materials and methods

During the Tanzanian Dental Association's annual meeting in June 1988, in Dar es Salaam, a questionnaire was distributed amongst the participants. The 70 participants who received the questionnaire were told not to write their names, or to provide any other information, which might identify them as respondents. They were assured that all information received would be handled in confidence. Forty-nine (70%) questionnaires were returned into a drop-box, 44 (62.8%) of the questionnaires were found to be reasonably completed by respondents.

The questions dealt with the respondents' views, opinions and knowledge of HIV-infection and AIDS. These questions were aimed at revealing how dental professionals in Tanzania have assimilated the available information and how this information has affected their attitudes and behavior in their lifestyle.

The questionnaire had been pretested 18,19* and was based on a questionnaire previously used in Finland among a general adult and adolescent population 20.*

Questions pertaining to AIDS as a threat, levels of worry and different groups' responsibilities in controlling or preventing the spread of HIV infection were asked using the following answering alternatives:

1) "very big, 2) big, 3) rather big, 4) small and 5) none." opinions about AIDS as a threat in different parts of the world were solicited by asking: "In your opinion how big a threat is AIDS in the following places?" (Table 1).

The levels of worry in Tanzania by countrymen, friends and students themselves were determined by asking the following: "All groups of people show different levels of concern or worry about AIDS, and about its spread. Choose the alternative you consider the best for a) your countrymen in general, b) for your friends and c) for yourself?" (Table 2).

The following question was also asked: "When you consider the possibilities of each group or authority listed below in controlling or preventing the spread of HIV-infection in your country, how big a responsibility do you think each one of them has in this work?" (Table 3).

To the question: "Which of the groups or authorities listed below have the possibility to control or prevent the spread of HIV-infection in your country?" the following alternatives were provided "1) has a possibility, 2) has no possibility and 3) I have no opinion" (Table 4).

The respondents' changes in lifestyle were determined by asking: "Have you changed your lifestyle in any of the areas listed below after learning about HIV-infection and AIDS as a disease? Please encircle all the relevant numbers relating to the areas of lifestyle which you have changed." (Table 5).

Of the returned and acceptably filled in questionnaires, 25.0% were from women. Out of the 44 respondents 72.2% were of African ethnic origin and 11.4% Asian. The remainder did not mention their ethnic group. Dental officers comprised 29.6% of respondents, Assistant Dental Officers 15.9%, Dental Assistants 43.2% and others the remaining 11.3%. Women had a significantly lower occupational status than men. The mean ages were 33 among men and 32 among women.

For analyses, infrequent occurring alternatives were later combined. Statistical analysis was done by using the chi-square test.

Results

Men considered AIDS to be either a very big or big threat more often in North America and in Europe than elsewhere. Among women, the threat was felt to be more equal in different parts of the world. However, Asia was considered as having a very big or big threat least by both sexes. Other parts of Africa, excluding Tanzania, were considered significantly more often as having a very big or big threat by women than by men (Table 1).

Men felt more often than women, that Tanzanians, in general, are very worried or worried about AIDS. The respondents' own worry and opinions' of the level of their friends' worry were almost equal in both sexes (Table 2).

Sensitivity

During internal and external clinical trials a panel of 505 nonroutine Western Blot positive sera were tested. 504 were found positive with Enzygnost Anti-HIV micro resulting in a sensitivity 99.8%.

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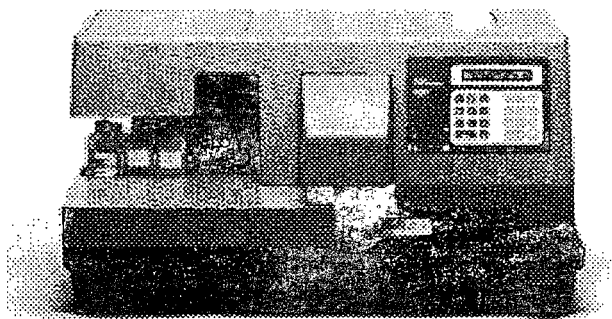
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All respondents had the opinion that individuals have a possibility to control the spread of HIV-infections. Most felt that Ministry of Health, politicians, physicians and dentists also have this possibility. Highly significantly less women (20.0%) than men (73.3%) felt that in general, the Tanzanian population had a very good or good knowledge of HIV-infection and AIDS.

Men felt more often than women, that politicians have a very big or big responsibility in controlling and preventing the spread of HIV-infection. On the other hand, women more often than men were ready to state that dentists had a very big or big responsibility (Table 3).

Of the respondents, 83.7% knew someone who had died of or was currently suffering from AIDS.

Overall 93.3% of men and 90.0% of women stated that they had changed some areas of their personal lifestyle after learning about HIV-infection and AIDS. Discussions about infection, seeking for information and changes in sexual behavior were most common. Other specified changes were dealt with personal protection in work and in everyday life (Table 4).

A total of 51 written comments or suggestions for the Ministry of Health and Tanzanian Dental Association were provided in 63.3% of acceptably filled forms. Of the forms returned 13 requested increased health education for the general public, in 11 of them availability of rubber gloves and disposable needles was mentioned, and special monetary allowances for dental professionals was requested in 6. Five dealt with increased research, 5 with seminars for health professionals and 5 with better availability of and accessibility to condoms for the general public. Four suggestions dealt with restricting laws and two were non-specific.

Discussion

The sample size in the present study was small and did not allow for detailed statistical analysis. The use of systematic sampling would have increased the representativeness. However, all invited dental persons did not attend the meeting and an exact list of participants was not available at the time of distributing the questionnaires. Age and sex distributions of the sample were similar to that among all dental professionals. However, Dental Officers were somewhat underrepresented and Assistant Dental Officers and Dental Assistants were slightly overrepresented in the obtained sample 18. Thus one should be careful when generalising the results and statistical analysis. The obtained response rate was probably due to use of unmarked questionnaire forms and drop-boxes, as well as the statements that no attempt would be made to identify individual respondents. The general publicity on the topic may also have increased the response rate.

The questionnaire had previously been tested in Tanzania 19* and in Finland 20* in surveys among dental students. The questions were based on those used in a nation-wide interview among the general population of Finland, carried out by the National Board of Health of Finland 21.*

The Tanzania dental professionals' view that more often AIDS was a very big or big threat in North America and in Europe

than elsewhere and clearly less often feeling so when considering Tanzania and other parts of Africa may be related to available information on reported cases of HIV-positives and those with AIDS 15, 22.* The statistics from Africa countries have been suspected of including more underestimation than statistics in industrialized countries 17.*

Women feel more often than men that the threat of AIDS is very big or big in Tanzania and in other parts of Africa. This may partly explain why women also considered Tanzanians to be very worried or worried about AIDS less often than men (Tables 1 and 2). Also the finding that only a few women, compared to most men, considered the general Tanzanian population to have a very good or good knowledge about AIDS supports the idea of women dental professionals being more concerned about AIDS in Tanzania.

The presence of AIDS as a threat in dental people's everyday life can be seen from the great majority themselves being very worried about AIDS (Table 2) and from the high proportion of people who had changed their lifestyle in one way or another (Table 4). The fact that over 70% had changed their sexual behavior after learning about AIDS and HIV-infection (Table 4) and many written requests for rubber gloves and disposable instruments are also clear signs of dental personnel's worry and willingness to improve and update AIDS prevention.

Men seem to have more trust in Tanzanian politicians and in political systems' ability to take responsibility than women do, as they significantly more often considered politicians responsibility very big or big in preventing and controlling the spread of HIV-infection. As there was a higher proportion of Dental Officers among men in the present sample, it may be that they have considered their responsibility from a different point of view than women. Women were more often among less educated dental professionals and might not be aware of the possibilities that the Dental Officers have.

The differences observed were true differences between sexes, as no differences were observed in any of the analysed answers when occupational categories were tested.

Written comments and suggestions dealt most frequently with improving the general public's knowledge and their availability of and accessibility to condoms. In 1989 excessive efforts have been made in Tanzania to increase the general public's knowledge and awareness. Musical and theatre groups are undertaking tours with the aim of distributing correct information on AIDS around the country and AIDS related pamphlets and other educational materials have been distributed.

CONCLUSION

HIV-infection and AIDS are felt as a threat which affects dental professionals' everyday behaviour and life. Dental people are willing to improve their own and general public's prevention. Dental people are worried about HIV-infection and AIDS, but female personnel do not consider the general public's level of knowledge or worry to be very high.

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Table 1.

Distribution (%) of dental professionals' views about AIDS as a threat in different parts of the world by sex

	Very big or big		Rather big, small or none	
	MEN	WOMEN	MEN	WOMEN
North America	89.3	80.0	10.7	0.0
South America	76.0	80.0	16.0	0.0
Europe	87.5	70.0	8.3	10.0
Asia	37.5	60.0	50.0	10.0
Tanzania	55.2	80.0	44.8	10.0
Other Africa**	41.7	70.0	50.0	0.0

(All others stated: I have no opinion)

Statistical evaluation between sexes: ** = p<0.05

Table 2.

Distribution (%) of dental professionals, their opinion of their friends and their countrymen's concern about AIDS by sex

	Very worried or worried		Rather, some or none	
	MEN	WOMEN	MEN	WOMEN
8Countrymen*	70.4	30.0	29.6	60.0
Friends	70.4	70.0	22.2	22.2
Oneself	85.2	90.0	14.8	0.0

(All others stated: I have no opinion)

Statistical evaluation between sexes: * = p<0.075

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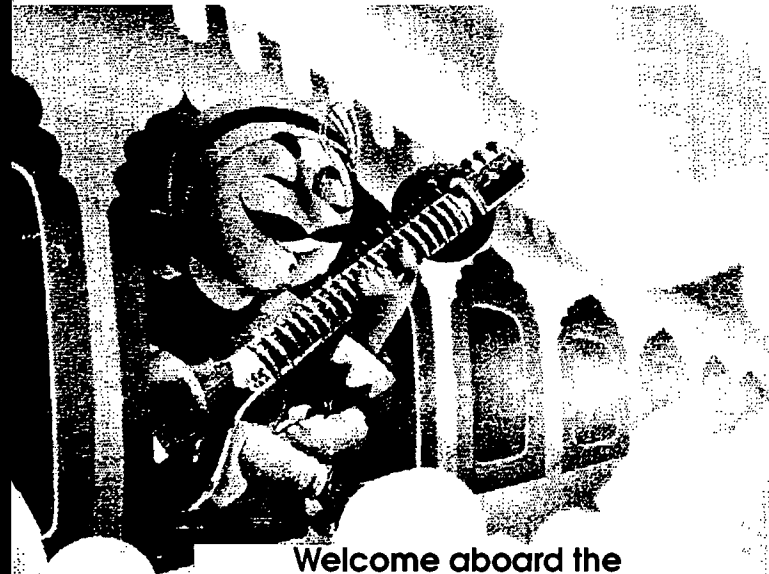
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Table 3.

Distribution (%) of dental professionals, opinions of different groups' or authorities' responsibilities in controlling or preventing the spread of HIV-infection by sex

	Very big or big responsibility		Rather big, small or non	
	MEN	WOMEN	MEN	WOMEN
Individuals	93.3	90.0	6.7	10.0
Ministry of Health	90.0	90.0	3.3	10.0
Politicians**	74.1	30.0	22.2	70.0
Physicians	74.1	70.0	25.9	30.0
Dentists*	66.1	90.0	29.6	10.0

(All others stated: rather big, small or none)

Statistical evaluation between sexes: * = p<0.075
** = p<0.05

Table 4.

Distribution of dental professionals' lifestyle changes after they had learnt about HIV- Infection and AIDS by sex

	Percentages of "Yes answers"	
	MEN	WOMEN
1) Discussed more about HIV-infection and AIDS with relatives or friends	66.7	80.0
2) Read more about HIV-infection and AIDS and tried actively to get more information	76.7	70.0
3) Changed sexual behavior in some respect	73.3	70.0
4) Avoided meeting people whom you know or whom you suspect of being infected	23.3	30.0

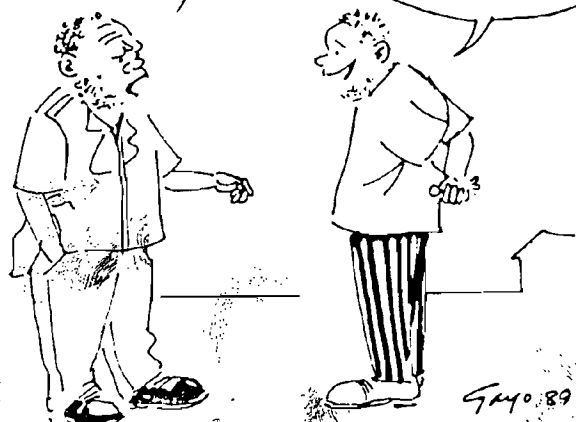
5) Thought of changing professional plans because of threat of HIV-infection	6.7	10.0
6) Took more care of health in general	63.3	70.0
7) Other changes, which _____	26.7	20.0
8) No changes in lifestyle at all	6.7	10.0
9) You cannot tell if any changes have occurred	0.0	0.0

(All differences between sexes non-significant)

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