WILLINGNESS OF HIGH SCHOOL STUDENTS TO BE TREATED BY AN HIV INFECTED HEALTH PRACTITIONER. A STUDY DONE IN DAR ES SALAAM, TANZANIA.

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ABSTRACT

OBJECTIVE
To assess willingness of high school students to be treated by HIV/AIDS infected dental practitioners in Ilala municipality, Dar Es Salaam, Tanzania.

METHODOLOGY
This was a descriptive cross-sectional study.

RESULTS
More than half (52.8%) of the high school students showed fear of being treated by HIV/AIDS infected dental practitioner, with 175 (55.4%) out of 316 students fearing even to be clinically examined by HIV positive dental practitioner. Out of 316 students, 163 (51.6%) students showed no problem in consulting a HIV/AIDS infected dental practitioner for dental problems. There were 170 (53.8%) respondents who were uncomfortable to undergo dental treatment provided by HIV positive dental practitioner.

CONCLUSION
The results of this study showed that there is fear an element of negative attitude and stigmatization among high school students on being treated by HIV/AIDS infected health care practitioner.

INTRODUCTION
According to the most recent statistics, more than 40 million people in the world are living with HIV/AIDS. Approximately 37.5 million of these individuals are adults and 2.5 million are children. It was estimated that 5 million people were infected with the HIV virus in 2003. Despite worldwide HIV prevention efforts, there are higher numbers of individuals living with HIV today than there have been in the last 5 years 1.

From the beginning, the HIV/AIDS epidemic has been accompanied by an epidemic of fear, ignorance and denial leading to stigmatization and discrimination of people living with HIV/AIDS and their family members. 2 Fear of being identified with HIV prevents people from learning their serostatus, changing unsafe behaviour, and caring for people living with HIV/AIDS. An ICRW study in Botswana and Zambia found that stigma against HIV-positive people and fear of mistreatment prevented people from participating in voluntary counselling and testing (VCT) and programs to prevent mother-to-child transmission (MTCT) 3.

Studies in African countries estimate AIDS causes between 19% and 53% of Government health employee deaths 4. Malawi and Zambia which are among the southern African countries have experienced five to six fold increases in health care related illness death rates 5.

Although HIV infected health care workers including dentist have been identified in the past, proven HIV transmission to patients is very rare. Most authorities recommend that an HIV positive health care worker be monitored by an expert panel, which could then if necessary refer to the regulatory body to revoke or restrict the person’s license to practice. 6 Mandatory HIV test is not required for health care worker because they generally do not pose a risk for infecting their patients, they are however ethically and legally obligated to report their HIV status to their profession’s regulatory body. 6

There have been a large number of look-back studies involving patients of HIV-positive health care workers 7 but only 2 showed probable transmissions.
In one review, 22,171 HIV test results for patients were available for 51 of 64 HIV positive health care workers (29 were dentists or dental students). Only 5 of 113 HIV-positive patients was found to have no identifiable risk factors for HIV infection. HIV isolates were available for 3 of the 5 patients; however, the isolates differed from those of their health care workers. The US Centers for Disease Control and Prevention (CDC) concluded that, although there is a risk of transmission from a health care worker to a patient, the risk is small. In 1990 and 1991 the center for disease control and prevention-CDC published details of the possible transmission of HIV from an infected dentist in Florida to 6 former patients, none of whom had other appreciable risk factors for HIV infection. A comparison of HIV strains from the patients and the dentist was highly suggestive that the strains were identical. There was criticism of the CDC’s traditional and molecular, epidemiologic investigations, but an independent analysis of the molecular data verified the CDC’s findings. The infected patients recalled that the dentist wore gloves and a mask during visits, and neither the patients nor the CDC investigators noted evidence of significant breaches of infection control procedures. Patient-to-patient transmission of HIV through infected dental instruments was considered unlikely. Thus, although dentist-to-patient transmission was likely in these cases, the mode of transmission is unknown.

Again, in the study done by Ou et al, seven patients became infected by HIV without any previous risks factors for HIV infection but had undergone invasive dental treatment under HIV infected dentist. Comparative genetic analysis and epidemiological investigations indicated that the patient became infected with HIV while receiving care from a dentist with HIV/AIDS. Survey indicates that there is a great deal of confusion and fear among the public on cross infection in dental clinic, which needs to be addressed properly through health education campaign. Another study by Irigoyen-Camacho et al shows that only 20% of the 490 participants were ready to continue with treatment after knowing that the dentist is HIV positive.

With regard to the above reports, it appears that a possibility exist for transmission of HIV from dentist-to-patient. This can be one of the reasons for fear, stigma and discrimination. Therefore this study is designed to assess these reasons among high school students, in Ilala municipality, Dar es Salaam. Similar studies done in this country could not be retrievable. Therefore this study is of much use to the dentists, health care providers as well as the countries policy makers on how to address this problem in our country.

The study provides some clues on the reasons for fear, stigma and discrimination of HIV/AIDS person.

**METHODOLOGY**

This study was a descriptive cross-sectional study conducted at Tambaza and Benjamin Mkapa High Schools in Ilala municipality (Dar Es Salaam), which involved a total of 316 students randomly sampled among individuals with a relatively good understanding of HIV/AIDS transmission. The information was obtained through interview using a swahili structured questionnaire which measured students’ attitude, fear, stigma and discrimination towards HIV positive dental practitioner. Data obtained were analyzed using SPSS version 11.5 computer program and the results were tabulated. Verbal consent was obtained from the research participants before inclusion into the study.

**RESULTS**

Table 1. Distribution of Participants by their attitudes towards HIV infected dental practitioner

<table>
<thead>
<tr>
<th>PROCEDURE</th>
<th>AGREE</th>
<th>DISAGREE</th>
<th>NOT SURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consultation</td>
<td>163(51.6)</td>
<td>103(32.6)</td>
<td>50(15.8)</td>
</tr>
<tr>
<td>Has Lost self esteem</td>
<td>59(18.7)</td>
<td>207(65.5)</td>
<td>50(15.8)</td>
</tr>
<tr>
<td>He is Emotionally unstable</td>
<td>90(28.5)</td>
<td>174(55.1)</td>
<td>52(16.5)</td>
</tr>
<tr>
<td>Unfit to extract teeth</td>
<td>52(16.5)</td>
<td>211(66.8)</td>
<td>53(16.8)</td>
</tr>
<tr>
<td>Should not perform Minor surgery</td>
<td>86(27.2)</td>
<td>194(61.4)</td>
<td>36(11.4)</td>
</tr>
<tr>
<td>Should not perform Major surgery</td>
<td>121(38.3)</td>
<td>164(51.9)</td>
<td>31(9.8)</td>
</tr>
</tbody>
</table>
More than half (51.6%) of the students were willing to consult an HIV infected dental practitioner for dental treatment.

Table 2: Distribution of participant by fear towards dental procedures

<table>
<thead>
<tr>
<th>PROCEDURE</th>
<th>FEARFUL</th>
<th>NOT FEARFUL</th>
<th>NOT SURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical examination</td>
<td>175(55.4)</td>
<td>125(39.6)</td>
<td>16(5.1)</td>
</tr>
<tr>
<td>Cleaning teeth</td>
<td>174(55.1)</td>
<td>112(35.4)</td>
<td>30(9.5)</td>
</tr>
<tr>
<td>Restoration</td>
<td>160(50.6)</td>
<td>98(31.0)</td>
<td>58(18.4)</td>
</tr>
<tr>
<td>Extraction</td>
<td>186(58.9)</td>
<td>95(30.1)</td>
<td>35(11.1)</td>
</tr>
<tr>
<td>Major operation</td>
<td>192(60.8)</td>
<td>81(25.6)</td>
<td>43(13.6)</td>
</tr>
</tbody>
</table>

Clinical examination which is regarded as a non-invasive procedure was feared by more than half (55.4%) of the students.

Table 3: Distribution of participants by Stigma

<table>
<thead>
<tr>
<th>STIGMA</th>
<th>NUMBER OF STUDENTS</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present</td>
<td>170</td>
<td>53.8</td>
</tr>
<tr>
<td>Absent</td>
<td>146</td>
<td>46.2</td>
</tr>
<tr>
<td>Total</td>
<td>316</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The table above shows that, more than half of the students (53.8%) are likely to stigmatize the HIV/AIDS dental practitioner.

Table 4: Distribution of Participants by their response whether they were comfortable with dental procedures

<table>
<thead>
<tr>
<th>DENTAL PROCEDURE</th>
<th>AGREE</th>
<th>DISAGREE</th>
<th>NOT SURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examination</td>
<td>106(33.5)</td>
<td>167(52.8)</td>
<td>43(13.6)</td>
</tr>
<tr>
<td>Restoration</td>
<td>102(32.3)</td>
<td>166(52.5)</td>
<td>48(15.2)</td>
</tr>
<tr>
<td>Teeth cleaning</td>
<td>119(37.7)</td>
<td>156(49.4)</td>
<td>41(13.0)</td>
</tr>
<tr>
<td>Major Operation</td>
<td>77(24.4)</td>
<td>174(55.1)</td>
<td>65(20.6)</td>
</tr>
</tbody>
</table>

Majority (55.1%) of the student were not comfortable to undergo major operation under HIV positive dental practitioner.

A total 316 students who filled the questionnaires, table 2 shows the assessment of fear among high school students on being treated by an HIV/AIDS infected dental practitioner. More than half of the students (52.8%) showed fear in all dental procedures with majority fearing major operations (60.8%), followed by dental extraction which were 58.9%. Clinical examination which is regarded as non-aggressive procedure was also feared by (55.4%) of the students. Cleaning of the teeth was feared by 55.1% of the respondents in total while tooth filling/restoration was feared by 50.6%.

The results shows that students attitudes towards a HIV/AIDS infected dental practitioner is not bad with 163 students (51.6%) showing no problem as regarding to consulting a HIV/AIDS infected dental practitioner for a dental problem. Majority (66.8%) of the students disagree with the notion that HIV positive dental practitioner is unfit to do dental extractions. Only 28.5% of the students in total agreed that HIV positive dental practitioner is emotionally unstable contrary to 55.1% who disagreed that HIV positive dental practitioner is emotionally unstable.

Among the students who responded to the question as to whether HIV positive dental practitioner should not perform major operations 24.4% Agreed while 55.1% disagreed. Stigma and discrimination was present in 53.8% of the students as shown in table 3.0. Among the students 33.5% were comfortable to let their mouths be clinically examined by HIV positive dental practitioner; however 52.8% were not comfortable as shown in Table 3.1.

**DISCUSSION**

This study explored participants feelings related to HIV positive practitioner and routine dental practice. Ideas generated from this shed light on what patients feel in the event of being treated by an HIV positive practitioner. Globally the HIV/AIDS pandemic has left many countries destabilized in various sectors including the health sector. Usually fear, stigma and discrimination accompanies HIV/AIDS in most cases, this increases the possibility of interfering with the health care delivery system and this is what made this study important. Negative attitude and discrimination towards medical and dental practitioners can have negative impact to health sectors especially in African countries where there is scarcity of health personnel.

However this study shows that students’ attitude towards HIV positive dental practitioner is good. More than half (51.6%) of the students were ready to consult HIV positive dental practitioner for a dental problem. Discrimination of infected dental practitioner
which accompanies HIV infection was also observed to more than half (53.8%) of the participants. This was expected to be a little low since the subjects were high school students who have the knowledge on HIV transmission.

In assessing stigmatization among high school students, more than half (53.8%) of the participants showed stigma towards HIV positive dental practitioner, since that percentage (53.8%) of the students were not comfortable to undergo dental procedures under HIV positive dental practitioner. Even though there is no much freedom for a patient to choose the kind of doctor he/she wants to be attended by, the World Medical Association (WMA) mentions that the patient has the right to choose his/her physician freely and he/she has the right to accept or refuse treatment after receiving adequate information. For most of the African countries the patients can not use this right of choosing their physician simply because there is no policy that forces the medical or dental practitioner for this matter to disclose his/her HIV/AIDS status when there is a suspicion to endanger patient’s life.

Close observation has shown that the chances of HIV transmission in the dental clinic when all the precautions of infection control were observed are very minimal. However studies have proved that there have been patients who acquired HIV infection when attending dental treatments under HIV-positive dentists.

In this study, more than half (55.4%) of 316 students feared even to undergo clinical examination under HIV positive dental practitioner. The fact that this study targeted high school students who have the knowledge about HIV transmission gives us the picture of what could be the results if similar study is conducted in the general community.

CONCLUSION

The results obtained from this study showed that there was fear, stigmatization and elements of negative attitude among high school students regarding being treated by HIV/AIDS infected dental practitioner.

RECOMMENDATIONS

This kind of study should be expanded to reach the general community so as to obtain the real picture of their perception concerning their willingness to be treated by a HIV/AIDS infected dental practitioner. There is a need for the ministry of health to revise the health policy in the view of HIV/AIDS problem particularly the patient doctor relationship and their rights in the future. It is about time that we conduct an open-public discussion on the subject of HIV/AIDS and its implication to both the health care providers and health care receiver.

REFERENCES

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9. Centers for Disease Control. Possible transmission of human immunodeficiency virus to a patient during an invasive dental procedure. MMWR 1990; 39:489-93


