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Effect of Knowledge of Patients' HIV Positive Status on the Attitude of Health Workers in Zambia

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ABSTRACT

Background: Zambia, Southern Africa, has one of the world's most devastating HIV and AIDS epidemics. More than one in every seven adults in the country is living with HIV1 and this disease is the leading cause for patient work load in all health institutions putting a strain on the depleted work force. Fear of contracting HIV from such patients is real and likely to impact negatively on the attitude of patients if they knew the HIV status of the patient to be positive. This study was undertaken to investigate the influence of knowing the HIV status of a patient to be positive on the various decisions of healthcare providers regarding provision of health care to such patients.

Study design: This was a cross-sectional study conducted between 2001 and 2005 in Zambia among health workers during the costing of basic health care package among selected health centres.

Outcome Measures: Information was obtained by questionnaire and scored on Likerts' scale regarding whether a patient with known HIV positive test result should be: nursed in isolation ward, staff and health professionals should be notified , beds of such patients should be specially marked, relatives should be informed (with and without consent), relatives to be the ones to nurse such a patient, the terminally ill one should be denied resuscitation, staff would refuse to handle a patient, they would encourage a patient to use herbs and prayers rather than HAART, medical treatment was ever refused, admission was ever refused and surgeon ever refused operating on patient with positive HIV test.

Results: A total 180 health workers comprising 120 (66.7%) nurses, 25(13.9%) physicians, 22 (12.2%) laboratory technicians and 13 (7.2%) environmental health technicians were studied. Most of interviewees felt that such patients should not be discriminated against. Over 80% felt that health staff should be availed this sero-status while 50% felt that relatives should be informed of the status even without consent and that the relatives nurse these patients .Half thought that resuscitation should not be done for terminally ill such patients and a third said they will offer prayers instead of HAART while half said they will recommend herbs. A third of physician reported having refused to operate on such patient

Conclusion: While most health-care professionals surveyed reported being in compliance with their ethical obligations the findings are a sources of concern. It would be useful to repeat this study now that HAART and post-exposure prophylaxis have been rolled out in Zambia.

INTRODUCTION

Zambia, Southern Africa, has one of the world's most devastating HIV and AIDS epidemics [1] More than one in every seven adults in the country is living with HIV1 and life expectancy at birth has fallen to just 39 years [2]. Zambia's first reported AIDS diagnosis in 1983 was followed by a rapid rise in the proportion of people living with HIV.Although Zambia has received hundreds of millions of dollars for HIV programmes from rich country governments, prevalence rates are not dropping and have remained more or less stable since the nineties,at as high as 25% in some urban areas[3].In 2004 Zambia's National AIDS Council called for mandatory HIV/AIDS testing in all hospitals in an effort to control the epidemic[4]. However with this mandatory testing, health workers would know the

Key words: Attitude, Health workers, Patient's HIV status

HIV status of their patients and may become influenced by it. For example in one study conducted, Zambia 76% of respondents in Mpika (29/38) and in Mazabuka, 79 %(34/44) of respondents, expressed fear of infection at the work place [4]. The risk for HIV-1 transmission associated with a percutaneous exposure to blood from an HIV-1 infected patient is approximately 0.3% per exposure (95% CI, 0.13 to 0.70%); that associated with occupational mucous membrane and cutaneous exposures are likely to be substantially smaller and the authors recommended use of barrier precautions and a need for strategies that change health care providers' attitudes and behaviours[5]. Even if medical staff are exposed to HIV infected persons' material post-exposure prophylaxis is one of the least available services in Zambia [6].Having knowledge that one has HIV could therefore influence the health behaviour of health staff. In a study in Gaza, 73% of doctors, 80% of nurses, and 92% of clerks wouldn't agree to share any day life activities or come in contact with HIV patient [7]. In a study examining the attitude of nurses and laboratory technologists in Nigeria, it was found that their attitude towards people with HIV/AIDS was poor. Some (55.9%) of the health workers felt that PLWAs were responsible for their illness , while 35.4% felt that they deserve the punishment for their sexual misbehaviors [8]. Health professionals are ethically duty bound to offer care to patients regardless of their HIV status. In one study in Nigeria, health-care professionals surveyed were reported to be in compliance with their ethical obligations but discriminatory behaviour and attitudes towards patients with HIV/AIDS existed among a significant proportion of health-care professionals surveyed [9].

Up to now various studies have been conducted in developed and developing countries on the attitude of healthcare providers toward patients with HIV [10], but little is known from Zambia, a country with one of the biggest prevalence of HIV in Sub-Sahara Africa, on whether this attitude could affect health care provision to these patients. One study done in Zambia, which is one of the few studies to have explored the impact of HIV/AIDS from the perspective of health workers and managers in the region found that in districts studied, HIV/AIDS has had a negative impact on workload and has considerably changed or added tasks to already overburdened health workers [11]. Most patients do not readily disclose the HIV status when they seek medical care unless they have signs and symptoms of HIV/AIDS or when the medical officer asks for it. In the event that the HIV positive status is known it is not known to what extent the information will affect the attitude of these over worked health workers towards such patients in Zambia. This study was undertaken to investigate the influence of knowing the HIV status of a patient to be positive on the various decisions of healthcare providers regarding provision of health care to such patients.

MATERIALS AND METHODS

This was a cross-sectional study conducted between 2001 and 2005 in Zambia. Using convenient sampling a total of 180 health personnel among them 120 nurses, 25 physicians, 22 laboratory technicians and 13 environmental health technicians were interviewed. This happened at a time when the costing of the basic health care package for Zambia was being conducted. After the interview for this purpose, the staff was interviewed regarding their attitude towards patients if they knew their HIV test result as being positive. Data was collected using a well-structured, self-administered questionnaire that collected information on demographic items and on statements regarding attitude toward patients known to have a positive HIV test. The latter included items; whether patient should be nursed in isolation ward, whether staff and health professionals should be notified when patient with a positive HIV is admitted, whether beds of such patients should be specially marked, whether relatives should be informed (with and without consent), whether relatives to be the ones to nurse such a patient, whether the terminally ill one should be denied resuscitation. Future attitudinal practices were explored as to whether they would refuse to handle a patient with a positive HIV test, whether they would encourage a patient to use herbs and prayers rather than ART. Past attitudinal practice was explored by whether medical treatment was ever refused, whether admission was ever refused and whether surgeons ever refused operating on patients with a positive HIV test. All the items were measured on a five-point Likert scale ranging from strongly disagree with the score of 1 to strongly agree with the score of 5, and negative attitudes were scored reversely. A higher score of this questionnaire indicated more favorable attitude. Validity of the questionnaire was verified through

content validity. Collected data was analyzed descriptively using stata version 6.

RESULTS

A total 180 health workers comprising 120 (66.7%) nurses, 25(13.9%) physicians, 22 (12.2%) laboratory technicians and 13 (7.2%) environmental health technicians were studied. The mean age of the participants was 28.5±6.4 years and 99 (55.0%) were females. The average duration of service was 7.5±6.6 years. The attitudes of the participants towards patients with known HIV positive test are shown in table1. Most health staff (62.6%) strongly disagreed with the suggestion that patients with known HIV positive test should be nursed in isolation ward, 32.2% were undecided whether beds for such patients should be specifically marked. A large majority of staff (81.1) felt that the professional staff should be notified as soon as such patients are admitted regarding their HIV status. About half (51.1%) staff strongly felt that relatives should be the ones to nurse such patient and an almost similar number (49.4%) strongly felt that relatives should be informed of the test result with or without consent. When asked about care of such patients who were terminally ill, about half (47.2%) strongly felt that resuscitation of such patient should not be attempted.

Regarding future practice, it was observed that 27.8% of staff strongly disagreed with the suggestion that they would refuse health care to such patients while 33.3% were undecided. About a third of (31.1%) staff indicated strongly that they would not refuse to handle such patients while a similar number (30.6) were undecided on this decision. About one third staff (30.6%) agreed that they would offer prayers as treatment to such patients while only 25.6% strongly disagreed with this suggestion. Strangely about half of staff (49.4%) agreed that they would offer herbs to these patients and only 15% strongly disagreed with this suggestion.

When asked about the actual practice it was re-assuring that few of such patients were actually denied medical care. About 42.2% strongly denied ever refusing care to such patients and a similar number (46.1%) strongly denied refusing admission to these patients. Twenty five (25) physicians were asked about their attitude towards operating on such patients. About one third 36% indicated that they had refused operating on such patients unless their conditions were emergencies but not elective.

DISCUSSION

This study explored the attitude of health workers in a situation where they happened to know the HIV positive status of their patients. It gratifying to note that even if the health workers had different attitudes towards this knowledge, the majority of them had a positive attitude regarding offering of medical care such as not refusing treatment or admission to such patients. This finding is similar to the results of another study [12], but contrary to what was found in a study from Nigeria [8]. These differences in attitudes might be cultured oriented or might be rooted in many historical events [13].

The study showed that staff would want to know the HIV status of their patients at admission. This is understandable as knowing this to be positive; they would take necessary precautions to protect themselves. It was also observed that staff would want relatives to be the ones nursing these patients. This is also understandable that with the high HIV prevalence in Zambia and most HIV/AIDS patients contributing to high patient loads, the health workers are not coping. This is compounded by the severe staff shortages. Task shifting involving relatives to take care of some of the patient care seems the only realistic approach. It is also gratifying to notice that discriminatory attitudes such as isolation of HIV patients, refusing to handle such patients or indeed marking of their beds was not noted to be a serious problem. It is worrying to note that about half of medical staff felt that resuscitation of terminally ill HIV patients should not be attempted. It may be that with the poor prognosis of such patients, staff would wish to direct resources to patients where prognosis is likely to be better.

Strangely ,but understandably so ,as this study was done just about when HAART was being rolled out in Zambia , about half of staff agreed that they would recommend herbs for their patients and one third suggested divine interventions in form of prayers for these patients. Risk of HIV transmission during needle prick at operation is small but real. Policies for post-exposure prophylaxis for such cases are only now being consolidated in Zambia. It is

Table 1: Attitudes of healthcare providers towards patients' known HIV positive test result

Attitude towards known HIV test result	Strongly agree *n*(%)	Agree *n*(%)	Neither agree nor disagree *n*(%)	Disagree *n*(%)	Strongly disagree n(%)
Should be nursed in isolation ward	5(2.8)	9(5)	14(7.8)	40(22.2)	112(62.2)
Staff and health professionals should be notified when a patient with a positive HIV test is admitted	146 (81.1)	11(6.1)	12(6.7)	12(6.7)	9(5)
Their beds should be specially marked	12(6.7)	21(11.7)	58(32.2)	50(27.8)	39(21.7)
Relatives should be informed about the test result	89(49.4)	25(13.9)	19(10.6)	32(17.8)	15(8.3)
Relatives should be the ones to give nursing care in ward	92(51.1)	28(15.6)	23(12.8)	18(10)	19(10.6)
Terminally should be denied resuscitation	85(47.2)	52(28.9)	9(5.0)	15(8.3)	19(10.6)
Future intentions					
○ Would refuse medical care due to positive HIV test	23(12.8)	15(8.3)	60(33.3)	30(16.7)	50(27.8)
○ Would refuse to handle patient due to positive HIV test	19(10.6)	25(13.9)	55(30.6)	25(13.9)	56(31.1)
○ Would encourage prayers instead of ART	20(11.1)	55(30.6)	29(16.1)	30(16.7)	46(25.6)
○ Would encourage use of herbs instead of ART	89(49.4)	30(16.7)	23(12.8)	11(6.1)	27(15.0)
Past practice experience					
○ Ever refused medical treatment due to positive HIV test	9(5.0)	7(3.4)	21(11.7)	67(37.2)	76(42.2)
○ Ever refused admission due to positive HIV test	15(8.3)	11(6.1)	11(6.1)	60(33.3)	83(46.1)
○ Ever refused operating due to positive HIV test	9(36.0)	6(24.0)	5(20.0)	2(8.0)	3(12.0)

therefore not surprising that physicians refused to operate if they knew the HIV status unless it was life threatening.

I conclude by saying knowledge of a patients' HIV positive status is necessary but hinges on the ethics of whether the staff and relatives should be informed of the status without the patients' consent in Zambia. It is probably about time to make it a policy that any patient needing an operation should have an HIV test done Zambian Protocol. Several factors such as health education, availability of HAART, age of staff and experience would influence these attitudes. This study was done when HAART was just being rolled out in Zambia. Lot of work has been done in this regard and I would recommend that this study be repeated with an addition of more parameters.

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