



AN IMPACT EVALUATION OF STUDENT TEACHER TRAINING IN HIV/AIDS EDUCATION: THE CASE OF THE CENTRE FOR CONTINUING EDUCATION, UNIVERSITY OF CAPE COAST, GHANA

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ABSTRACT

This study was conducted to evaluate changes in student teacher trainees at the Centre for Continuing Education, University of Cape Coast, Ghana, after completing a course on the Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome (HIV/AIDS). It particularly evaluated changes in relation to improving their level of knowledge on the transmission, stigmatisation, symptoms, prevention and control of sexually transmitted infections (STIs) and HIV/AIDS. The study also considered stigmatisation, the attitudes of students towards people living with HIV/AIDS (PLWHA) and their sensitivity to impart knowledge on the pandemic.

A descriptive research design was used. The target population comprised all student teachers who had participated in the programme on reducing HIV/AIDS and stigmatisation through education. A sample size of 600 respondents randomly selected from 10 study centres throughout the country responded to a 32-item questionnaire. Section A of the questionnaire collected data on participants' age, sex, study centre and level or year group. Section B focused on five research questions. Frequencies and percentages were used to analyse the data.

Findings from the study revealed that there was an increase in the knowledge of student trainee teachers on STIs, HIV/AIDS and stigma prevention, and their ability to discuss reproductive health and sexual issues. However, as student teachers were exposed to other HIV/AIDS materials and activities outside their written modules for the programme, it appears that not all of the changes were due to the programme.

Keywords: teacher training, HIV/AIDS education

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ACRONYMS

| | | |
|--------|---|--|
| AESOP | - | Annual Education Sector Operational Plans |
| AIDS | - | Acquired Immune Deficiency Syndrome |
| CBE | - | community-based organisation |
| CCE | - | Centre for Continuing Education |
| CSW | - | commercial sex workers |
| DBE | - | Diploma in Basic Education |
| ESP | - | Education Sector Plan |
| FBO | - | faith-based organisation |
| GAC | - | Ghana AIDS Commission |
| GES | - | Ghana Education Service |
| GDHS | - | Ghana Demographic and Health Survey |
| GNAT | - | Ghana National Association of Teachers |
| HIV | - | Human Immunodeficiency Virus |
| MOESS | - | Ministry of Education Science and Sports |
| MOH | - | Ministry of Health |
| NACP | - | National AIDS Control Programme |
| NGO | - | non-governmental organisation |
| PLWHA | - | people living with HIV and AIDS |
| STD | - | sexually transmitted disease |
| STI | - | sexually transmitted infection |
| TAD | - | teachers as agents of dissemination and change |
| TEWU | - | Teachers and Education Workers Union |
| UCC | - | University of Cape Coast |
| UNAIDS | - | United Nations Joint Programme on HIV/AIDS |
| VCT | - | voluntary counselling and testing |

INTRODUCTION

The Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome (HIV/AIDS) pandemic continues to be a major challenge to global health and the socioeconomic development of many countries both developed and developing. The pandemic is one of the world's most widespread infectious diseases. The extent of its devastation has raised global concern. The estimated number of persons living with HIV and AIDS worldwide in 2007 was 33.2 million (UNAIDS, 2007). Currently, around 40 million people worldwide are living with HIV and AIDS (Bakilana et al., 2005). Sub-Saharan Africa bears the greatest burden with more than two-thirds (68%) of all persons infected with HIV, although disparities exist in its distribution. An estimated 1.7 million adults and children became infected with HIV in Sub-Saharan Africa and 1.6 million died of AIDS in 2007 (UNAIDS, 2007). Annually, an average of three million people dies of HIV-related illnesses, with about 80% of these deaths occurring in Sub-Saharan Africa. Similarly, almost 72% of all new infections take place in Africa. There are currently an estimated 12 million AIDS orphans on the continent.

Although the highest rates of HIV infection occur in countries in eastern and southern Africa, the threat of the disease is not confined to these subregions. More than half of the countries in Sub-Saharan African countries are experiencing a generalised epidemic, with the adult HIV infection rate exceeding 5% at the end of 1999 (Kelly, 2001). The countries experiencing a generalised epidemic include those with large populations such as Nigeria, Ethiopia, South Africa and the Democratic Republic of the Congo (Kelly, 2001).

The countries of West Africa are not among the worst hit, but the prevalence rate of the epidemic in these countries is nonetheless alarming. The general fragility of the economic, political and social systems of African nations has deprived the continent of any meaningful socioeconomic safety nets that could serve as a reliable bulwark against the ever-increasing menace of HIV and AIDS.

The first case of AIDS in Ghana was diagnosed in 1986. By 1990, the number was around 1 130. The figure rose steadily to 5 500 in 1994, 22 500 in 2000 and 36 000 in 2004 (National HIV/AIDS/STI Control Programme, 2004). Ghana had a median prevalence rate of 3.6% in 2003. This translates into 392 000 HIV/AIDS-infected persons as at the end of 2003. The 2007 national estimates and projections put the HIV and AIDS population at 249 145, which comprised 231 840 adults and 17 305 children, with a cumulative death rate of 2 027 (HIV Sentinel Survey, 2008).



HIV/AIDS prevalence rates are most pronounced among groups at high risk of infection. Among patients infected with sexually transmitted diseases (STDs), the prevalence rate is estimated to be 76% and 82% among commercial sex workers (CSWs) in Accra and Kumasi respectively (Ghana AIDS Commission, 2001). Disaggregation of data by age, gender and region in both rural and urban surveillance sites reveals a high prevalence among the youth (15–30 years). However, the peak age of HIV/AIDS infection is 25–29 years for females and 30–34 years for males. Higher numbers of AIDS cases are reported in the urban centres than in the rural ones (National AIDS Control Programme [NACP], Ministry of Health, 2001).

The scale of the epidemic will result in considerable human suffering for infected and affected people at all levels of life, from the individual to the macroeconomy, especially the education sector, which has a workforce of over 240 000 in Ghana. Thus, the education sector is a major and critical area in which the HIV/AIDS menace can do most harm. If teachers, who have taken many years to train and on whom governments spend a rather large amount of scarce resources, should die prematurely in high numbers, the education of children and the youth would be greatly jeopardised.

Generally, HIV/AIDS impacts on the education sector in various ways, including the following:

- As more and more educators and other education workers become infected, more money will be spent on servicing medical bills and little or no money will be left for expansion and the training of the workforce.
- As administrators and managers fall sick, supervision and accountability will become difficult.
- More budgetary allocation to the health sector will be required at the expense of the education sector in order to cope with the high demand for health care from people living with HIV/AIDS.
- Decreased donor support to the education sector will occur in favour of the health sector.

As more and more families and pupils become infected with HIV/AIDS, the education system itself risks a reduced demand. This implies that there will be fewer children to be educated and fewer children who are able to afford education. The education system in general will be compelled to limit the supply of education because of teacher shortages and financial constraints. Furthermore, high absentee rates of

infected and affected teachers will reduce the interaction between the student and the teacher, leading to a reduction in the quality of education provided. Eventually, the ability of the education sector to fulfil its function will be severely affected.

Ghana has made considerable strides in its response to the epidemic. Since 2001, the country has adopted a multisectoral response to HIV and AIDS. As part of this initiative, the Ministry of Education has developed and implemented a strategic sectoral plan for HIV and AIDS, focusing on the prevention of new infections, care, support and advocacy. This is reflected in the Education Sector Plan (ESP) 2003–2015 and the Annual Education Sector Operational Plans (AESOP).

Ghana's response to the HIV/AIDS pandemic was initially characterised by a medical approach, in which the disease was managed as a health rather than as a developmental issue and consequently directed by the Ministry of Health (MOH). The overall coordination of HIV/AIDS was not strong at all levels because of the lack of an institutional framework to mobilise support from various stakeholders (Ghana AIDS Commission, 2004).

The alarming spread of the pandemic at the time led to a realisation for the need for a strong political will and commitment, openness and a multisectoral and multipronged approach to control and manage HIV/AIDS in the country. As a result, a wide range of stakeholders, from governments, non-governmental organisations (NGOs), faith-based organisations (FBOs) to community-based organisations (CBOs), was targeted to launch preventive care and support measures that are expected to successfully raise awareness and promote behaviour change among the populace.

Against this backdrop, the Centre for Continuing Education at the University of Cape Coast, the University of Education in Winneba and the University of Ghana in Legon, Ghana, collaborated with the Simon Frazier University in Vancouver, Canada, to launch a programme to reduce HIV/AIDS and stigmatisation through education in 2005. The main objective of the programme was to equip adult trainee teachers in distance education programmes with knowledge and skills that would enable them to take good care of themselves and to serve as agents of dissemination of knowledge and change in their schools and school communities.

Since its inception, the programme has trained three cohorts of student teachers, numbering about 6 000. This paper specifically evaluates the level of knowledge of



student teacher trainees at the Centre for Continuing Education on the transmission, symptoms, prevention and control of STIs and HIV/AIDS.

METHODOLOGY

The research was a descriptive survey and covered a total of 600 Diploma in Basic Education (DBE) student teachers at the Centre for Continuing Education (CCE). The students were conveniently sampled from 10 out of 22 study centres, covering five regional capitals and five district capitals. The 600 students represent about 10% of a total of 6 574 DBE student teachers who have completed the course on reducing HIV stigmatisation through education since its inception in 2006.

The instrument used for data collection was a 32-item questionnaire. Section A collected data on participants' age, sex, study centre and level or year group. Section B contained five research questions. The respondents were asked to tick their preferred option or fill in their responses in the spaces provided. The instrument was administered by CCE staff during one of their usual weekend face-to-face interactions with the student teachers. Any ten readily available student teachers of each year group (from the first to the third year) were provided with questionnaires and asked to complete and return them before the close of lectures. The return rate of the questionnaires was 96%. Data collected was compiled and analysed, using the simple percentage comparison method.

RESULTS AND DISCUSSION

Background information

Table 1: Sex distribution of respondents

| Sex | Frequency | Percentage |
|--------------|------------|---------------|
| Male | 316 | 54.67 |
| Female | 262 | 45.33 |
| Total | 578 | 100.00 |

Table 1 shows that more males (316) responded to the instrument than females (262). The method used to select the respondents was completely random. In addition, available statistics from the CCE students' database indicate that more males (3 408) have pursued the DBE programme than females (2 966) since

its inception in 2006. These two factors may have accounted for the observed difference.

Table 2: Age distribution of respondents

| Age range | Frequency | Percentage |
|----------------|------------|---------------|
| Below 25 years | 80 | 13.84 |
| 26–35 | 378 | 65.40 |
| 36–45 | 84 | 14.53 |
| Above 45 | 63 | 6.23 |
| Total | 578 | 100.00 |

The age distribution of students, as shown in Table 2, indicates that the majority of the CCE student teachers are between 26 and 35 years. A total of 378 students, representing 65.4% of the respondents, belong to this age category. Conversely, those aged 45 and above form only 6.23% of the respondents. Students within the 26–35 age bracket form part of the reproductive age group that is often considered to be between the ages of 19 and 49.

In Ghana, most people start working before the age of 26. In order to protect their jobs, they enrol in distance education programmes. This may account for the large number of students between the ages of 26 and 35.

The 26–35 age group is the most vulnerable and forms the major workforce of the country, particularly in the education sector. Any negative effect of HIV/AIDS on this group will have dire consequences for the country. A study indicated that the education sector had an HIV/AIDS prevalence rate of 9.2%, which was higher than the national prevalence rate of 3% (Tumokong, 2004). The conclusion to be drawn is that the programme is directed at an appropriate category of students.

What is the level of knowledge of student teachers at the Centre for Continuing Education on sexually transmitted diseases and HIV/AIDS?

A number of questions were posed to the students in order to evaluate their level of knowledge on issues of HIV and AIDS. Table 3 provides details of the responses given by the students.



Table 3: Level of knowledge of student teachers

| Item | Positive response | | Negative response | |
|--|-------------------|-------|-------------------|-------|
| | Fre-quency | % | Fre-quency | % |
| No difference between HIV and AIDS | 16 | 2.77 | 562 | 97.23 |
| Herbalists have a cure for HIV/AIDS transmission | 36 | 6.23 | 542 | 93.77 |
| Female genital mutilation can transmit HIV/AIDS | 556 | 96.19 | 22 | 3.81 |
| AIDS can be transmitted without sexual contact | 544 | 94.12 | 34 | 5.88 |
| Discrimination against people living with HIV/AIDS | 24 | 4.15 | 554 | 95.85 |
| Stakeholder collaboration relevant to control | 566 | 97.92 | 12 | 2.08 |

Generally, the students exhibited a great understanding of all the issues raised. As shown in Table 3, as many as 562 students (97.23%) out of a total of 578 knew that there is a difference between HIV and AIDS. On whether herbalists have a cure for AIDS, 542 students (93.77%) gave a negative response. Again, while as many as 544 respondents (94.12%) knew that AIDS can be transmitted even without sexual contact, 5.88% thought that sexual intercourse was the only channel through which the disease could be transmitted. The trend was the same for other related questions on HIV and AIDS.

When asked to comment on why, in spite of the many interventions, HIV and AIDS control has not been completely successful, students mentioned poverty, stigmatisation and ignorance as some of the factors militating against the struggle. Other factors identified were a high illiteracy rate, doubts about the existence of the disease, attribution of the disease to evil spirits and the difficulty that people have in changing their behaviour.

On what could be done to reverse the trend, the following suggestions were provided by the student teachers:

- Regulation of youth entertainment
- Use of information vans to show films on real-life situations
- Active involvement of religious bodies in the campaign
- Elimination of stigmatisation
- Intensification of television and radio programmes on HIV/AIDS

- Establishment of more guidance and counselling centres to provide HIV/AIDS education
- More education on HIV/AIDS to be provided in local dialects
- More recreational centres to be established in the communities
- Education on HIV/AIDS to be made examinable

The high understanding of HIV and AIDS issues demonstrated by student teachers is consistent with the findings of the Ghana Statistical Service and Macro International (published in the National HIV/AIDS Strategic Framework II, 2006–2010), which states that there is near-universal awareness of the HIV/AIDS epidemic. This finding is an indication that the programme is making a positive impact on the trainee teachers. The broad knowledge base of the students on HIV and AIDS may also be attributed to other intervention activities by the Ministry of Education, Science and Sports (MOESS) and the Ghana Education Service (GES), such as the Teachers as Agents of Dissemination and Change (TAD) Programme, the HIV and AIDS alert model and HIV and AIDS manuals for basic and senior high schools.

Did the education on HIV/AIDS and stigmatisation course result in a change in the attitude of CCE trainee teachers towards the disease?

The following attitudes of student teachers were evident before taking the course on HIV/AIDS:

- They were afraid of people living with HIV/AIDS (PLWHA) and hence avoided and discriminated against them.
- They saw PLWHA as immoral people receiving punishment from God.
- They did not respect PLWHA.
- They were pleasant towards PLWHA, but refused to interact with them.
- They were unfriendly or hostile towards PLWHA.

Table 4: Attitude of student teachers after the course on HIV and AIDS

| Attitude | Positive response | | Negative response | |
|---|-------------------|-------|-------------------|-------|
| | Fre-quency | % | Fre-quency | % |
| Talking to people suffering from HIV/AIDS | 550 | 95.16 | 28 | 4.84 |
| Shaking hands with PLWHA | 518 | 89.62 | 60 | 10.38 |
| Living in the same house as PLWHA | 546 | 94.46 | 32 | 5.54 |



| Attitude | Positive response | | Negative response | |
|------------------------------------|-------------------|-------|-------------------|-------|
| | Fre-quency | % | Fre-quency | % |
| Eating from the same bowl as PLWHA | 484 | 83.74 | 114 | 16.26 |
| Washing the bedding of PLWHA | 468 | 80.97 | 110 | 19.03 |
| Sharing an office with PLWHA | 552 | 95.50 | 26 | 4.50 |
| Walking with PLWHA | 564 | 97.58 | 14 | 2.42 |
| Respecting and loving PLWHA | 544 | 94.12 | 34 | 5.88 |

A baseline survey conducted on the student teacher trainees prior to the course on HIV and AIDS indicated that they did not respect PLWHA because they saw them as immoral people receiving punishment from God. Students therefore discriminated against PLWHA and avoided them. It could, however, be seen from Table 4 that there has been a reversal of the trend since the CCE HIV/AIDS programme was introduced. The study, however, shows that students still shun activities that bring them into direct contact with PLWHA. Table 4 shows comparatively lower numbers of responses for shaking hands with PLWHA, eating from the same bowl as them and washing their bedding in comparison to the responses for activities that keep people at reasonable distances from PLWHA. Some students probably feel that having direct contact with PLWHA could be risky, as it may result in the transmission of the AIDS virus or other opportunistic diseases if one is not careful.

To what extent are student teacher trainees at the CCE involved in the dissemination of information on HIV/AIDS?

Table 5: Students' involvement in public education on HIV/AIDS

| Item | Positive response | | Negative response | |
|---|-------------------|-------|-------------------|-------|
| | Fre-quency | % | Fre-quency | % |
| Taking part in radio/FM discussions on HIV and AIDS | 56 | 9.69 | 522 | 90.31 |
| Organising workshops, seminars, etc. | 260 | 44.98 | 318 | 55.02 |
| Sharing knowledge on HIV/AIDS with people I come across | 576 | 99.65 | 2 | 0.35 |

Positive results to national issues are achieved when the populace is adequately informed. On the dissemination of information on HIV and AIDS by student teacher

trainees, Table 5 shows that out of the 578 respondents used for the study, 56 (9.69%) were involved in radio/FM discussions on HIV and AIDS, even though it may be unfair to expect such activity from all students. The remaining 522 (90.31%) were not involved in any radio/FM programmes on HIV and AIDS. Regarding workshops, seminars and conferences, as well as being used as resources, 260 respondents (44.98%) said they had been involved in such programmes, while the remaining 318 (55.02%) replied in the negative. On sharing knowledge on HIV and AIDS with people, 99.65% of trainee teachers said they shared their knowledge with people they came across, while 0.35% said they did not. This may have contributed to the current high awareness of the HIV/AIDS epidemic in the country.

A question asked on HIV and AIDS lessons taught in class revealed that 96.54% of trainee teachers teach such lessons very often or sometimes (Table 6). The remaining 3.46% indicated that they had never taught HIV/AIDS lessons in class. From the data analysed so far, it can be concluded that, to a very appreciable extent, student trainee teachers are involved in the dissemination of information on HIV and AIDS. When people are well informed, it is easy to share information.

Table 6: Rate at which HIV/AIDS lessons are taught

| Response | Frequency | Percentage |
|--------------|------------|---------------|
| Very often | 164 | 28.37 |
| Sometimes | 394 | 68.17 |
| Not at all | 20 | 3.46 |
| Total | 578 | 100.00 |

How do student teachers in the Centre for Continuing Education distance programme protect themselves from contracting HIV/AIDS?

This research question sought to find out how student teachers protect themselves from contracting HIV and AIDS.

Table 7: Student teachers who have gone through voluntary counselling and testing

| Response | Frequency | Percentage |
|--------------|------------|---------------|
| Yes | 188 | 32.53 |
| No | 390 | 67.47 |
| Total | 578 | 100.00 |

As can be seen from Table 7, 32.53% of a total of 578 student teachers who responded to the instrument have gone through voluntary counseling and testing (VCT), while the remaining 67.47% have not. It is obvious from the results that people are not translating their broad knowledge on HIV/AIDS to the importance of VCT. This may partly be attributable to the fear of discrimination and the stigma society attached to HIV. This finding is consistent with the survey report of the Ghana National Association of Teachers (GNAT) and Teachers and Education Workers Union (TEWU) in 2008, which indicated that many people in Ghana still hold the view that when it comes to HIV, ignorance is bliss. The low rate of VCT among respondents could also be due to the lack of VCT centres in a number of communities.

In Ghana, informal conversations reveal that most people are afraid to go for voluntary testing. They think that the psychological trauma they might suffer if they are declared positive will speed up their death even faster than the disease itself.

Knowing your HIV status serves as a control measure. It enables those who are negative to protect themselves from infection and provides the infected ones the opportunity to take good care of themselves with respect to medication and nutrition. There is therefore a need to intensify education on VCT.

Other responses obtained in reaction to this research question include abstinence and condom use during sexual intercourse, not sharing sharp or piercing objects, and refusing blood transfusion. This finding is similar to the results of the Ghana Demographic and Health Surveys (GDHS) of 1998 and 2003, which showed that 88% of men and 81% of women knew that condoms could be used to avoid HIV/AIDS infection (Ghana Statistical Service and Macro International, 2004). Other measures identified by the students included using gloves to handle accident victims, avoiding deep kissing and blood covenants, not engaging in prostitution, as well as being faithful to one's partner. The conclusion is that student teachers protect themselves through a number of means.

If people know how to protect themselves against the disease, their chances of being infected will be reduced in the sense that they may make a conscious effort to refrain from certain negative behavioural tendencies. Ignorance about the disease can lead multitudes to their early graves.

What practical measures should be adopted to improve the HIV/AIDS course?

This research question sought to unravel some of the practical measures that could be adopted to improve the HIV/AIDS course offered by the Centre for Continuing Education. The majority of the respondents (95%) mentioned showing videos on HIV and AIDS as one of the strategies. Videos will reveal some of the symptoms, as well as the state of the individual at certain stages of the disease. This will make students aware of how devastating the disease can be and they could hence avoid being infected. Student teacher trainees also think that the course should be run for longer than a semester. This will enable students to get involved in various field trips that will enhance their perception of the disease and also help them to have first-hand information about the disease. Other respondents said that another practical measure that could be adopted would be to include more pictures and diagrams in the course module to make the study real, for "seeing is believing". Measures, such as using people suffering from HIV/AIDS (PLWHA) as resources, reducing the content of the module to ensure better understanding and organising in-service training programmes for course tutors, were also mentioned by students. In addition to the above, students recommended the use of condoms, piercing instruments (needles, knives, blades, etc.), gloves and artificial penises and vaginas for teaching. To them, this will enable teachers to demonstrate the correct way of using these items and lead to an overall control of HIV and AIDS.

CONCLUSION

This study was principally undertaken to evaluate the impact of HIV/AIDS education on student trainee teachers pursuing the DBE programme at the Centre for Continuing Education. Specifically, it considered transmission, symptoms, the prevention and control of STIs and HIV/AIDS. The study also looked at stigmatisation, the attitudes of students towards people living with HIV/AIDS and their readiness to impart knowledge on the pandemic. The results revealed a high level of understanding of CCE student teachers on issues of HIV/AIDS. Questions bordering on the relationship between HIV and AIDS, cure, transmission and control were correctly answered by over 90% of the sample population. It was discovered from the findings that students' relationships with PLWHA have been improving since the introduction of the HIV and AIDS education course. Some



students, however, still refuse to have direct contact with HIV/AIDS victims. More education is required to reverse this attitude.

The number of student teachers involved in the dissemination of information on HIV/AIDS depended on the medium used. It was found that numbers were comparatively high for those media that related directly to their profession, but were low for other media, such as engaging in radio discussions. Student teachers were found to adopt various measures to protect themselves against HIV/AIDS. Among those mentioned were abstinence, condom usage and refusal of blood transfusion.

RECOMMENDATIONS

The findings of the study have implications for the HIV and AIDS programme at the Centre for Continuing Education and other similar programmes being implemented in the education sector.

The following recommendations were made:

- The programme should focus attention and resources on the promotion and use of VCT services.
- The CCE should open VCT centres at least in the regional study centres as a means of encouraging student teachers to access this service.
- Face-to-face interaction attendance should be made compulsory for student teachers at least during HIV/AIDS lessons.
- Student teachers who wish to undertake specific programmes on HIV/AIDS should be given the needed support and motivation.
- The content of the HIV/AIDS Education and Stigmatisation course module should be made more interactive and updated to include current issues on the pandemic.
- More pictures and diagrams should be included in the course module to make meanings clearer.
- The module and other education material used by facilitators should be reviewed to address the lack of female empowerment in making decisions and negotiating for safer sex.

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