An assessment of government policy response to HIV/AIDS in Ghana



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ABSTRACT

The HIV/AIDS epidemic in Africa has assumed a dimension raising heartbreaking anxiety among national governments and civil society groups. In Ghana for example, the pandemic is well-documented and has gone beyond a health problem, and now encompasses all socio-economic aspects of life. The estimated rate of infection from the mid-1980s to 2000 has more than doubled, and in spite of the control efforts by various groups and organisations, prevalence of the disease has not declined notably. This paper assesses government policy, programmes and strategies to combat the disease, using analysis of time trend sentinel data and weighting these against control efforts. The assessment revealed that 380 000 adults and 36 000 children are currently infected. There are wide spatial variations in prevalence across the country and the overall national prevalence has fluctuated over time, standing at 2.6% in 2000, 3.6% in 2002 and 3.1% in 2004. This appears relatively lower than in adjacent countries, where prevalence is around 5% and over 25% in East and Southern African countries.

Although the review found a robust multipronged government intervention approach to containing the disease, we are hesitant to claim that the fairly stable or low national prevalence in Ghana compared with its immediate neighbours may have been the consequence of the effectiveness of national AIDS control programmes and impact of government interventions.

Keywords: assessment response, sentinel surveillance system, prevalence, vulnerability, generalised epidemic.

RÉSUMÉ

L'épidémie du VIH/SIDA en Afrique a pris une dimension qui augmente l'anxiété qui à son tour ronge le cœur parmi les gouvernements nationaux et les groupes de la société civile. Au Ghana, par exemple, la pandémie est bien notée et vue comme étant au-delà du problème de santé, mais actuellement elle englobe tous les aspects socio-économiques de la vie. Le taux prévu de contaminations à partir de la mi-1980 à 2000 a plus que doublé et en dépit des efforts de contrôle par une gamme de groupes et d'organisations, la prédominance de la maladie n'a pas montré de baisse selon le taux de baisse de prédominance en comparaison au poids des efforts de contrôle. Cette étude évalue la politique du gouvernement, des programmes et des stratégies de combattre la maladie. La méthode utilisée pour effectuer cette évaluation compte essentiellement: l'analyse des données sentinelles de tendance de temps et son balancement contre les efforts de contrôle. L'évaluation a dévoilé que 380 000 adultes et 36 000 enfants sont actuellement contaminés et qu'il existe des larges variations spatiales du taux de prédominance à travers le pays et que le total de la prédominance nationale fut fluctuant tout le temps étant 2.6% en 2000, 3.6% en 2002 et 3.1% en 2004. Cela parait relativement bas au Ghana par rapport aux pays voisins où la prédominance est de 5% et plus de 25% dans les pays de l'Afrique de l'Est et de l'Afrique Occidentale.

Même si la revue a connu une intervention robuste à plusieurs pointes de la part du gouvernement et les approches à but de contenir la maladie, nous hésitons de prétendre que le taux de prédominance nationale assez stable ou bas au Ghana vis-à-vis les pays voisins était une conséquence de l'efficacité des programmes de contrôle national du SIDA et l'impact élevé des interventions du gouvernement.

Mots clés: évaluation, résponse, données sentinelles, prédominance, vulnérabilité, épidémie générale.

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INTRODUCTION

The HIV/AIDS prevalence in Ghana's population of about 20 million is currently estimated to be below the 5% threshold for a generalised HIV/AIDS epidemic. In other words, it is still a concentrated epidemic occurring mostly among high-risk groups. The literacy rate is around 65% and while awareness of the HIV/AIDS epidemic is thought to be over 95%, this has not yet translated into corresponding widespread behavioural change. Given the relatively low prevalence of the disease, Ghana has an important window of opportunity to curb the spread of infection and to mitigate the impact of the epidemic. There has been considerable political commitment both in the past and present, and government has moved to operationalise the National Strategic Framework through multisector collaborations. In addition, the government has formally established the Ghana AIDS Commission (GAC) to provide leadership to coordinate the national response. With a relatively advanced decentralised system of government, Ghana is presented a further opportunity to operationalise HIV/AIDS response strategies at the community and grassroots levels. This effort is currently being scaled up on a regional basis, and efforts are underway to intensify the local, community-based response to the epidemic. The overall goal of this assessment was to gauge the impacts of policy response by counter-balancing the level of control effort and the disease prevalence over time. This paper provides an overview of essential issues relating to HIV/AIDS in Ghana, laying out some of the sociocultural determinants of the disease, and policy efforts by government and international organisations to contain and reduce the impact of the disease on the general population.

METHODOLOGY

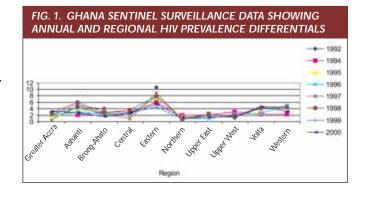
In this assessment, we employed a literature search, review and analysis of a compilation of policy documents, technical and non-technical reports, newsletters, public statements, research documents, and conference papers held in key government departments, ministries, non-governmental organisations, religious institutions, research centres, etc. that are in the forefront of HIV/AIDS control efforts in Ghana. The search was through personal contacts, interviews and discussions with some key policy people who had good knowledge of what documents to look for and/or had been directly responsible for policy design and formulation on HIV/AIDS in

Ghana. The bulk of the quantitative data came from the National AIDS Control Programme. However, we note that this is by no means an exhaustive list of possible documents on the disease, and may not serve as a firm indication of what the situation is in Ghana, but the base information was sufficient to draw fairly general conclusions. We anticipated that documents relating to HIV/AIDS and specific sectors in the country would be scarce, and we therefore chose this quasi-systematic review approach. The review therefore is susceptible to the following inherent biases:

- equally useful information may have been held in several other institutions that do not directly deal with HIV/AIDS issues in Ghana and which we missed
- the information may have been reported in a manner to serve the interests of the institutions in which they are kept
- the review may have carried over the potential methodological errors associated with the empirical data that produced the reports and documents we used in the analysis
- the institutions may have lost some of the potentially useful reports, and consequently we would have missed those reports.

EPIDEMIOLOGY OF HIV/AIDS IN GHANA

A scrutiny of sentinel surveillance data in Ghana seems to suggest that HIV prevalence in Ghana during the past few years has been fairly stable in the range of 3 - 4% of the adult population aged 15 - 49 (NACP, 2001a; 2001b; 2003), although there are also gender and regional variations (Table 1 and Figs. 1 & 2). Whereas there is no evidence of a significant increase in HIV prevalence in Ghana during the past few years, most of the neighbouring West African countries have experienced a rapid increase in their national



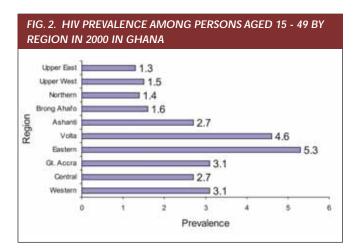


TABLE 1. HIV INFECTION IN ABSOLUTE NUMBERS IN THE POPULATION AGED 15 - 49			
Region	Population	Pop 15 - 49	Number infected 15 - 49
Western	1 842 878	840 537	26 057
Central	1 580 047	679 262	18 340
Gt. Accra	2 909 643	1 463 259	44 995
Eastern	2 108 852	933 589	49 480
Volta	1 612 299	688 290	31 661
Ashanti	3 187 601	1 430 914	38 635
Brong Ahafo	1 824 822	808 214	12 527
Northern	1 854 994	774 460	10 455
Upper West	573 860	238 554	3 459
Upper East	917 251	397 445	5 167
Total	18 412 247	8 254 524	240 777

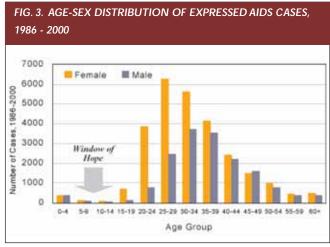
prevalence. In the particular case of Ghana, it will take several more years of detailed and careful empirical observation and monitoring before any firm conclusions can be made about stabilisation or decline in HIV prevalence. This is because intervention programmes have not been formally evaluated to show proof of direct association with prevalence trends. From the observed national trends, there is certainly a danger that prevalence in Ghana could increase in the future, as has been the case in neighbouring countries, because of several factors including the rapid regional population mobility across national boarders. These factors together may potentially increase the rate of HIV transmission and the spread of AIDS as well as other sexually transmitted infections such as genital herpes and gonorrhoea in the general population.

Our analysis is guided by the Kermack-McKendrick epidemic model, which assumes that a disease and in this case, HIV/AIDS, is transmitted from one individual to another by direct contact. Therefore we inferred that any increase in population mobility across national borders (from high to low prevalence regions)

is likely to increase the chances of inter-personal contacts between and among those infected ('infectives') and those at risk ('susceptibles') along a prevalence gradient established between Ghana and its neighbours (Brauer, 2005). The current geographic differentials in prevalence are confirmation of the fact that rapid population mobility acts as a trigger for rapid spread. But like many other epidemiological models, we note that intervention programmes that reduce the chances of inter-personal contacts within the population may justifiably influence future prevalence.

It has therefore now become even more compelling than ever that Ghana mounts an expanded response in order to curtail the spread of the disease, and especially to prevent the spread of HIV among vulnerable groups including adolescents and commercial sex workers. It is also clear that the number of AIDS cases and deaths will inevitably rise during the first decade of the 21st century if the 350 000 infected Ghanaians are not put under special surveillance, but allowed to interact with the non-infected general population. Table 1 and Fig. 2 show high prevalence in the eastern and Volta regions in Ghana, and these two areas coincide with transit points for traders and travellers commuting between the northern and southern sectors of the country via the east-north corridor highways. Areas around Atimpoku, Agomanya and Somanya are known to be contributing to the high prevalence in the eastern region, and the populations of these areas are made up of significant proportions of migrants returning from Côte d'Ivoire, which is known to have one of the highest rates of infection in West Africa. It is therefore not surprising that the current level of infection among adults has risen to 380 000 in 2004. However, if an HIV/AIDS cure becomes available and accessible to all infected people, this potential danger could be avoided in our case. Either way, an expanded programme of care and support will be required to provide the necessary medical care for those living with AIDS, and to mitigate the social and economic impacts of AIDS on families and communities.

In spite of the fact that there seem to be large-scale intervention activities, the Ministry of Health (MOH) in Ghana and the National Aids Control Programme (NACP) estimated in 2002 that about 600 000 of those attending antenatal clinics (3.6% of the population) were infected with HIV, and that a frighteningly high number of persons were estimated



Source: NACP, 2001a

to be infected a day (NACP, 2003). The basis for the estimates was from sentinel surveillance systems set up by the Ministry of Health in designated hospitals and health centres in the country. Findings from the sentinel surveillance of women attending antenatal clinics show that by 1994, 2.7% of all pregnant women who visited these designated sentinel sites were HIVpositive (Fig. 1). This number rose to 4.6% in 1998 and was expected to rise exponentially by 6.4% in 2004, 8.2% in 2009 and 9.5% in 2014. However, empirical data showed that in 2004 the prevalence was 3.1%, deviating widely from the projected figures, suggesting a slowing of the spread of infection in the general population. In 2000, the conservative estimates of the Ghana Health Service (GHS) and the NACP were that the number of people living with HIV/AIDS (PLWHA) in Ghana was 600 000, and would be 720 000 in 2004, and 1.36 million in 2014, giving an estimated daily infection rate of 300 people in the year 2004, 380 in 2009 and about 510 in 2014. Vulnerability was found to be greatest among those aged 24 years - 39 years, accounting for 59% of PLWHA in Ghana. However, the figures show that HIV prevalence among persons aged between 4 - 14 years is low, accounting for only 1.0% of all HIV/AIDS cases recorded (Fig. 3), with older persons (49 years and above) constituting 8.0% (Anarfi, 2000). This gives Ghana a window of opportunity to be able to contain the disease, if greater energies and intervention efforts are more appropriately directed at these groups.

With respect to gender, the number of infected females accounts for 64% of the recorded HIV/AIDS cases, establishing that females are more vulnerable than

males in Ghana. However, this gender difference could be due to the nature of the Voluntary Counselling and Testing (VCT) programme in Ghana, in that more women present themselves for testing (at antenatal clinics) than men.

DETERMINANTS OF HIV/AIDS PREVALENCE AND SEXUALITY IN GHANA

It is generally understood that HIV/AIDS awareness in Ghana is quite high, with nearly all adult men and women having heard about the disease. To date, no population surveys have ever been conducted in Ghana to establish HIV prevalence in the general population, and census questionnaires have not included questions on HIV, except the 2003 Ghana Demographic and Health Survey (GDHS), which included some questions on the disease. Findings from the 2003 GDHS revealed that more than a third of women and men aged 15 - 49 knew someone personally who had HIV or who had died of AIDS. Two in three women and three in four men in the same age group knew that using a condom during sexual intercourse and limiting sex to one uninfected partner together could effectively reduce the risk of HIV infection (GSS, 2004). Most studies that have been carried out on the transmission of HIV/AIDS in Ghana generally agree that behavioural and economic factors largely account for the concentrated pattern of infection within the population. However, economic factors tend to influence the sexual behaviours of adolescents in their reproductive ages, and they constitute more than 50% of the population. GDHS 2003 figures show that 7% of women and 4% of men had sex at age 15, while 40% of women and 27% of men had first sex at age 18 (GSS, 2004). Sexual intercourse with non-married or non-cohabiting partners is widely understood to be associated with an increase in the risk of contracting sexually transmitted diseases. According to the GDHS 2003, 20% of women and 66% of men aged 15 - 49 had engaged in higher-risk sexual behaviour in the preceding 12 months of the survey. Another 25% of women and 45% of men aged 15 - 49 were found to engage in unprotected sex or sex without use of condoms. Higher-risk sexual behaviour (sex without protection) was found to be more common among young people aged 15 - 24, i.e. 50% of women and more than 75% of men (GSS, 2004). Among those who did engage in higher-risk sex, less than one-third of women and half of men aged 15 - 24 used a condom during their last episode of unsafe sex. Sexual

intercourse with more than one partner is associated with a high risk of exposure to sexually transmitted diseases. One per cent of women and 10% of men aged 15 - 49 had sexual intercourse with more than one partner in the 12 months prior to the survey.

NATIONAL RESPONSE TO HIV/AIDS IN GHANA

Records show that since 1994, a total of 7 000 persons within the 15 - 49 age group had died from AIDS-related diseases in Ghana (NACP, 2001a). By 1999 the number of deaths resulting from AIDS increased to over 20 000 persons, and it is projected that by the year 2014 more than 1 million persons in Ghana would have died from AIDS-related causes. As the most affected group includes people in their prime reproductive age, orphanhood may present a huge social and economic burden in Ghana. Records from the MOH show that there were as many as 126 000 AIDS orphans in 1999. This was estimated to increase to 252 000 by the year 2004 and further increase to 603 000 by the year 2014.

As a consequence, the responses of successive governments in Ghana have been manifold and include intensified health promotion efforts and campaigns on HIV/AIDS at the highest political level. The key strategy has been a well-coordinated multisectoral approach, tasking all sectors and institutions to fashion and design sector-specific AIDS prevention and control programmes to help reduce the prevalence of the disease. The lead institution that coordinates HIV/AIDS prevention and control strategies and activities is the Ghana AIDS Commission (GAC) with the President of the Republic of Ghana being its Chairman. Combatting of the disease in Ghana is therefore executed at all levels, bringing all stakeholders together, including political institutions, civil/public institutions and the private sector. The Ghana HIV/AIDS Strategic Framework 2001 - 2005 mandates all sector ministries to incorporate HIV/AIDS activities into their programmes and to draw a budget line for such activities. Whereas the GAC carries an advisory responsibility toward the government of Ghana on issues relating to HIV/AIDS, the NACP is an implementing body for HIV/AIDS policies and strategies in Ghana and is responsible for field operationalisation of HIV/AIDS programmes.

Additionally, NACP provides HIV screening and counselling facilities in all teaching, regional and

district hospitals and has developed educational programmes to create awareness and to increase knowledge about the disease to enhance positive behaviour change. The majority of the activities on HIV/AIDS in Ghana appear to be donor driven, usually with funding from bilateral and multilateral agencies. Among the donors are the Canadian International Development Agency (CIDA), German Technical Co-operation/Regional AIDS Programme (GTZ), United States Agency for International Development (USAID), the European Union (EU), UNAIDS and the Japanese Fund.

Ghana AIDS Commission (GAC)

The Government of Ghana, recognising that HIV/AIDS is a serious health and developmental issue involving several actors at multiple levels, and the need to harmonise all prevention and control strategies at all levels, set up the GAC to perform this role. This commission is the highest policy-making body on HIV/AIDS in Ghana. It is a supra-ministerial and a multisector body located in the Office of the President. The Commission is mandated to direct all activities in the fight against the epidemic, and to provide effective leadership in the coordination of all programmes and activities of all stakeholders. The programmes are to be pursued through advocacy, joint planning, monitoring and evaluation. Specifically, the GAC is mandated to carry out the following functions in the prevention and control of HIV/AIDS in Ghana:

- formulating national policies and strategies
- providing high-level advocacy for HIV/AIDS prevention and control
- providing effective leadership in the national planning of programmes
- expanding and coordinating the national response
- mobilising and managing resources and monitoring their allocation and utilisation
- fostering linkages and networking among stakeholders.

National AIDS Control Programme (NACP)

The NACP was set up in 1987 and its strategic framework is aimed at preventing and mitigating the socio-economic impact of HIV/AIDS on individuals, communities and the nation as a whole. Its objectives are to reduce new infections among the 15 - 49 year age group, improve service delivery and reduce individual and societal vulnerability, as well as establish a multisector and multidisciplinary institutional

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framework to coordinate programme implementation. The areas of intervention under the framework are prevention of new transmission of HIV, care and support for PLWHA, and creating an enabling environment for the national response (GAC, 2000). Unlike the GAC, the sole responsibility of which is policy formulation, the NACP is mainly responsible for policy implementation.

Ministry of Youth and Education (MOE)/ Ghana Education Service (GES)

The Ministry of Education (MOE) is the organ of government with sector responsibility for the supervision and coordination of all pre-professional educational activities and programmes. This includes the formulation and review of policies, establishment of a regulatory framework for the various agencies and units, and creation of an enabling environment to ensure efficient and effective delivery of education services. The mission of the Ministry of Education is to provide relevant education to all Ghanaians at all levels, irrespective of gender, tribe, religious and political affiliations.

The Education Sector is made up of two main structures: firstly, the Ministry of Education which formulates policies, supervises the entire education sector, and also provides funding for activities in the sector; and secondly, the Ghana Education Service which is the largest implementing agency, with a staff of 180 000 out of the total 220 000 workforce in Ghana's 18 implementing agencies on the ground. It is also largely responsible for field-operationalisation of educational policy programmes (Chetty, 2003).

Curriculum design and delivery of HIV/AIDS education has received considerable attention within the Ghana Education Service. For instance, the School Health Education Programme (SHEP) is now a full directorate. SHEP, in collaboration with some NGOs, has trained focal persons at the regional and district levels to assist in the implementation and community-based delivery of SHEP programmes. This training has also been extended to the regional and district directors of education. SHEP is yet to complete the training of classroom teachers and headquarters staff. It is currently quite obvious that the integration of HIV/AIDS topics into the mainstream curriculum or carrier subjects has not yet achieved any significant success. Guidance and counselling services and peer

education are offered at primary and secondary school levels in Ghana. The MOE/GES currently implements the Population/Family Life Education (POP/FLE) programme and has integrated HIV/AIDS topics into the pre-tertiary school curriculum. POP/FLE is also being up-scaled by the African Youth Alliance (AYA) project under the aegis of UNFPA, which seeks to improve the overall Adolescent Sexuality and Reproductive Health (ASRH) status in basic schools by promoting healthy behaviour change in youth in five of the ten regions, covering 20 districts in Ghana.

Additionally, the Curriculum Research Development Division (CRDD) of the MOE/GES has written an HIV/AIDS manual to enable teachers teaching related subjects such as English language, agriculture, life skills, social studies, and religious studies, to teach lessons on HIV/AIDS efficiently.

Finally, the MOE has established the HIV/AIDS secretariat to coordinate HIV/AIDS activities and to integrate policy programmes of the organisations working in the educational sector, with emphasis on health promotion and health education in schools. These policies include among others the Ghana Population Policy, Health Policy (October 2000), National Youth Policy, and the Draft National HIV/AIDS & STI's Policy document (NPC, 2000; PIP, 2000). These policies serve as national blue-prints and guiding principles that give direction to programming and planning of governmental actions and interventions in national professional training and development.

NGOs/CBOs and multinational/bilateral organisations

Many NGOs and CBOs including multinationals and bilaterals have also been working in partnership with several government agencies to bring HIV/AIDS control and prevention programmes closer to the people. They include the Christian Health Association of Ghana (GHAG) comprising the Catholic Secretariat, Salvation Army and the Presbyterian Church. Others are the Ghana Red Cross Society, Save the Children Fund (SCF) UK, Centre for Development of People (CEDEP), CARE International, Action AID, and Stop the Killer AIDS, the UN Agencies, DFID, USAID, etc.

The role of NGOs in HIV/AIDS control has largely been advocacy, health education and support for those with the disease. The HIV/AIDS component

implemented by these NGOs has not been based on peer education, but on classroom health education in the refuge centres of the Street Girls Aid (SGAID) and the Catholic Action for Street Children (CAS). In addition, social workers and nurses provide health education services through health kiosks and mobile vans in the streets in many parts of the country, especially in urban areas. All expected outputs emanating from these activities have been met and in some cases have even exceeded initial expectations, as approximately 300 children each day have been reached and received information and health services as planned. USAID offices in Ghana are widely recognised to have made a considerable contribution to HIV/AIDS education in the country. The USAID/Ghana Mission supported a baseline study to assess the knowledge, attitudes and practices of students, teachers and parents with regard to HIV/AIDS. The study revealed that students in junior secondary schools were much more sexually active than expected. It also showed that there were many misconceptions about HIV/AIDS among Ghanaian youth. Based on the results of the study, USAID has supported NGOs in developing programmes to establish HIV/AIDS clubs in schools, and sensitise teachers and parents about HIV/AIDS. In addition, a nationwide HIV/AIDS prevention training programme has been established in 34 teacher training colleges. All teacher trainees are required to undergo HIV/AIDS training as part of their teacher preparation and professional development.

Universities and research institutions

The universities and research institutions in Ghana conduct multiple research activities that seek to provide adequate knowledge and understanding about the biology, aetiology and spread of the disease (UoG, 2002). These research activities are largely biomedical in nature with a focus on the discovery, isolation, characterisation, documentation and analysis of the medical, biological, social and economic aspects of the disease, so as to contribute to knowledge about the transmission mechanisms and social as well as economic impacts of HIV on the general population. Findings from such research therefore inform and drive policy directions on current and future government intervention strategies in respect of HIV/AIDS in Ghana. Not surprisingly, HIV/AIDS concerns now feature in many activities of Ghanaian universities such as teaching, research, and advisory services. Noguchi

Memorial Institute for Medical Research (NMIMR) has a virology unit that carries out voluntary HIV testing and runs projects on the biological mechanisms of the HI virus, such as the identification of existing viral populations and their recombinant types in Ghana. The Centre for Scientific Research into Plant Medicine (CSRPM) at Mampong in Ghana has ongoing research initiatives that aim to develop herbal medicines and preparations that could possibly be used to cure the disease.

SYNTHESIS AND ANALYSIS OF KEY FINDINGS

A review of the existing policy documents, technical reports and programme documents of various interventions revealed a tangled web of HIV/AIDS prevention and control strategies at various stages of implementation in Ghana (GAC, 2000; 2004; GHA, 2001/012; GoG, 2003; MoE, 2003; MoH, 2003). Most of the interventions have achieved remarkable successes, especially the control campaigns in Agomanya in the Eastern Region of Ghana (highest HIV/AIDS prevalence community in the country at the time), which brought down HIV prevalence from 6% in 2002 to 4.6% in 2003 (NACP, 2003). Additionally, many of the education campaigns are shown to have made positive impacts, by bringing down prevalence in many high prevalence corridors in the country.

However, this assessment is constrained, by lack of quantitative empirical data on HIV/AIDS prevalence from robustly designed programme evaluations, from claiming that the reduction of prevalence in the programme areas is really due to the intervention programmes. As intervention programmes and government strategies have not been formally evaluated, leaving a clear absence of such basic data on the intervention evaluations, many scholars agree that it is difficult to determine the real impacts of HIV/AIDS prevention and control programmes (Bennell, Hyde & Swanson, 2002). The lack of such data significantly constrains the power of any analysis of the impacts of programme interventions on the reduction of HIV/AIDS prevalence in the country. Without such basic data, the magnitude of the impacts on the spread of the disease and transmission rate in any sector cannot be determined and quantified. Essentially, such quantitative data are needed in order to measure over time the performance of preventive and control interventions in relation to HIV/AIDS transmission.

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Fundamentally, all that is known about the disease in Ghana are the qualitative aspects of the impacts of the disease on the nation, such as that when individuals contract the disease they will no longer be able to support their families financially, and in other cases their children may be forced out of school to take care of their ailing parents. It is generally known that a possible impact of HIV/AIDS is that when individuals contract the disease they will withdraw from active service while seeking health care, and this ultimately affects national productivity through a direct reduction in the size of the national workforce.

Furthermore, studies done thus far on HIV/AIDS in Ghana are basically behavioural and qualitative in nature (see, for example, Avotri, 2004; Claypoole & Nazzar, 2004; Osei-Agyekum, 2004; Odoi-Agyarko, 2004), and heavily focused on baseline studies of HIV/AIDS knowledge, attitudes and practices among vulnerable sub-population groups. There is speculation that economic, peer and social/cultural pressures that promote unsafe sex among adolescents remain as high as ever. These high-risk behaviours are believed to be increasing in frequency in the poorest communities in the country (Anarfi, 1995; Anarfi, 2000; Anarfi & Antwi, 1995; Meekers, Stallworthy & Harris, 1997). However, we do not at this point have any evidencebased discrete quantitative data to support this claim and ultimately evaluate the causal relationship between such practices and educational quality outcomes.

PERSPECTIVE ON GOVERNMENT RESPONSES AND STRATEGIES REGARDING HIV/AIDS

In general, this review found that government policies and strategies appear superficially well-designed, robust and encompass a broad spectrum of subunits likely to make them very effective. However, many of the policies lack implementation clarity, which often may have led to implementation conflicts among cognate implementing agencies. Thus, allied agencies tend to remain caught up in unproductive conflicts, which are to the detriment of policy goals and objectives. The Ghana HIV/AIDS Strategic Framework 2001 - 2005 mandates all sector ministries to incorporate HIV/AIDS activities into their programmes and to draw a budget line for such activities. However, as a result of lack of clarity, definition of roles among the implementing agencies remains largely ambiguous. Typically, organisational and implementation difficulties arise when there is power struggle among such cognate

agencies. A classic case in Ghana is the indistinguishable nature of the roles performed by the NACP and the GAC. Broadly speaking, the objectives of NACP are to reduce new infections among the 15 - 49-year age group, improve service delivery and reduce individual and societal vulnerability, as well as establish a multisector and multidisciplinary institutional framework to coordinate programme implementation. Similarly, the GAC is seen as the highest policy-making body on HIV/AIDS in Ghana, mandated to direct and coordinate all activities in the fight against the disease. Clearly, when two bodies are mandated to coordinate the same activity, this will not only create implementation conflicts between these two bodies regarding who controls what, but will lead to waste of scarce resources in duplicated efforts.

Additionally, while there is strong political will and interest in matters relating to the prevention and containment of HIV/AIDS in Ghana, political commitment has remained very low. The large gap between political will and political commitment has remained a major setback to efforts to lower prevalence. The involvement of politicians in the fight against the disease has remained at rhetoric level, thus reducing momentum in the allocation of adequate money to support AIDS control activities. The central government has focused largely on developing policy strategies, but has ceded funding of activities relating to the policies to external donors.

Moreover, the data used in the analysis, estimation and projection of HIV/AIDS are obtained from the sentinel system, built on selected antenatal clinics in the country. Prevalence estimated from such antenatal attendance may not represent prevalence in the general population (Zaba, Boerma & White, 2000). The antenatal sentinel system fundamentally assumes generalised epidemic conditions and high antenatal attendance. But the AIDS epidemic in Ghana is a concentrated one and, moreover, the number of pregnant women attending antenatal clinics constitutes a small proportion of women of reproductive age (15 -49). This number excludes sexually active women outside the reproductive age and men - who seldom attend antenatal clinics. Hence prevalence calculated from the sentinel system may be an underrepresentation of prevalence in the general population.

Lastly, government policies and strategies in combatting the disease appear sound only on paper; they do not contain provisions that address the factors promoting high-risk behaviours, especially among youth and other vulnerable groups. For instance, there is a strong consensus that economic determinants override all factors promoting high-risk behaviours among youth and adolescents, but government efforts in addressing unemployment among youth in Ghana have remained a very low priority. The lack of policy provisions that address both direct and indirect drivers of the rapid spread and transmission of HIV/AIDS has left most control programmes and strategies largely ineffective.

CONCLUSIONS

This assessment reveals that HIV/AIDS prevalence is still relatively low in Ghana, compared with other neighbouring countries in the sub-region. Yet, large prevalence variations exist among the ten political and administrative regions in Ghana. Prevalence is shown to have declined in some of the high-prevalence locations such as Agomanya/Somanya due to the widespread intervention activities by Family Health International (FHI) and other organisations. However, there is a dearth of sector-specific data in Ghana, limiting our capacity to perform any meaningful analysis which would have permitted adequate and conclusive assessment of the impact of government policy on the disease in Ghana. Much of the existing data on HIV/AIDS prevalence come from the sentinel surveillance system, which has its own limitations, as the data do not keep categorised sector-wide records, which made it difficult to perform disaggregated analyses of all sub-population groups. For example, despite widespread concerns about the vulnerability of young people to HIV/AIDS in Ghana, there is still a paucity of information, which places a limit on any meaningful assessment of the extent to which the various HIV/AIDS intervention programmes bring about changes in sexual behaviour, and/or changes of lifestyle and a corresponding decline in HIV prevalence within the general population.

On this basis, it is quite difficult to assume that young people and adolescents in Ghana are adopting important behavioural changes to their sexuality and reproductive life to make them less vulnerable to HIV infection. However, some indicators suggest that limited changes towards safer sexual behaviour are occurring.

Government strategies and interventions may have been very effective in controlling HIV/AIDS and may

have contributed to the low prevalence of the disease in Ghana. We are of the opinion that there is only suggestive and indeed weak evidence in support of this fact, because of the wide agreement that there is a conspicuous lack of empirical data linking cause, effects and the disease in different sub-population groups. In conclusion, we therefore hesitate to attribute the low prevalence of the disease in Ghana, compared with its immediate neighbours, and the declining prevalence in some high-prevalence areas to the impact of government policies and interventions.

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