



**THE EFFECT OF THE HEALTH SECTOR SERVICE FUND
ON THE CONTROL OF HIV/AIDS IN HEALTH FACILITIES
IN SABATIA SUB-COUNTY, KENYA**

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Abstract:

HIV/AIDS remains one of the major threats to humanity even as the world celebrates the tremendous technological achievements of the 20th and 21st centuries. Kenya has been heavily depending on foreign funding on HIV/AIDS for many years thus leading to over 80% dependence on international sources. Donor funding fell by 3% in 2013, this led to a reduced amount to \$8.07 billion US dollars from 2012. HSSF was established to mobilize funds domestically in order to directly transfer funds to Health Centers and dispensaries (level 3 and 2 health facilities) to enable them to improve health service delivery to local communities. However, there has been poor management of these funds. The objective of this study was to establish the effect of the Health Sector Service Fund in the control of HIV/AIDS in health facilities in Sabatia Sub-County. This study was guided by the Global Fund New Funding Model 2012 which demonstrates commitment to a country's ownership. The study adopted a cross-sectional descriptive survey research design and targeted 123 medical staffs/officials and 1374 comprehensive care centre (CCC). The study participants were selected using Simple Random Sampling and 93 staffs plus 10 CCC were selected. Data was collected using questionnaires and Focused Group Discussions. The findings revealed that HSSF fund accounted for 27.6% change in the control of HIV/AIDS and the function of HSSF have a unique significant contribution to HIV/AIDS control ($\beta=.525$, $p=.000$). This implied that Control of HIV/AIDS is positively associated with functions of HSSF funds such that an improvement in the functions of HSSF fund could positively lead to an improvement in

the control of HIV/AIDS. The study concluded that HSSF management system is a predictor. HIV/AIDS control hence it was recommended that HSSF fund management system be intensified and improved.

Keywords: health sector service fund, control of HIV/AIDS, health facilities, Kenya

1. Introduction

HIV/AIDS remains one of the major threats to humanity even as the world celebrates the tremendous technological achievements of the 20th and 21st centuries. In the year 2010, there were 3.2 Million new infections in Sub Saharan Africa alone increasing the number of those living with the virus in the region to more than 25.8 Million (UNAIDS, 2010), in 2016 the number dropped to 790,000 new infections. In Kenya, there were 1.6 Million Kenyans living with HIV/AIDS in the year 2013 of which over 200,000 were children, in 2018, there were 1,493,382 Kenyans living with HIV/AIDS with a drop in new infections from 100,000 to 52,676.

The main challenge encountered by HIV/AIDS programs by the Kenya Republic is associated with inadequate funds (NACC, 2013). The country has been heavily depending on foreign funding on HIV/AIDS for many years thus leading to over 80% dependence on international sources. Global funding for international AIDS/HIV response programs in 2013 reached its ever highest amount with \$19.1 billion which were available in low and middle income countries (PEPFAR, 2012). Even though there was an increase in funding, there were increasing cases of new infections which required innovative domestic means to address the problem.

In 2012, the UK government contributed 10.7% of all bilateral and HIV. The department of international development (DFID) is primarily responsible for distributing UK foreign aid. Through DFID, it provides funding for a wide range of development projects; addressing the global HIV/AIDS epidemic is among its principle goals accounting for 7.1% of its budget. Between 2008 and 2013, DFIDs overall spent, including both bilateral and multilateral funding averaged 300million a year (DFID, 2014). Roughly 60% of DFIDs multilateral HIV funding is distributed through the global fund. The world bank and UNAIDS receive most of UKs remaining multilateral funds. The UK has recently committed up to 1 billion for the global fund 2014-2016 replenishment which will see the UKs annual multilateral fund commitment increase significantly to 500 billion annually (Global Fund, 2012).

In 2012, 28% of international HIV assistance was provide through multilateral organizations such as the Global fund, UNITAID and other United Nations agencies. Multilateral funding accounted for 13% of all funding of HIV (IMF factsheet, 2013). Several donor governments recently increased their contribution to the Global fund and now prefer to spend through multilateral rather than bilateral channels. For example in 2013, five donors provided the majority of their HIV funding through multilateral

channels (such as Global fund and UNITAID): France (88%), European commission (81%), Canada (70%), Japan (69%) and Germany (53%) (Washington times, 2012).

The GFATM is an international financing organization that aims to attract and disburse additional resources to prevent and treat HIV and AIDS, Tuberculosis and malaria (Global fund, 2012). A public-private partnership, the organization has its secretariat in Geneva Switzerland. The organization began operation in January 2002 (United Nations, 2012). Microsoft founder Bill Gates was one of the first private foundations among many bilateral donors to provide seed money for the project (Gates Foundation, 2012).

The Global fund is the world largest financier of anti-AIDS, TB, malaria programs and by mid-2012 had approved funding US dollar 22.9 billion that supports more than 1000 programs in 151 countries (Global fund, 2012). According to the organization it has financed the distribution of 270 million insecticide-treated nets to combats malaria, provided antituberculosis treatment for 9.3 million people, and provided some AIDS treatment for 3.6 million people (Global fund, 2012). In 2009, the fund accounted for around 20% of international public funding for HIV, 65% for tuberculosis and 65% for malaria (WHO, 2012)

The World Bank was a leader in global HIV and AIDS spending in the early days of the epidemic. Since 1989 the World Bank has provided 44.6 billion to HIV and AIDS programs country wide. The World Bank remains a significant financier for HIV and AIDS. In 2013 its budget was \$ 1.5 billion. As well as financing HIV prevention, treatment and care programs, the World Bank supports continue to do “better for less” specifically. It provides technical assistance to increase the efficiency, effectiveness and sustainability of national responses to the pandemic (WHO, 2008), send work and monitoring of utilization of the funds; and submission of the financial reports from the Health centers and Dispensaries to the National Committee (Heraf, 2014).

Donor funding fell by 3% in 2013, this led to a reduced amount to \$8.07 billion US dollars from 2012. This is because the United States, which is the major funder of these programs, declined to extent its funding. There was hence the need to mobilize funds domestically; HSSF was established. It is an innovative direct transfer of funds to Health Centers and dispensaries (level 3 and 2 health facilities) to enable them to improve health service delivery to local communities. One of the key arguments for introducing HSSF was the need to reduce the complexity and delays in access to funds for facilities hence facilitate the strengthening of quality of care (WHO, 2012).

The main objective was to deliver finances for operations directly to the point of use in the Health centers and Dispensaries. Prior to this policy, only about 50 percent of targeted funds could reach these facilities (level 3 and 2) (Health rights Advisory Forum, Heraf 2014). It's worthwhile to put into account that the baseline goal for the HSSF was to perform some underlying functions which among others includes supporting and empowering rural communities to take charge of improving their own health, supporting capacity building in management of health facilities in the country, provision of financial resources for medical supplies, rehabilitating and equipping of

health facilities in the country, provision of grants for strengthening of the faith-based health facilities and also to improve the quality of services delivery at the health facilities. (Heraf, 2014).

However, Since the first HIV incidence was reported in Kenya, the Sabatia sub county in Vihiga County has had HIV trends that depicts the picture of an area from “a low prevalence” to “a concentrated” one (KAI 2012) i.e. by the end of year 2015, there were 1374 HIV positive people of whom 362 people were living with AIDS whereas 87 AIDS cases were reported to have died by the end of year 2015 (NACC 2015). This is far much higher as compared to the neighboring Hamisi and Emuhaya sub counties that depicted fairly controlled states of HIV spread in the area with comparative figures of 925, 237 & 53 and 867, 196 & 39 respectively within the same period of time. The difference between this two data demonstrates the seriousness of the problem yet HSSF is thought to be functional in both the Sub Counties.

2. Methodology

2.1 Research design

Descriptive cross sectional research design was used in this study and it adopted both qualitative and quantitative methods in data collection.

2.2 Study population

The study targeted all the 123 medical staffs which included Sub county officials and staffs from the 8 Health Facilities in the sub-county. The study also targeted the 1374 HIV/AIDS clients enrolled in CCC.

2.3 Sampling technique

The sample was determined according to Krejcie and Morgan formulae that gave a sample size of 93 medical staffs. After determining the sample size by Morgan and Krejcie formulae for medical staffs, the participants were selected using simple random sampling procedure by lottery way. For the CCC in the 8 health facilities, purposive sampling was used to get 1 CCC from six health facilities and in two facilities, 2 CCC were selected to participate in the FGDs; in total 10 CCC were included in the focus group discussions (Krueger, 1994)

2.4 Data collection tools

The researcher used questionnaires and Focused Group Discussions as instruments of data collection for this study.

2.5 Data collection procedures

To start with, the researcher obtained an introductory letter from Mount Kenya university Research and Ethics committee (REC) after which a permit to carry out research from the National Commission of Science and Technology Institute

(NACOSTI) was also obtained. Additionally, any other permit which was considered relevant was acquired from the relevant authorities e.g. from the County Administrative departments. The researcher visited the 8 health facilities in the Sub-County on different days and presented the introductory letter to the in-charges of various departments explaining the purpose of the visit and the purpose for the intention to carry out the study. The in-charges summoned their staff and the researcher was introduced, the purpose of the visit and the intention to carry out the study was again clarified to them. On the different agreed dates to carry out the research in various health facilities, data was collected from the 93 medical staffs and the 10 CCC.

2.6 Validity of the research instruments

According to Orodho (2009), validity is the degree to which a test measures what it purports to measure. To enhance validity, expert review and content validity (Foxcroft 2004) was adopted.

2.7 Reliability of the study instruments

According to Mugenda and Mugenda (2003), reliability is the measure of the degree to which a research instrument yields consistent results of data after repeated trials. Reliability was ascertained through test re-test technique on 12 participants during the pilot study, i.e. 10% of the study population (Kirlinger, 2009) and the results from the two different test periods were compared and correlated and a Pearson r coefficient of .82 was established.

2.8 Data analysis and management

The data was collected and analyzed by both qualitative and quantitative methods. Quantitative data was analyzed using SPSS (Statistical Package for Social Sciences (SPSS version 22.0). Qualitative data from FGDs was organized into themes and categories and analyzed objectively.

3. Results

3.1 Effect of the functions of the HSSF fund on the control of HIV

This objective sought to establish the influence of the functions of the HSSF fund in respect to the control of HIV/AIDS in Sabatia Sub-County. The study respondents were asked to indicate the extent to which they agreed on the functions of HSSF influence on the control of HIV/AIDS. The statements constructing the functions of HSSF were measured on a five point likert scale of 1-5. The findings are presented as shown in Table 1 using frequency counts, percentages, means and standard deviation.

From the findings in table 1, majority, 35(44.9%) of the respondents strongly disagreed that there was support and empowerment of rural communities to take charge of improving their own health. These findings were supported by a low mean of 2.29 and a standard deviation of 1.10, implying that this practice was not effectively

carried out. Table 1 findings further indicated that majority, 32(41.0%) of the respondents strongly disagreed that there was support capacity building in management of health facilities in the country, and also supported with a mean of 2.54 and a standard deviation of 1.02.

The findings from table 4.8 indicate that there was a strong disagreement by majority, 34(43.6%) of the respondents that there was provision of financial resources for medical supplies, rehabilitation and equipment of health facilities in the country, also supported with a mean of 2.46 and a standard deviation of 1.12. Provision of grants for strengthening of the faith based health facilities through their respective secretariats was also a minimal practice as indicated by a mean of 2.28 and a standard deviation of 1.347 and strongly disagreed by majority, 47(60.3%) of the respondents. Finally, the findings revealed that majority, 61(78.2%) of the respondents strongly disagreed that there was improvement of the quality of services delivery at the health facility with a mean of 1.67 and a standard deviation of 0.878 indicating small variations in the responses from the mean. Therefore, it can be concluded that the HSSF funds were not fully used to perform their functions. And this reflects the state of HIV/AIDS control in Sabatia Sub County whereby its trends keep going up yet HSSF funds are assumed to be operational.

Table 1: Effect of the functions of the HSSF fund on the control of HIV

Functions of the HSSF fund	SD f (%)	D f (%)	N f (%)	A f (%)	SA f (%)	M	SD
Support and empower rural communities to take charge of improving their own health.	35 (44.9)	7 (9.0)	17 (21.8)	16 (20.5)	3 (3.8)	2.29	1.10
Support capacity building in management of health facilities in the country.	32 (41.0)	12 (15.4)	3 (3.8)	22 (28.2)	9 (11.5)	2.54	1.02
Provide financial resources for medical supplies, rehabilitation and equipment of health facilities in the country.	34 (43.6)	9 (11.5)	8 (10.3)	19 (24.4)	8 (10.3)	2.46	1.12
Provide grants for strengthening of the faith based health facilities through their respective secretariats.	47 (60.3)	1 (1.3)	4 (5.1)	13 (16.7)	13 (16.7)	2.28	1.34
Improve the quality of services delivery at the health facility.	61 (78.2)		4 (5.1)	7 (9.0)	6 (7.7)	1.67	.87

The study in addition carried out a simple linear regression model to establish the influence or effect of HSSF fund on control of HIV/AIDS through obtaining a percentage change in control of HIV/AIDS accounted for by HSSF fund and get unique contribution of HSSF fund. The findings were presented as shown in Table 2.

The model summary in Table 2 showed that HSSF fund accounts for 27.6% change in the control of HIV/AIDS in Sabatia Sub County, (R Square=.276).

Table 2: Model Summary Results on the effect of the HSSF fund on HIV Control

Mo del	R	R Square	Adjusted R Square	Std. Error of The Estimate	Change Statistics				
					R Square Change	F Change	Df1	Df2	Sig. F Change
1	.525 ^a	.276	.267	.48333	.276	28.990	1	76	.000

a. Determinants: (Constant), Influence of the functions of the HSSF fund

Model summary results of the unique contribution of HSSF fund were also presented as shown in Table 3. From the results in Table 3, it was noted that the function of HSSF had a unique significant contribution to HIV/AIDS control ($\beta=.525$, $p=.000$), which implies that a change in HSSF fund functioning is likely to lead to a change in control of HIV/AIDS. These findings were also represented on a model equation using unstandardized coefficients as shown in Table 3.

$$\text{Control of HIV} = 1.187 + .426(\text{Influence of the functions of the HSSF fund})$$

Table 3: Model Coefficients on the Contribution of HSSF Fund on HIV control

Model		Unstandardized Coefficients		Standardize d Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.187	.186		6.375	.000
	Influence of the functions of the HSSF fund	.426	.079	.525	5.384	.000

a. Dependent Variable: Control of HIV

4. Discussion of Results

The study findings revealed that HSSF funds were not fully used to perform their functions in Sabatia Sub-County yet they accounted for 27.6% change in the control of HIV/AIDS when other factors were not considered. This means that even if a larger percentage, 72.4% in the control of HIV/AIDS was explained for by something else, 27.6% was explained for/influenced by the functions of HSSF funds. This is a large margin that justifies the functions of HSSF. HSSF functions also contributed uniquely to the control of HIV/AIDS. That is, as much as there were already constant contributing factors to the control of HIV in Sabatia Sub-County, HSSF funds' functions when included in the model brought about a strong significant contribution. Therefore HSSF funds' functions are very vital in the control of HIV in the Sub-County. In addition, it was noted that the function of HSSF had a unique significant contribution to HIV/AIDS

control ($\beta=.525$, $p=.000$), which implies that the control of HIV was associated with the HSSF functions. Thus as the management intensified on the improvement of the functions, there was consequent improvement on the control of HIV/AIDS.

These findings agree with those of Heraf (2014), who stated that the baseline goal of HSSF was meant to perform some underlying functions which among others include supporting and empowering rural communities to take charge of improving their own health, supporting capacity building in management of health facilities in the country, provision of financial resources for medical supplies, rehabilitating and equipping of health facilities in the country, provision of grants for strengthening of the faith-based health facilities and also to improve the quality of services delivery at the health facilities. What was not considered in Heraf (2014) studies is that there were no empirical findings to support the findings. The present study thus confirms from the large margin of the control of HIV/AIDS accounted for by the HSSF functions, that indeed it has a positive influence and must be greatly considered by the stakeholders in position.

4.1 Conclusions

HSSF management system is a predictor of HIV/AIDS control, such that its improvement leads to an increased control measures of HIV/AIDS.

4.2 Recommendations

It was recommended that HSSF fund management system be intensified and improved to ensure that its functions are effective towards achieving better control of HIV/AIDS in the Sub-County.

Conflict of Interest

There is no conflict of interest among the authors of this study.

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