African Journal for Physical, Health Education, Recreation and Dance (AJPHERD) December 2015 (Supplement 1), pp.22-34.

Factors determining co-ordination of HIV/AIDS programmes in Ugu District Municipality of KwaZulu-Natal Province, South Africa

M.B. MNGUNI, P.T. SANDY AND A.H. MAVHANDU-MUDZUSI

Department of Health Studies, College of Human Sciences, University of South Africa, P.O. Box 392, Pretoria 0003, South Africa. E-mail: mmudza@unisa.ac.za

Abstract

There is poor coordination of Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) programmes in Ugu District Municipality. The purpose of this study was to explore factors that determine effective co-ordination of HIV/AIDS programmes in Ugu District Municipality. A cross-sectional study of 239 respondents from community-based organisations responded to structured questionnaires. Results indicate limited knowledge of existing programmes for HIV/AIDS coordination, varied periods of operation on HIV/AIDS services, inconsistencies in receiving information and updates about HIV/AIDS programmes, varied educational qualifications of HIV/AIDS programme managers and limited skills and experiences related to chairing of HIV/AIDS meetings. All these resulted in ineffective co-ordination of HIV/AIDS programmes in Ugu District Municipality. There should be relevant support structures, policies and processes to ensure effective coordination of HIV and AIDS responses in municipalities in South Africa.

Keywords: Community based organisations, Coordination, District municipality, effective coordination, HIV/AIDS Programmes.

How to cite this article:
Mnguni, M.B., Sandy, P.T. & Mavhandu-Mudzusi, A.H. (2015). Factors determining co-ordination of HIV/AIDS programmes in Ugu District Municipality of KwaZulu-Natal Province, South Africa. *African Journal for Physical, Health Education, Recreation and Dance*, December (Supplement 1).

Introduction

The HIV/AIDS pandemic is one of the major health challenges faced by the world today. It affects every individual including the most productive members of society (Working Group on Higher Education [WGHE], 2006). This pandemic severely hampers the country's ability to achieve several developmental goals (South African National AIDS Council [SANAC], 2011). Reports indicate that sub-Saharan Africa bears the brunt of the HIV and AIDS burden of the world (Kironde & Lukwago, 2009; Shisana *et al.*, 2014). This region, which makes up 9% of the world population, carries two thirds of the total global HIV cases (World Health Organisation [WHO], 2007). Thus, most countries in the sub-Saharan African region have generalised HIV epidemics with a prevalence exceeding 14% (Lingappa *et al.*, 2008; Eyawo, de Walque, Ford, Gakii, Lester & Mills, 2011). To respond to this pandemic, most countries in the world adopted several approaches

to curb the scourge of HIV/AIDS. Some of the approaches implemented include the provision of condoms, offering of HIV counselling and testing, provision of antiretroviral treatment, promotion of medical male circumcision and health education (WHO, 2012).

South Africa, as one of the countries severely affected by HIV/AIDS, with an estimated 6.4 million of its inhabitants living with this infection (Shisana *et al.*, 2014) also responded to the call to address HIV/AIDS. One of the strategies utilised was the establishment of the South African National Aids Council (SANAC), which, in turn, developed an HIV/AIDS National Strategic Plan (2007-2011) in 2007. The National Strategic Plan was revised again in 2011 and the vision of the Joint United Nations Programme on HIV and AIDS (UNAIDS) was adopted (Shisana *et al.*, 2014). The adopted vision focuses on the goals of zero new HIV and TB infections; zero new HIV infections due to vertical transmission; zero preventable deaths associated with HIV and TB; and zero discrimination associated with HIV and TB (UNAIDS, 2011; Shisana *et al.*, 2014). The National Strategic Plan on HIV, STIs and TB provides guidance on how HIV/AIDS programmes should be implemented in South Africa, in order to achieve the zero new HIV infection by the year 2015 (SANAC, 2011).

For proper implementation of the strategic plan, since South Africa has nine provinces, a framework to ensure effective delivery of programmes for HIV/AIDS was developed by the National Department of Provincial and Local government (DPLG) as a mandate from the National Strategic Plan (NSP) (DPLG, 2007). The principal remit of this framework was to facilitate effective delivery of HIV/AIDS programmes in the provinces and district municipalities. To achieve this, provinces and municipalities were tasked to establish AIDS councils to facilitate coordination of HIV and AIDS programmes. The initiative mandated political leadership at district municipality level to drive the coordination.

Despite this, coordination of HIV and AIDS programmes remains problematic, with reported inconsistencies within provinces, districts and across the local government functions (Ugu, 2007). This was shown by variations in HIV programmes and prevalence of HIV among the provinces of South Africa. KwaZulu-Natal (KZN), one of the nine provinces in SA, has the highest proportion of people living with HIV and AIDS (PLWHA). The rates have been increasing gradually since 2002. For example, in 2010, the HIV prevalence was 15% (Health and Welfare 2011). In 2012, the prevalence had increased to 16.9% (Shisana *et al.*, 2014).

This escalation of HIV and AIDS in KZN has sparked the vast response to the HIV and AIDS pandemic by several sectors in the province, both from governmental and non-governmental organisations. This has generally resulted in the fragmentation and duplication of services, which, in turn, has resulted in poor

mobilisation of resources (Ugu, 2007). Hence, this study which explored factors that determine effective co-ordination of HIV and AIDS programmes in Ugu District Municipality in KZN Province.

Methodology

Research Setting

The study was conducted in Ugu District Municipality, which is one of the ten district municipalities in KZN. Ugu District Municipality has an estimated population of 715 000 (Ugu, 2012). The district has had a gradual increase in PLWHA over the last ten years. For example, it is estimated that less than 100 000 people were HIV-positive in 2004 compared to an estimation of 169 000 by the end of 2009 (Ugu, 2012). HIV and AIDS has become the leading cause of deaths in Ugu accounting for 54% of all deaths in the province. The number of HIV and AIDS related deaths increased cumulatively by 30% between 1996 and 2004 (12% of deaths in 1996 to 54% of all deaths in 2004).

Design

A descriptive correlation design was used to identify factors that determine the coordination of HIV and AIDS programmes in Ugu District Municipality. The study used a non-experimental technique to collect data, allowing the respondents to raise their own opinions, to explore the strength of relationships of coordination of programmes of HIV and AIDS with management support, enabling policies, human resources and political commitment.

Sampling

The study population comprised of a total of 260 Community Based Organisations (CBOs) providing services for HIV and AIDS in Ugu District Municipality. There are six municipalities with different numbers of CBOs. A stratified quota random sampling was used to ensure that all CBOs for each municipality were proportionally represented. The determination of the sample size was based on the sample size formula, following advice from a statistician. The sample size, population values were transposed into the following formula: Sample Size Needed = Z^2 - P (1 -P) / I^2, where Z is the Z-score, P is the proportion and I is the confidence interval. A total of 239 respondents participated in the study.

Data collection

Data were collected by two trained data collectors, recruited for their experience and interest. They collected data in consultation with experienced researchers. A self-administered questionnaire designed and piloted by the researchers was used

for data collection. A Likert-type scale was used to elicit responses to some attitudinal questions and coordination of programmes for HIV/AIDS. The scale had five responses, namely strongly agree, agree, neither agree nor disagree, disagree and strongly disagree. The instrument facilitated numerical data analysis using statistical methods. A pre-test study was conducted five days before the actual data collection phase to identify all possible sources of errors before the study. A total of 239 questionnaires were distributed in June 2013 and a 100% response rate was achieved.

Data analysis

Descriptive and inferential data analyses were carried out on the primary data using the Statistical Package for the Social Sciences (SPSS version 20). Frequency tables and cumulative percentages were used similarly to test for means. Descriptive statistics techniques were also used to tabulate the frequency of counts, means and standard deviations in analysing the demographic data of participants. Inferential statistics were produced using statistical procedures, which allowed the researcher to test relationships and differences.

Ethical considerations

Ethical Approval to conduct the study was obtained from the University of South Africa Higher Degrees Research Ethics Committee (Ref number: HSHDC/107/2012). Permission and authority to conduct the study was granted by the Council of Ugu District Municipality and also the CBO forum. The purpose of the study, issues of confidentiality, voluntary participation, respect, dignity and prevention of harm were explained to the respondents. Respondents who participated signed a letter of consent, indicating informed consent (Brink, Van Der Walt & Van Rensburg, 2009; Polit & Beck, 2012).

Validity and Reliability

External validity of the study was enhanced by selecting a representative sample using a simple random sampling probability technique. **A** large sample size was used to reduce random sampling error. A pre-test of the questionnaire was conducted with a few respondents of similar profile at another district to check for consistency, accuracy and reliability of the tool, and modifications which were deemed appropriate were done before embarking on final data collection. Besides, 10% of the data were re-entered and compared with the already entered data. Internal consistency of the questionare was determined using cronbach`s alpha, which is 0.65. Equivalence, which is agreement or degrees between two items on a scale or measure was ensured through the use of Cohen`s Kappa which was 0.72. Agreement was noted between scores of different items. To ensure internal validity of this study. The main researcher closely monitored the data collection

process. Data analysis where and interpretation used were cross-checked in advance by a competent statistician, who analysed all the data and ensured that processes were appropriate and valid.

Results

This section covers key demographic patterns of the respondents and other aspects related to HIV/ AIDS coordination.

Key Demographic Patterns

Two hundred and thirty-nine (239) completed questionnaires were collated. The respondents were all from six municipalities across Ugu District Municipality, KwaZulu Natal, namely Umuziwabantu, Hibiscus Coast, Ezinqoleni, Umzumbe, Umdoni and Vulamehlo.Respondents' ages ranged from 21 to 69 years old with a mean respondent age of 36.21 years. Respondents between the ages of 32 and 42 years were the most represented across each of the municipalities and they represented 37.2% (n=89) of all the respondents.

The representation of respondents by gender shows a disproportionately high representation of women (74.1%; n= 177) as compared to men (23.9%; n=62). Each local municipality had nearly twice as many female respondents as their male counterparts as indicated in Figure 1.

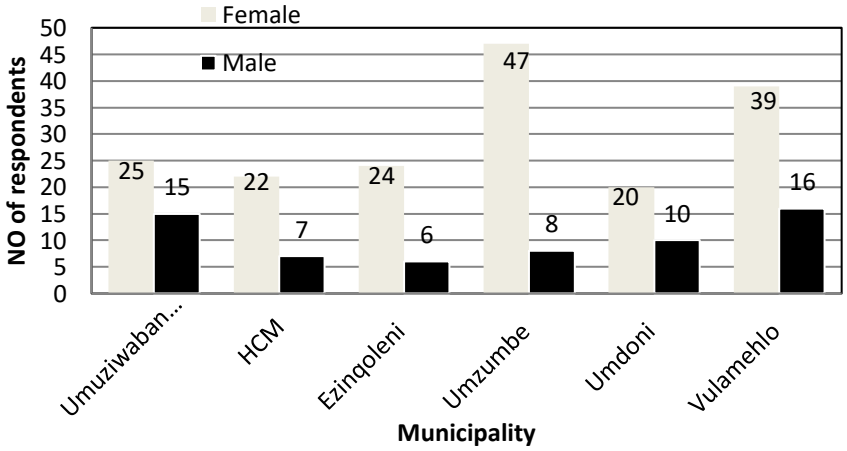

Figure 1: Gender distribution in the six municipalities (n=239)

The level of prior education was assessed across all the respondents from the different CBOs within the different municipalities. Most of the respondents (58.4%; n=134) were educated to certificate level. In most instances, the identified certificate related to their specific work on HIV and AIDS and had been facilitated

by their employing CBOs. 35 of the 239 respondents (14.6%) had not progressed beyond secondary school and had not completed matric. The representation of respondents with tertiary qualifications reflects a progressive reduction from one level of education to the next with the lowest representation being those with doctoral qualifications.

Respondents' highest level of qualification is an important variable that can have an influence on a number of factors related to respondents' participation within the study. Most notably, respondents' educational background was cross-referenced with their positions within their places of employment. Figure 2 offers a summative overview of the current positions of respondents within their organizations.

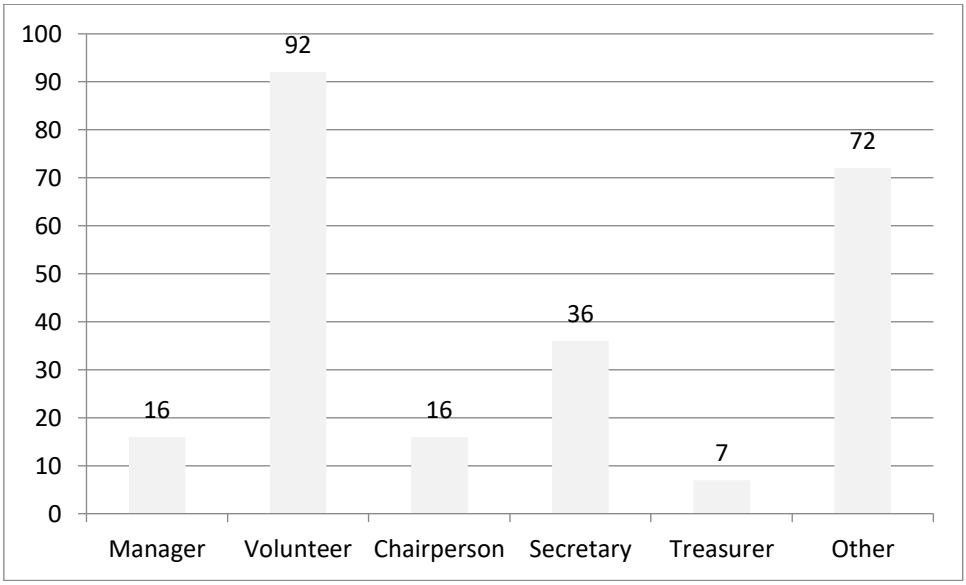

Figure 2: Different groups/posisions within the study respondents (n=239)

Volunteers (38.3%; n92) were the highest represented group across all the municipalities, followed by non-designate community support workers (n=60), who broadly offered similar support as volunteers but differed by virtue of being employed in salaried positions. It is noteworthy that the third most represented group of respondents was that of administrative staff, that is secretaries who made up 15% of the respondent group.

The spread of positions among respondents broadly mirrored the findings relating to the educational levels of respondents. For example, many of the volunteers were within the groups of individuals who had not completed matric and/or were in possession of certificate-level qualifications they had attained through work-based training opportunities.

Aspects related to HIV and AIDS coordination

This section addresses aspects such as knowledge of existing programme of coordination, period of operation in HIV and AIDS services, information and update about the HIV and AIDS programmes, educational qualifications of HIV and AIDS programme manager, and chairing of HIV and AIDS meetings.

Knowledge of existing programme of coordination

In addition to specific demographic factors that describe the respondent group, respondents' knowledge about the existence of co-ordination programmes, their length of involvement with HIV and AIDS coordination and how they engaged with these were explored simultaneously with a number of service-related factors.

Period of Operation on HIV and AIDS Services

As indicated in below, the majority of organisations that provide HIV and AIDS services have been in operation within the Ugu District Municipality in excess of three years (64%; n=160) None of the organizations had provided services for less than a year. This provides important background with regards to how familiar each organization was with the district it was serving.

Beyond a determination of the organisation's level of stability in service provision within the Ugu District Municipalt, data on respondents' familiarity with local programmes for HIV and AIDS coordination was collected with a particular focus on respondents knowledge about coordination, how they keep themselves abreast with developments in the field, the frequency of updates provided about service changes and additional factors that they perceived to be important to coordination.

In assessing the level of knowledge about coordination services, respondents were specifically questioned in two areas. First, respondents' familiarity with the HIV and AIDS coordination programme within their municipality was assessed through self-reporting by respondents. Their responses revealed that 79% (n=189) felt that they were adequately informed about key aspects of the coordination programme in their locality (See Table 1 below for full overview of responses).

Respondents showed varying degrees of confidence in their knowledge about co-ordination. Confidence was not consistently reflected by the respondents' self-evaluations of their knowledge about the key aspects related to the coordination aspects within their local programmes for HIV and AIDS. Nearly half of the respondents (46%; n=110) indicated that they believed their knowledge about programmes for HIV and AIDS coordination was less than adequate. Only 9.6% (n=23) of all the respondents indicated that their knowledge about HIV and AIDS coordination was more than adequate.

Table 1: Respondents' knowledge about coordination of programmes in Ugu District (n=239)

Local Municipality	No of Questionnaires Distributed	No of Responses on the item	%	Very Poor	Poor	Neutral	Adequate	Above Expectations
Umuziwa	40	40	100%	2	3	5	27	3
Hibiscus Coast	29	29	100%	1	1	9	13	5
Ezinqoleni	30	30	100%	0	8	10	10	2
Umzumbe	55	55	100%	4	18	16	9	8
Umdoni	30	30	100%	2	5	12	10	1
Vulamehlo	55	55	100%	3	4	18	23	7
Total	**239**	**239**	**100%**	**10**	**36**	**65**	**65**	**23**

Information and update about the HIV and AIDS programmes

It is important to determine the method(s) by which respondents were updated and informed about programmes, in order to develop a clearer understanding of respondents' knowledge about HIV and AIDS coordination. The majority of the respondents (n=95; 39.7%) indicated that the primary source of information about programme coordination was sourced directly from their place of primary employment. A similar number of respondents identified external workshops, AIDS Council meetings, the Local AIDS coordinator, and other organisations as sources of information about HIV and AIDS coordination programmes. Outside of these potential sources of information, 58.9% (n=141) confirmed that they had received the most recent updates within the last 12 months.

The process of accessing knowledge about updates on HIV and AIDS coordination can be done in two ways, that is respondents either passively receiving the information or proactivity seeking out updates on HIV and AIDS coordination. With respect to the latter, respondents' self-reports show that less than half (41%; n=98) of the respondents confirmed that they had attended update meetings organised by the municipality for HIV and AIDS coordination.

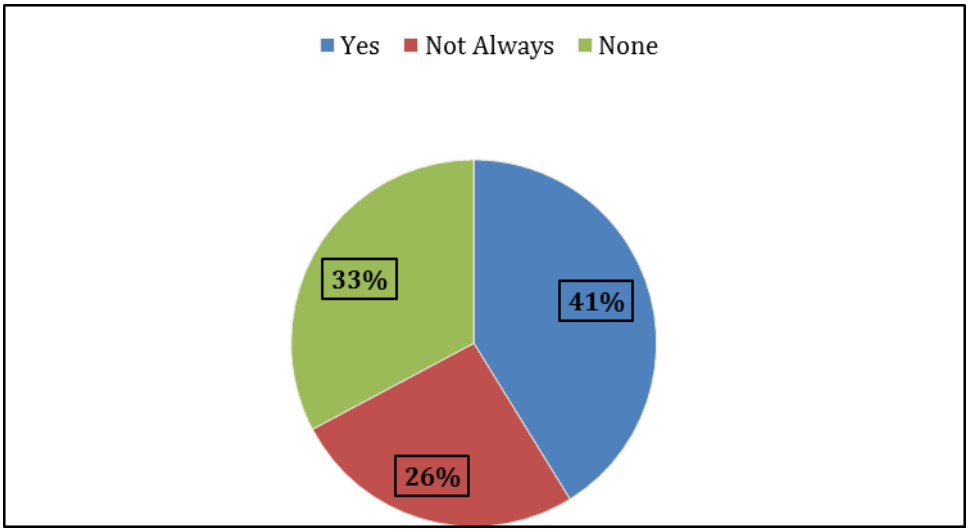

Figure 3: Respondents' attendance in HIV and AIDS meetings organised by Ugu district municipality (n=239)

These patterns do not only offer insights into factors that impact respondents' access to knowledge about HIV and AIDS, but they are also equally important for clarifying the reasons that may have contributed to the non-attendance of respondents to the pre-arranged update meetings. "Lack of time" (13.4%); "lack of material" (7.1%); "existence of a concurrent emergency" (5.9%); "forgetfulness" (2.5%); "lack of awareness about updates" (5.9%) and a "general lack of belief in the value of update meetings" (2.9%) were the reasons given by the respondents for not attendeing update meetings arranged by the local municipalities. In addition to exploring the influence of respondents' knowledge on HIV and AIDS coordination, data collection focused on a number of service-design factors and the extent to which they contributed to the efficiency of HIV and AIDS coordination.

Educational qualifications of HIV and AIDS programme manager

With regard to programme management, one of the areas that was specifically clarified related to respondents' views about the educational qualifications they thought most appropriately prepared programme management for effective management of HIV and AIDS programmes.

Possession of a "degree in Social Work or Community Development" was most frequently identified (31.3%; n=75) by respondents as the recommended qualification for managers of HIV and AIDS programmes followed by "Matric with a Nursing Qualification" (21.3%; n=51) and Matric with a Development Studies diploma (20.5%; n=49). In contrast, only 7.5% (n=18) respondents

identified the sole possession of a matric qualification as an appropriate qualification for managers of HIV and AIDS coordination services. Of interest to note is that the possession of higher level qualifications, masters and/or doctorate, was not specifically identified as a necessitate for the role of a programme manager (Figure 4).

(Insert Figure 4: Respondents view regarding most appropriate qualification level for Coordination (n=239))

Chairing of HIV and AIDS meetings

Respondents were asked to offer their opinions regarding the responsibility for chairing the HIV and AIDS council meetings. These meetings serve as an important arena for providing updates to programme workers and managers about best practices and policy requirements required to facilitate the effective oversight of HIV and AIDS programmes. As such, the responsibility for chairing these meetings may arguably be seen as important as it ultimately identifies the individual(s) or organization that will establish priorities for effective coordination.

Of the 239 respondents who responded to this question, the majority (n=106) were of the opinion that the district Mayor and/or his/her deputy were the rightful individuals to assume the chairing responsibility of the HIV and AIDS Council meetings. Other potential alternatives offered by respondents included; (1) municipal management (n=22); (2) Chairperson of the forum for CBOs (n=50); and (3) A representative of the people living with HIV and AIDS (PLWHA) (n=52). The latter finding is particularly important because it underscores the need to acknowledge that service-users also have useful skills to contribute.

Discussion

The study explored coordination as an approach used to facilitate processes for joint planning and multi-sectoral responses to HIV and AIDS. In describing the programme currently implemented in Ugu District Municipality, the researcher emphasised that a coordinated response is vital to mitigate impacts of HIV and AIDS at local level. The response calls for a coordinated multi-sectoral action plan to achieve integrated service delivery to communities.

Local government is increasingly becoming vital in facilitating the coordination role. Whilst the national and provincial initiatives are important, implementation and provision of services takes place at local district level. Municipalities constitute the government at local level, and are perceived as central players of focus. For successful coordination of the HIV/AIDS response, the ‘Three in Ones Principle’ should be adhered to. The principle is based on three pillars, namely (i)

One agreed HIV/AIDS Action Framework that provides the basis for coordinating the work of all partners, (ii) One National AIDS Coordinating Authority, with a broad based multi-sector mandate, and (iii) One agreed country level Monitoring and Evaluation System (UNAIDS, 2011). The effective use of these pillars can contribute to self-coordinating entities, well-coordinated and effective programmes.

The support of leadership is critical to ensuring a widespread and sustainable HIV and AIDS response at local level. Political leadership is not simply enough. Visible support and commitment of political and administration leadership is critical for effective coordination. It has to be supported by a strong multi-sectoral team with technical, administrative and managerial capacity, failing which, the political responses will be frustrated. Political commitment should not be limited to public speeches which focus on awareness messages.

It means leadership, taking a visible role in owning and driving the programmes for HIV and AIDS. Indicators of such commitment would include role clarification processes for all political leaders at district level, a political head such as the Mayor driving or being the champion, a local strategy for interventions, allocation of relevant resources, issues of HIV and AIDS mainstreamed in the core business of the municipality, and being a permanent item in the Integrated Development Plan of the municipality. To affirm this, the South African Local Government Association (SALGA) (2008) also emphasises the critical role of local leaders, who must also be personally committed to an effective HIV response.

HIV and AIDS matters require immediate attention; they need to be appropriately attended, without any lengthy red tape processes and unwarranted bureaucracy. A dedicated secretariat for HIV and AIDS which is an office located at the highest administrative office in the district municipality has been established as a major positive factor for HIV and AIDS coordination to provide district wide support. A competent official, with relevant academic background and skills to manage the programme is critically important for effective coordination. There is a call for National Government policies to clearly indicate willingness to develop a public policy, high level leadership, a multi-spectral approach and a development perspective (McGrew & Poku, 2007).

This recommendation calls for a strong leadership including political will at the highest level. Government needs to take the lead in fostering a supportive environment and providing a framework for action that works both horizontally (with government, business and civil society) and vertically (at international, national and community level). Adherence and compliance enabling policies would enable role players to develop practically sound terms of references to guide performance. This practice would yield good governance practices.

Terms of reference would provide guidelines for standardised operating procedures. Key drivers of HIV and AIDS need to be identified at local level, such as at the district. It is at this level where interventions to address the identified challenges should be prioritised. In aligning with the Three in One principles, the development of operational plans and strategies for monitoring and evaluation should be an integrated effort, coordinated by a local government entity, such as, the municipality. Municipalities provide services for government at local level. They are ideally placed to ensure compliance to set standards by facilitating factors that determine coordination of programmes for HIV and AIDS.

Proper coordination requires multi-sectoral response. The approach enhances joint planning by various stakeholders for integrated service delivery, in order to achieve a common understanding. The strategy is used by government institutions at district and local levels to facilitate an enabling environment that will address the HIV and AIDs pandemic. Every level of society should be involved and partnerships need to be developed between sectors responsible for interventions. Different partners bring different strengths and experiences of partnerships and development, and best practices in multi-sectoral responses to be shared. The co-ordination role of local government as a central player for support is over emphasized (UNAIDS, 2011). This principle would ensure a shared vision that would enhance local government's input into policy development and inclusion of vulnerable groups

Limitations of the study

CBOs that have only been operational for less than a year and, those which are not included in the data base of Ugu District Municipality were not included in the study. The study was conducted in Ugu District Municipality, an area with an existing programme of coordination. The municipality has a dedicated office and relevant infrastructure in place, compared to other municipalities. Respondents were familiar with the phenomenon addressed in the study. This may limit the generalisation of the findings to the whole country.

Conclusion

Participants have limited Knowledge of existing programmes of coordination. The length of time they had worked in HIV/AIDS programmes differed. Variations were also identified in relation to qualifications and experiences in coordinating HIV/AIDS programmes. There is inconsistency in receiving HIV/AIDS related information. All these resulted in ineffective co-ordination of HIV and AIDS programmes in Ugu District Municipality. A paradoxical finding of this study is that interest and participation in HIV and AIDS programmes remains high despite the perceived problems with coordination. With the high prevalence of HIV and AIDS in South Africa, coordination at local level appears to be of benefit as it

creates an enabling environment for implementers and greater access to services for the general public at community level. Lack of coordination strategies is likely to increase challenges, especially in such a highly HIV prevalent society. Duplication of services, fragmented interventions, and poor management of resources are some of the risks or challenges that will increase, and such increases may have a negative impact on co-ordination of HIV and AIDS services.

Recommendations

It is recommended that there should be relevant support structures, policies and processes to ensure effective coordination of HIV and AIDS responses in municipalities in South Africa. This would be possible if the 'Three in Ones Principle' is implemented. This principle advocates for one coordinating structure, one guiding strategy and one framework for monitoring and evaluation at all levels. There is need for further studies which would explore the contributions and the role of donor agencies and other partners who provide services from outside the district.

Acknowledgments

The authors are grateful to the Council of Ugu District Municipality and the CBO forum for granting them permission to conduct the study, as well as all the CBO members who participated in this study.

References

Brink, H., Van Der Walt, C. & Van Rensburg, G. (2009). *Fundamentals of Research Methodology for Health Care Professionals* (2nd ed.). Cape Town: Juta.

Burns, N. & Grove, S.K. (2013). *The Practice of Nursing Research, Appraisal, Synthesis and Generation of Evidence* (7th ed.). St Louis: Saunders.

Eyawo, O., de Walque, D., Ford, N., Gakii, G., Lester, R.T. & Mills, E.J. (2010). HIV status in discordant couples in sub-Saharan Africa: a systematic review and meta-analysis. *Lancet Infectious Disease*, 10, 770-777.

Kironde, S., Lukwango, J. (2009). Corporate response to the HIV/AIDS epidemic in Uganda time for a paradigm shift? *African Health Sciences,* 2 (3), 127-135.

KZN (2010). *HEALTH, KwaZulu-Natal. Strategic Plan 2010 – 2014.* Durban, South Africa: Government Printers.

Lingappa, J.R., Lambdin, B., Bukusi, E.A., Ngure, K., Kavuma, L., Inambao, M., et al. (2008). Regional Differences in Prevalence of HIV-1 Discordance in Africa and Enrollment of HIV-1 Discordant Couples into an HIV-1 Prevention Trial. *Plos One, 3*(1). (Online). At doi: 10.1371/journal.pone.0001411.e1411. June 2015.

Macnee, C.L. & McCabe, S. (2008). *Understanding Nursing Research: Reading and Using Research in Evidence-based Practice* (2nd ed.). Philadephia: Lippincott Williams and Wilkins.

McGrew, A., & Poku, N. (2007). *Globalization, Development and Human Security*. Cambridge, U.K: Polity Press.

Polit, D.F. & Beck, C.T. (2012). *Nursing Research: Generating and Assessing Evidence for Nursing Practice* (9th ed.). Philadelphia, PA, USA: Lippincott Williams &Wilkins.

SALGA (2008). *Country Guidelines on HIV and AIDS for Local Government***.** Pretoria: Government Printers.

Shisana, O., Rehle, T., Simbayi, L.C., Zuma, K., Jooste, S., Zungu, N., Labadarios, D., Onoya, D. *et al.* (2014). *South African National HIV Prevalence, Incidence and Behaviour Survey, 2012*. Cape Town, HSRC Press.

South African National AIDS Council (2007). *HIV & AIDS and STI National Strategic Plan for South Africa 2007-2011*. Pretoria: SANAC.

South African National Aids Council (2011) *National Strategic Plan on HIV, STIs and TB 2012–2016.* Pretoria: Government Printers.

Ugu District Municipality (2007). *Integrated Development Plan*. Port Shepstone, KwaZulu-Natal, South Africa: Ugu District AIDS Council.

Ugu District Municipality (2008). *Strategy for HIV and AIDS 2007-2011*. Port Shepstone, KwaZulu-Natal, South Africa: Ugu District AIDS Council.

Ugu District Municipality (2012). *Strategy for HIV and AIDS 2012-2016*. Port Shepstone, KwaZulu-Natal, South Africa: Ugu District AIDS Council.

UNAIDS (2011). *Global HIV/AIDS response: epidemic update and health sector progress towards universal access: progress report 2011. (Online). At* http://www.unaids.org/en/media/unaids/contentassets/documents/unaidspublication/2011/20111130_ua_report_en.pdf. June 2015)

World Health Organisation (2012). *Guidance on Couples HIV Testing and Counselling - Including Antiretroviral Therapy for Treatment and Prevention in Serodiscordant Couples Recommendations for A Public Health Approach*. Geneva: WHO.

Working Group on Higher Education (2006). *Higher Education Institutions in African Responding to HIV/AIDS.* ACCRA**:** WGHE.