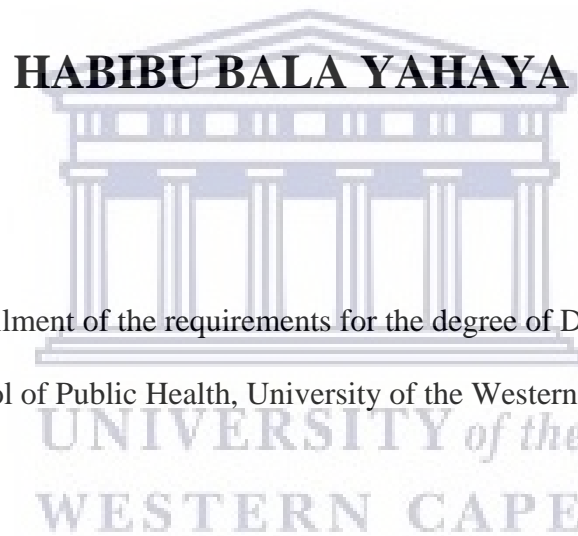


**The effects of the devolution of HIV treatment programmes
from external to local non-governmental organisations: a
mixed-methods study in Kano, Northern Nigeria**



A thesis submitted in fulfilment of the requirements for the degree of Doctor of Philosophy in the
School of Public Health, University of the Western Cape.

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KEY WORDS

Organisational readiness for change

Devolution

Organisational capacity

Organisational climate

Anti-retroviral treatment performance

Ownership

Sustainability

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ABSTRACT

Introduction: The devolution of health programmes from external to local non-governmental organisations (NGOs) is a relatively new phenomenon in sub-Saharan Africa. The special characteristics of the devolution of complex programmes pose both managerial and employee challenges, which previous change management research has not adequately addressed. Furthermore, earlier research has mainly viewed organisations as isolated and independent entities, whereas programmes that aim at large-scale interventions, such as the President’s Emergency Plan for AIDS Relief (PEPFAR) projects, are embedded in their organisational context. Ineffective implementation of the PEPFAR antiretroviral therapy (ART) devolution process is a potential threat to programme sustainability in Nigeria.

The aim: This study undertook to examine the effects on health facilities’ ART performance of the devolution of funding for and oversight of Nigeria’s ART programme from international PEPFAR implementing partners to local NGOs in Kano State, Nigeria.

Methods: A concurrent, triangulation mixed-methods design was used. The study explored the PEPFAR 1 (2005-2010) and PEPFAR 2 (2011-2016) periods of ART scale-up and transition; the opinions of key actors involved in managing the programme’s interaction with the organisational environment; and their readiness for devolution. The primary sources of data for ART performance assessment were hospital records for the PEPFAR 1 and 2 periods. The sources of data for readiness included ART sites’ employees (n=199) who participated in the survey; a sub-sample of

employees (n=19); and managers (n=5) that were interviewed for their respective perspectives of the devolution implementation.

Findings: The results showed that employees perceived ART devolution implementation as a failure. The predictors of employee readiness such as involvement, supervision, training, communication, welfare, flexibility and motivation were scored low for post-devolution.

Performance along human immunodeficiency virus (HIV) care continuum for HIV Counselling and Testing (HCT) uptake; the number of clients enrolled on HIV treatment; and HIV treatment outcomes have also deteriorated post-devolution. HIV support group palliative/home-based care and many laboratory and preventive services ceased. While organisational performance was positively and significantly correlated with devolution readiness, employee levels of education were, however, inversely and significantly correlated to devolution readiness.

Other demographic variables, i.e. gender, age, and marital status were found to not have a significant relationship with devolution readiness. Managers indicated that progressive cuts in PEPFAR funding, weak policy environment/ownership, low political will, poor coordination, dependency on donors, verticalisation of PEPFAR programmes, economic recession within Nigeria, and reduced post-devolution human resources capacity were the factors associated with decline in ART performance and poor devolution readiness.

Conclusions: The study contributes to the theoretical understanding of how ART programmes are initiated and how the devolution evolves within the organisational climate context. The findings shed light on the devolution failure and its consequences on ART programme performance. Results

also extend the concept of devolution readiness using managers' experiences to highlight factors associated with the general decline in ART performance during the post-devolution era.

For successful ART programme devolution, the findings direct attention to a review of the national strategic health plan to strengthen effective integration of donor programmes into the health systems, strong coordination, ownership/political will and increased budgetary allocation to AIDS control programmes. Inter-sectoral collaboration and high-level advocacy by key stakeholders, including civil societies, are required to achieve sustainable ART programme goals. A design is proposed by key programme managers for successful devolution implementation.



DECLARATION

I declare that this work, “*The effects of the devolution of HIV treatment programmes from external to local non-governmental organisations: a mixed-methods study in Kano, Northern Nigeria*” is my own work. I declare that this work has not been submitted for any degree or examination in any other university, and that all sources I have used or quoted have been indicated and acknowledged by complete references.

Student: **Habibu Bala Yahaya**

Signature: _____

Date: _____



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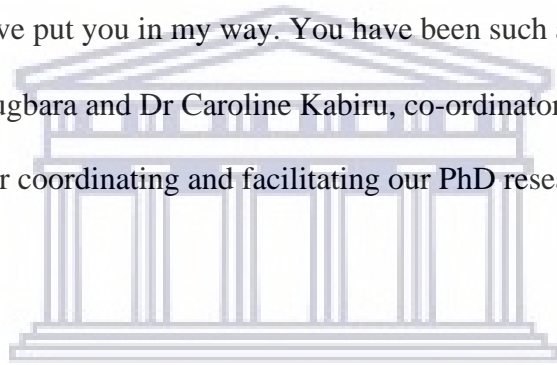
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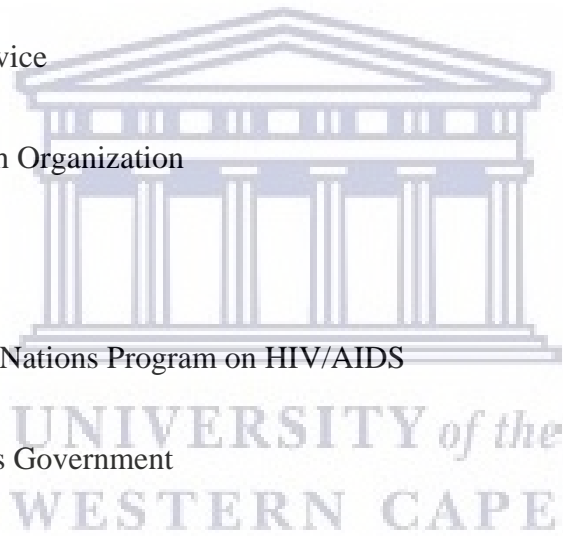
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LIST OF ABBREVIATIONS

ARVs	Antiretrovirals
ART	Antiretroviral treatment
BMC	Bio Medical Central
CDC	American Center for Disease Control
FHI 360 ⁰	Family Health International 360 ⁰
FGD	Focus Group Discussion
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
GHI	Global Health Initiative
GoN	Government of Nigeria
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
IHVN	Institute of Human Virology Nigeria
IP	Implementing Partner
IIPs	International Implementing Partners
LIP	Local Implementing Partners
KMO	Kaiser-Meyer-Olkin
KII	Key Informant Interview
MAP	Multi-Country HIV/AIDS Program

MCC	Millennium Challenge Corporation,
MOH	Ministry of Health
NACA	National Agency for the Control of AIDS (<u>formerly</u> National Action Committee on AIDS)
NGO	Non-Governmental Organization
ORC	Organizational Readiness for Change
PEPFAR	(US) President’s Emergency Plan for AIDS Relief
POS	Point Of Service
WHO	World Health Organization
WB	World Bank
UNAIDS	Joint United Nations Program on HIV/AIDS
USG	United States Government
USAID	United States Agency for International Development



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CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND

This thesis describes the ways in which the global moves of the devolution of antiretroviral treatment (ART) programmes from external to local NGOs are being rolled out, and potentially leading to more country ownership and sustainability. It looks at the specific case of the contemporary President's Emergency Plan for AIDS Relief (PEPFAR) global reform in Nigeria, how the devolution is carried out, and how the effects of devolution on ART performance might be in evidence. The thesis applies the Competing Values Framework of organisational readiness to change to examine the effects of devolution on employee readiness and ART performance. The Competing Values Framework has been found to have a high degree of congruence with well-known and well-accepted categorical schemes that organise the way people think, their values and assumptions, and the ways they process information (Mitroff et al., 1979).

Nigeria's health sector is, in many ways, slow to implement change and innovation. The case of ART programme devolution can be used to represent a context that is complex in terms of sustainability and ownership. It offers an opportunity to explore how organisational change readiness affects ART performance, shapes forms of practice, and the extent to which organisational 'technologies from external to local NGOs' might be coordinated despite local funding and institutional challenges. This research empirically investigates the relationships of employees to different components of organisational change readiness domains, and the effects of their readiness on ART programme performance in Kano State, Nigeria. A brief description of the background, problem Statement and rationale of the study is provided in this chapter.

Devolution of donor-funded health programmes to host governments is recognised as an important step in achieving ownership, programme performance and sustainability (Shediac-Rizkallah & Bone, 1998). Organisations are continually confronted with the need to implement changes in strategy, structure, process and culture (Armenakis et al., 1993). This is due to the world becoming increasingly complex as a result of the greater interdependence among world economies. In addition, the world has become increasingly dynamic due to the information explosion and worldwide communications (Zeffane, 1996). Moreover, the levels of donor assistance for health alone are unlikely to increase at rates needed to meet ambitious new targets as encapsulated in the Sustainable Development Goals for 2030 (Resch & Hecht, 2018). Although Nigeria adopted a 'test and treat' policy in 2015, which means that anyone with a positive diagnosis is eligible for treatment, this is far from a reality due to the economic challenges being faced by the country (UNAIDS, 2018b). Weaknesses in the health system exist and create a barrier to many people accessing or staying on treatment (NACA, 2018). Even when ART can be accessed, drug supplies are known to run out and cause stockouts (ibid). The COVID-19 pandemic is currently worsening the situation. Results showed that among 22 countries with trend data on numbers newly initiating treatment, all countries except Jamaica showed declines for at least one month or more relative to the pre-COVID-19 baseline of January 2020 (UNAIDS, 2020a). According to a survey conducted by WHO, 24 countries reported having either a critically low stock of ARVs or disruptions in the supply of these life-saving medicines due to the COVID-19 pandemic. The survey forecasted that a six-month disruption in access to ARVs could lead to a doubling in AIDS-related deaths in sub-Saharan Africa in 2020 alone (WHO, 2020). A failure of suppliers to deliver ARVs on time and a

shut-down of land and air transport services, coupled with limited access to health services within countries as a result of the pandemic, were among the causes cited for the disruptions in the survey.

Despite large-scale organisational changes occurring with increasing regularity, these changes do not always achieve their intended aims (Bughin et al., 2011; De Meuse et al., 2011). In order to realise a sustainable, flourishing future for humanity, organisations require worldwide change in social, political, and economic systems (Starke, 2014). Effective strategies for attaining real devolution implementation in Nigeria remain unclear. According to UNAIDS (2015) estimates, Nigeria ranked second in the world among countries with the highest burden of human immunodeficiency virus (HIV) infections, with 3.5 million people living with HIV (PLHIV) and a prevalence rate of 3.1%. Between 2012 and 2016, development assistance for HIV/AIDS dropped by 20%, resulting in declines in total HIV/AIDS financing in low-income countries, where external funding constitutes 85% of all HIV/AIDS spending (Dieleman et al., 2018). Private funding sources within this period ranged from 0.5% to 1.6%. In absolute figures, HIV spending by public sources ranged from approximately US\$97.8 million in 2009 to approximately US\$123.0 million in 2012 (National Agency for the Control of AIDS, 2014).

HIV expenditure by international sources steadily increased from US\$317.2 million in 2009 to US\$445.2 million in 2012. Hence, funding for HIV treatment in Nigeria has been donor driven mainly by the United States government through PEPFAR funding as part of a global response to fight the disease. A Federal Ministry of Health demographic survey report (Nigeria Federal Ministry of Health, 2013) indicates that PEPFAR funding accounted for more than 77% of the total cost of HIV funding in 2010. Other donors included the World Health Organisation (WHO)

funding of HIV programmes and the Global Fund. PEPFAR spent more than US \$2.5 billion in Nigeria from 2005-2010.

PEPFAR has helped introduce lifesaving treatment to 7.7 million PLHIV worldwide (US PEPFAR (World AIDS Day 2014 update). In addition, PEPFAR had at the time of this study, made substantial contributions toward alleviating the global burden of HIV/AIDS with targeted efforts in sub-Saharan Africa, a region that continues to bear a disproportionate share of the global HIV disease burden (UNAIDS, 2014b). Since its inception, the programme shifted from an emergency response against a growing epidemic (PEPFAR I, from 2004–2010) to a more targeted, sustainable approach with greater country ownership (PEPFAR II, from 2010–2013). PEPFAR 3.0 (2013–2019) aimed to maximise the impact of investments by targeting evidence-based interventions for key geographic areas and populations with the highest incidence rates. Currently, the US government has decided to devolve HIV programmes, and reduce funding to many countries, including Nigeria, in order to achieve country ownership and financial responsibility. PEPFAR has implemented a nonbinding intragovernmental partnership framework (PF) to establish areas of collaboration for HIV prevention, care, and treatment programmes with government partners based on national priorities and implementation plans.

Other international funding sources of Nigeria’s HIV treatment programme included the World Bank, the United Kingdom Department for International Development (DFID), the United Nations (UN), and domestic private and public sector financing (PEPFAR, 2014). The activities of PEPFAR I implementing partners were managed by external experts from large international organisations and US-based university projects. The justification given by PEPFAR for using these

international PEPFAR implementing partners (IIPs) was their extensive technical capacities and experience. Weak government capacity has also been cited as one of the reasons PEPFAR chose to channel their funds to the IIPs rather than to public sector systems, thereby reinforcing vertical approaches (Souteyrand et al., 2008).

Since 2004, PEPFAR has invested more than US\$2.5 billion to reduce the HIV/AIDS burden in Nigeria. PEPFAR has supported the provision of specialised HIV treatment services by expanding comprehensive ART sites from 25 with 11,234 HIV clients enrolled on ART in 2005, to 516 with 491,021 clients on treatment by 2011 (United States Government Interagency Team report, 2011). A new Government of Nigeria and United States Government (2010) Partnership Framework on HIV/AIDS 2010–2015 was ratified at the beginning of PEPFAR II in line with a change in global policy to strengthen programme alignment, ownership and sustainability. Key elements of this policy change included: a paradigm shift in HIV programme funding and oversight; the transfer of implementation responsibilities from international to local partners; a reduction in the number of implementing partners; and a re-organisation of the partners' structure and scope of responsibilities.

With the inception of PEPFAR II in 2010, the programme's focus shifted from emergency response to sustainability and country ownership (PEPFAR, 2017b). Under the new policy, the structure and functions of the 66 former international implementing partners were devolved to five local partners to promote country coordination, empowerment and sustainability. The study site of this research, Kano State, is one of the states where ART programme devolution activities were particularly evident, due to the work of a large number of external NGOs during PEPFAR 1.

According to personal communication recorded by the PEPFAR Nigeria coordinator's office, the major areas affected by the change in policy were human resources for health, laboratory services, HIV clinic operations and logistics support. These capacity challenges of the local NGOs raised concerns among stakeholder groups about the sustainability of service delivery (PEPFAR, 2017a). With increasingly aggressive global targets such as the UNAIDS 90-90-90 goals, there was a concern that PEPFAR-supported programmes would not only fall short of these targets, but also lose the significant gains established in the earlier PEPFAR I era.

Kano State is diverse and has poor health and socio-demographic indices; it thus requires effective management and close monitoring of the post-devolution programme implementation to ensure its success. Nigeria's National HIV Seroprevalence Survey (2014) shows that the prevalence rate of HIV in Kano State was 2.2% (Federal Ministry of Health, 2013). A four-year review showed that 9.9% of medical admissions in the adult population in Kano State were due to HIV/AIDS-related diagnoses, with a HIV-related mortality of 38.7% and tuberculosis the most common cause of death at 33.4% (Sani et al., 2006). This finding was similar to that obtained from the University College Hospital, Ibadan, Oyo State where a 2-year review showed HIV-related admissions of 10.1% (Ogah et al., 2012).

Although billions of dollars have been invested and national prevalence in Nigeria has declined from 5.8% in 2001 to 3.1% in 2014 (UNAIDS, 2015a), the number of AIDS-related deaths went unchanged from 2005 to 2013. In addition, less than 25% of adults living with HIV in Nigeria have access to ARVs (UNAIDS, 2015a), and Nigeria's health system performance remains low with a rank of 187 out of 195 countries (Odubola , 2018) . There has been nearly a decade of implementation of the signed Partnership Framework on HIV/AIDS between the US government

(USG) and the Government of Nigeria (GON). The framework stipulates devolution of funding and oversight of PEPFAR-supported ART programmes from external to local ownership. Although the policy seeks to align USG-funded HIV/AIDS efforts with national programmes and the efforts of other international partners and civil society at the country level, it presents a complex collaboration with respect to organisational readiness for change. Nigeria continues to lag behind the rest of the `world to control the epidemic.

In sub-Saharan Africa, countries such as Nigeria increasingly face funding challenges for HIV programmes due to the rising demands of ART services and other needs from PLHIV. There are local and external socio-political and administrative change dynamics associated with ART programme implementation by NGOs. These include mergers, general instability and human resource capacity challenges that continually affect ART service delivery processes. HIV programme devolution from external to local NGOs presents a challenge for local implementing partners to re-evaluate their strategies, structure, policies, operations, processes, and culture. In this situation, organisational change (OC) is unavoidable.

It is important to note that humans have different individual life experiences, motivational levels, socio-demographic characteristics, knowledge, attitudes, support systems, values, and behavioural patterns which might involve painful learning and relearning and can create feelings of uneasiness and tension among employees. Thus, researchers and practitioners need to know as much as possible about employee readiness predictors so that management can endeavour to understand an individual's attitudes, beliefs, and behaviours towards organisational change. In addition, ART performance may be affected by the devolution processes.

Nigeria's submission to the Global Fund under its new funding model for US\$351,780,487 for additional resources was approved in November 2014 and grant-making was completed in December 2015. Unlike PEPFAR, the Global Fund has a different funding model. In the Global Fund model, countries will have access to two streams of funding. The larger and more-predictable stream is 'indicative funding' apportioned according to a Board-approved allocation methodology that is based on disease burden and 'ability to pay' (The Global Fund, 2013). The second is a competitive stream, 'incentive funding', created to reward ambitious, high-quality expressions of full demand that go beyond indicative funding and/or to leverage financing at the country level. However, a recent audit by the Global Fund Office of the Inspector General identified irregularities and the lack of proper monitoring of the implementation of several devolution activities. The Office has called for US\$785,906 to be recovered after investigators discovered significant irregularities in a renovation project of medical stores between 2011 and 2013 (Global Fund, 2015). Although the renovation of the stores was completed, the investigators found that one of the principal recipients, the Nigeria National Agency for the Control of AIDS (NACA), mismanaged the project and that the quality of the work was sub-standard.

Although PEPFAR aims to facilitate gradual implementation of the new policy to achieve smooth organisational readiness, the process was associated with massive scale down in the number of implementing partners and modifications of their programme scopes. This devolution process is likely to exert significant immediate and future effects on overall HIV programme success and possibly ART performance in Nigeria.

1.2 NIGERIA SOCIO-ECONOMY AND HIV/AIDS BURDEN

1.2.1 Nigeria: An overview

Nigeria is Africa's most populous country, largest economy, and leading oil producer (Husted & Blanchard, 2020). It has an estimated population 206 million individuals (Varrella, 2020) and a gross domestic product (GDP) of 448.10 billion US dollars in 2019 (More & Prospects, 2021). It plays a major political and economic role in Africa and wields significant influence in regional bodies such as the African Union and the Economic Community of West African States (ECOWAS). By 2050, Nigeria is poised to overtake the United States as the world's third most populous country, with a population projected to exceed 400 million (UN DESA, 2019). Bordering Benin to the West, Chad and Cameroon to the East and Niger to the North, it is an oil-rich country with many natural resources and a GDP per capita at purchasing power parity (PPP) of US\$5900 in 2017 (Aregbeshola, 2021). Nigeria has a total area of 923,768 square kilometers with about 43% of the population below 15 years of age. The country is divided into six geo-political zones namely South East, South West, South South, North East, North Central and North West. Nigeria is also a political federation with 36 states and the federal capital territory (FCT), 774 local governments and multi-ethnic groups. Nigeria's health care system is weak (NPC, 2019). A study of global health care access and quality ranked Nigeria 142nd out of 195 countries (Fullman et al., 2018).

Despite extensive investments, the country still has insufficient healthcare delivery infrastructures, poor quality health-care services, and unevenly distributed human resource capacity (Oremeyi et al., 2016). The country has an estimated 23 640 health facilities, and 85.5% of these are primary

health-care facilities(Federal Ministry of Health, 2010). Although these facilities serve the majority of the population, they are unable to provide basic and cost-effective services, especially in rural areas (Adeniyi J, Ejembi CL, Igbineosun P, 2014; Hodges et al., 2021). This poor performance is attributed to various factors including poorly equipped health facilities, insufficient staff, lack of clearly defined roles and responsibilities, inadequate political commitment, and poor accountability.

There are various sources of healthcare financing existing in Nigeria. These sources include, but not limited to tax-based public sector health financing, household out-of-pocket health expenditure, the private sector (donor funding), community-based health expenditure, and social health insurances (Eboh et al., 2016). External financing of health care includes grants and loans from donor agencies like the World Bank, the World Health Organization (WHO), Funds and Foundations among others (Oremeyi et al., 2016). In an attempt to address healthcare problems in Nigeria, governments focused on two major approaches. The first supports the neoliberal health policy that anchors its philosophy on market forces and the introduction of user fees for the provision of health services (World Health Organisation, 2011). The second promotes the continued expansion of public health centres by introducing health insurance, which is supposed to insure patients at all times, thereby expanding coverage and accessibility (Uzochukwu et al., 2018). Although external financing covers only 8% of total health expenditure in Nigeria, it represents a significant proportion of financing for polio elimination efforts, childhood vaccine programs; malaria, TB, HIV and AIDS control, and increasingly reproductive, maternal and child health programs (Ata, 2021).

1.2.2 HIV/AIDS burden in Nigeria

According to the WHO, approximately 35 million deaths have been recorded globally since the beginning of the HIV/AIDS pandemic. Seventy percent of the 37 million people that were globally infected in 2015 were from sub-Saharan Africa, with Nigeria ranking as the country with the second highest number of infected people and the highest number of infected children (UNAIDS, 2016). The trends of HIV infections among pregnant women attending antenatal care were periodically monitored through the National HIV Sero-prevalence Sentinel Survey (NHSSS), and the Integrated Behavioural and Biological Surveillance Survey (IBBSS) monitored infections for key populations (National HIV and AIDS Strategic Plan, 2018). Although HIV prevalence among adults in Nigeria was much less (2.9%) than other sub-Saharan African countries such as South Africa (18.9%) and Zambia (12.4%), the size of Nigeria's population meant 3.6 million people were living with HIV in 2016. It is estimated that almost two thirds of HIV infections in West and Central Africa in 2016 occurred in Nigeria. Together with South Africa and Uganda, the country accounts for almost half of all new annual HIV infections in sub-Saharan Africa (Report, 2017; UNAIDS, 2017b). This is despite achieving a 15% reduction in new infections between 2005 and 2016.

The annual AIDS-related deaths in Nigeria increased from 192,000 in 2008 to 217,148 in 2012 with a corresponding rise in new infections from 336,379 to 388, 864 in the same period (Federal Ministry of Health, 2015; Wanyenze et al., 2008). Nigeria has shown steady progress on increasing access to treatment for people living with HIV, with the adoption of a test and treat policy in 2016. From 2010 to 2017, the number of people living with HIV and having access to antiretroviral

therapy almost tripled, up from 360,000 people in 2010 to more than 1 million people in 2018. Despite this success, only 33% of all people living with HIV in Nigeria were receiving treatment in 2017 (UNAIDS, 2018a).

Based on findings from the 2019 Nigeria HIV/AIDS Indicator and Impact Survey (NAIIS), the national prevalence of HIV has declined significantly and was estimated at 1.4% (15-49 years), with a total estimated 1.9 million persons living with HIV in Nigeria (NACA, 2019). The rates varied across the six geopolitical zones in the country with the highest prevalence in the South Zone (3.1%) and the lowest prevalence in the North West Zone (0.6%) (NACA, 2019). Prevalence among females was significantly higher, estimated to be 1.9%, with male prevalence estimated to be 0.9%. The distribution of the HIV burden across age bands indicated 12% of persons living with HIV were between the ages of 0-14 years while 75% were between 15-49 years and 13% are 50 years and older. Viral load suppression (VLS) among PLHIV was the highest among males aged 55-64 years at 55.0% and the highest among females aged 45-54 years at 54.3%. The VLS gender disparity between females and males was greatest among those aged 25-34 years, with females aged 25-34 years (40.0%) twice more likely to have viral suppression compared to males in the same age group (20.3%).

ART implementation and its devolution must respond to local patterns and dynamics of HIV transmission and related healthcare. In a UNAID report (2014), it was stated that the best available estimates of modes of transmission indicated just over two-fifths (42%) of infections occurred among persons practising 'low-risk' sex, a sub-population that includes cohabiting or married sexual partners (Idoko, 2014). Key population (KP) groups contributed a significant portion of

new HIV infections (UNAIDS, 2014). Female sex workers (FSW), men who have sex with men (MSM) and people who inject drugs (PWID), all of whom constitute an estimated 1% of the adult population, contributed nearly 23% of new HIV infections. Roughly 20% of infections may be attributed to female sex workers, their clients and client partners alone, of which three-quarters may be attributable to brothel-based FSWs. PWID and MSM and their partners respectively contributed about 9% and 10% of the annual new infections. These KPs and their partners, who together constitute an estimated 3.4% of the adult population, contributed as much as 40% of new infections.

As indicated in the 2016 National HIV Strategy for Adolescents and Young People 2016-2020, mother-to-child transmission in Nigeria accounted for a fairly high proportion of HIV infections among adolescents age 10–19 years (NACA, 2016). Among women who gave birth from January 1, 2015, 76.5% self-reported attending at least one antenatal care (ANC) visit for their last pregnancy and 40.0% self-reported knowing their HIV status during pregnancy. Among women who self-reported their HIV status, 1.4% self-reported testing HIV positive prior to or during pregnancy. Among the known HIV-positive women, 82.6% self-reported receiving ARVs during their pregnancy. Among women who self-reported receiving ARVs during their pregnancy, 80.1% self-reported starting ARVs prior to their first ANC visit (National Agency for the Control of AIDS, 2014).

1.3 ART PROGRAMME FUNDING SOURCES

Public health programme devolution from an international donor to a host government is critical in ensuring ownership and sustainability (Shediak-Rizkallah & Bone, 1998). A country-owned

response harnesses diversified systems, financing arrangements, and hinges on the principles of shared responsibility and mutual accountability. As the introductory paragraphs have indicated, HIV financing in Nigeria is pluralistic but broadly categorised into domestic and external (international) sources. In contrast to domestic funding which includes public and private sources, external support has been more substantial and relatively stable (Idoko, 2014; LaPelle et al., 2006). The ART programme in Nigeria has been donor dependent with USG-PEPFAR driving the response via international implementing partners.

A review of national expenditure from 2009 to 2012 shows that public funding varied between 17.7% to 25.2%, whereas international funding varied between 74.7% and 82% (Idoko, 2014). Private funding sources within this period ranged from 0.5% to 1.6%. In absolute figures, HIV spending by public sources ranged from approximately US\$97.8 million in 2009 to approximately US\$123.0 million in 2012. HIV expenditure by international sources steadily increased from US\$317.2 million in 2009 to US\$445.2 million in 2012 (Idoko, 2014; LaPelle et al., 2006). Sources of external funding in Nigeria included bilateral contributions, multilateral agencies, and international non-profit and for-profit organisations, with bilateral donations accounting for the largest contribution (NACA, 2015). The two major donors were PEPFAR and the Global Fund to Fight AIDS, Tuberculosis and Malaria. Other notable donors included the Department for International Development (DFID), the World Bank Multi-country AIDS Programme (MAP) loans, the Bill and Melinda Gates Foundation, the Canadian Agency for International Development (CIDA), and the United Nations Agencies.

The Federal Ministry of Health report (NACA, 2014) indicated that PEPFAR funding to Nigeria was on the increase throughout the initial phase in which US\$2.5 billion (77% of Nigeria's HIV funding) was spent from 2004–2010 alone. International HIV assistance, the bedrock of the global response a decade ago, however had stagnated by 2015 (Kates et al., 2016). The global economic meltdown continued to affect external support, resulting in a dwindling of donor funds for HIV/AIDS. PEPFAR Nigeria's total annual budget gradually started dipping from 2012 (Olakunde & Ndukwe, 2015). In comparison, George W. Bush had poured US\$15 billion into PEPFAR during his American presidency. By 2010, under the Obama administration, funding for PEPFAR fell by 12%, putting the programme at its lowest funding level since 2007 (Gray, 2017). The largest cuts on PEPFAR funding were proposed by the Trump's administration. The Trump administration gave Congress a lengthy list of ways to cut US\$18 billion from the federal budget in an effort to offset its request for additional defence spending (Wallace, 2017). These cuts included funding for health programmes, which included PEPFAR projects.

HIV outcomes in Nigeria are among the worst in high-burden countries globally. Given the country's overwhelming dependence on international financing for its HIV response (Global Policy Watch, 2017), the likelihood of future decreases in international HIV assistance bodes ill for the scale-up of essential HIV interventions. As PEPFAR started cutting budgets in 2010 due to the policy changes, the Nigerian government is responsible for providing counterpart funding to finance the rising programme demands. However, an analysis of the external sources from 2009 to 2012 shows a steady decline in the percentage of government funding from approximately 17% to 8.2% (NACA, 2014). PEPFAR Nigeria's total annual budget has been diminishing gradually since 2012 (PEPFAR, 2015).

In an attempt to increase domestic funding, Nigeria launched a new initiative to require each of its 36 states to contribute up to 1% of their monthly allocations from the federal government to the HIV response. Nigeria also planned to increase private sector investment from 2.1% in 2014 to 10% in 2018 (UNAIDS, 2017a). Funding problems arose in 2016 following an audit of NACA by the Global Fund to Fight AIDS, Malaria and Tuberculosis. The audit found evidence of fraud and collusion amounting to US\$3.8 million, causing the Global Fund to suspend its funds (Vanguard, 2016). However, the Global Fund has reinstated its support following the creation of the Western and Central Africa catch-up plan, which saw the fund commit to providing another US\$214 million to cover an additional 215,000 HIV treatments (UNAIDS, 2018b).

The percentage of people living with HIV in Nigeria who received ART in 2014 (22%) is only about half the average for sub-Saharan Africa overall (43%). As of 2012, only 516 of all the health facilities (2%) provided ART (Idoko, 2014). Nigeria has also lagged in aligning national HIV treatment policies with scientific evidence. ART is limited to people with less than 350 CD4 cells/mm³, whereas the world has transitioned towards a test-and-treat approach as a result of the results of a clinical trial (Idoko, 2014). Estimates also show that only half of all children living with HIV have access to ART, leaving 742,000 children who are neither tested nor treated for HIV (UNAIDS, 2020b).

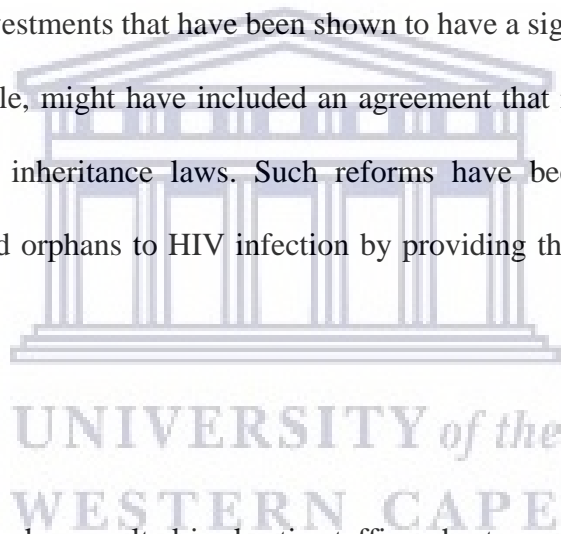
In a NACA report, Nigeria's HIV/AIDS spending data is captured for the years 2013 and 2014. It shows total expenditure of US\$723,917,352 in 2013 and US\$632,378,599 in 2014. Public domestic sources totalling US\$132,534,227 accounted for 18.3% of the total expenditure in 2013,

with a reported increase to US\$170,050,150 in 2014, representing 27% of total expenditure. International donor contributions accounted for expenditure of 80.4% in 2013 and 70.8% in 2014, with PEPFAR alone accounting for 59% and 63.7% of total expenditure per year respectively, while the Global Fund accounted for 21% and 6.5%, per year respectively (NACA, 2015).

Between the various programmes, 30% of reported investments were spent to provide HIV/AIDS care and treatment services, while 25.6% was spent on HIV prevention services. Around 19% of the expenditure, in the same year, was reported as human resources expenditure, including the public health service providers recruited by the national and state governments, as well as lay workers recruited by donors including PEPFAR. A study showed that the estimated annual average ART cost per patient in Nigeria was US\$231 and US\$334 adjusted for purchase power parity (PPP). Staff, ARVs and laboratory tests were the largest components of the unit cost (Bautista-Arredondo et al., 2018). In an overall sample of 18 health facilities in that study, ARVs represented 40% of total costs; staff represented 39%; and laboratory tests accounted for 17%. The personnel cost distribution indicated that nurses and doctors represented 40% of total staff costs, other health staff (ART personnel in direct contact with patients, such as counsellors, medical lab personnel, etc.) represented 43%, and a smaller portion (17%) corresponded to indirect staff (health facility administrative personnel).

In 2008, the US Congress passed the Tom Lantos and Henry J. Hyde Reauthorization Act (Moss, 2012) which extended its commitment to global HIV/AIDS programmes for a further five years, from 2009 to 2013 as part of PEPFAR II. President Bush urged Congress to extend PEPFAR from FY2009 through FY2013 with a US\$30 billion authorisation. It was estimated that this

contribution would support treatment for 2.5 million people, prevent more than 12 million new infections, and care for more than 12 million people, including five million orphans and vulnerable children. Some observers expressed concern about the long-term commitment that PEPFAR may require, particularly in the focus countries. As an alternative to adding focus countries, it was suggested that compacts be used between the US government and PEPFAR-recipient governments to clearly outline the scope and terms of US involvement in AIDS prevention, treatment and care and to elicit recipient government involvement, ownership and investment. Supporters of using compacts asserted that compacts may have been helpful in outlining expectations for broader development efforts and investments that have been shown to have a significant impact on health. Some compacts, for example, might have included an agreement that recipient countries would reform property laws and inheritance laws. Such reforms have been shown to reduce the vulnerability of widows and orphans to HIV infection by providing them with greater financial security.



PEPFAR funding reductions has resulted in drastic staffing shortages, and increased workloads placed on staff that were retained (Banigbe et al., 2019). The policy changes therefore, present key challenges, concerns and apprehensions from managers on how to address service delivery demands, a decline in commodity supply, and the needs of the rising number of PLHIV requiring treatment. This highlights the many downstream effects caused by the gap left between PEPFAR funding and national support when alternative funding is not sourced successfully (Vogus & Graff, 2015).

Cromer et al. (2004) contend that governments must identify ways to replace donor funding. This is difficult with even the strongest of government commitments because governments are continuously balancing competing priorities. Economic instability and increasing healthcare costs often drive health budgets below desired levels. Equity in HIV programme funding must be ensured across programmatic areas. While some programmatic areas have received considerable focus, others have been given little attention. Treatment and care, programme management and human resources account for more than 85% of HIV expenditure (NACA, 2014). Whereas expenditure on prevention and research activities has been increasing, expenditure on treatment and care is declining.

The UNAIDS catch-up plan for Nigeria, also identifies the removal of user fees as a key next step in expanding treatment coverage. Although the ARV drugs are free, patients will often be asked to pay for other services, for example running other tests. Studies have shown that these fees and high costs of travel to clinics can be a barrier to many people accessing care (Etiaba et al., 2016). Nigeria has an aim to triple treatment coverage from 2018, ensuring that 90% of the population living with HIV will be on treatment by 2021 (NACA, 2018). To reach this goal, stigma and discrimination around the virus has to be addressed, and a commitment to fostering an enabling environment for people living with HIV to come forward.

1.4 ART PROGRAMME COUNTRY OWNERSHIP AND SUSTAINABILITY

The concept of country ownership was established as a cornerstone of international assistance by the Paris Declaration on Aid Effectiveness (OECD, 2005). It requires donor countries to commit and align behind country programmes and use local systems.

Definitions of country ownership of health programmes vary, but this study is based on the Health Policy Project's definition:

Country ownership broadly indicates an end-point in a transition from a donor-led development process to one that is managed entirely by in-country stakeholders. During this transition, key stakeholders - primarily the government, nongovernmental organisations (NGOs), the private sector, and civil society - begin to take the lead in drafting and monitoring development plans and priorities, coordinating aid, and using country health systems for aid delivery (Health Policy Project, 2011).

The past two decades have witnessed a proliferation of what are commonly called global health initiatives (GHIs). These initiatives were put in place as an emergency response to accelerate the scale-up of control of the major communicable diseases - HIV/AIDS, tuberculosis and malaria (Lu et al., 2006). In 2012, a US government report referred to three GHIs - the World Bank's Multi-country HIV/AIDS Programme (MAP), the Global Fund to Fight AIDS, TB and Malaria, and The President's Emergency Plan for AIDS Relief (PEPFAR) as contributors for more than two thirds of all direct external funding to scaling up HIV/AIDS prevention, treatment and care in resource-poor countries.

The donor community has long been interested in the sustainability and fate of public health programmes after donor funding is reduced (Bossert, 1990; Case, 2005). This interest has escalated recently because of shifts in donor priorities and the resulting rapid reductions in, and often complete withdrawal of, external funding. As low-income countries began to grow economically and become middle-income countries, donor support for their HIV response began to decline and

countries transitioned towards entirely domestically-funded and domestically-implemented responses (Vogus & Graff, 2015). The process of transitioning the financing and control of large-scale health programmes from donors to local governments is not new. Among programmes funded by the US government, the transitions of large-scale health programmes have been called ‘graduations’ and have been occurring since at least the 1980s with the graduation of family planning assistance programmes in Latin America and the Caribbean (Shen et al., 2015).

Over the years, the subject of international development projects has received considerable attention from scholars and development practitioners because of the problems associated with development projects (Ika et al., 2010; Khang & Moe, 2008; Kwak & Lee, 2002; Youker, 2019). International development projects, as Kwak and Lee (2002) observed, have tended to pose special problems for project managers and have also been criticised for denying recipients of aid the ownership of the development process.

In countries currently receiving funding from two major external sources - the Global Fund and PEPFAR - both donors have made commitments to sustainability and coordinated transitions to ensure programme ownership (Bosco, 2016; The Global Fund, 2016). Strong transition plans were not in place in these countries during the initial phases of both PEPFAR and the Global Fund. This situation began to change as a result of new processes such as the Global Fund’s ‘transition risk assessments’ (TRA) and PEPFAR’s Sustainability Index Dashboard (SID) (Bosco, 2016).

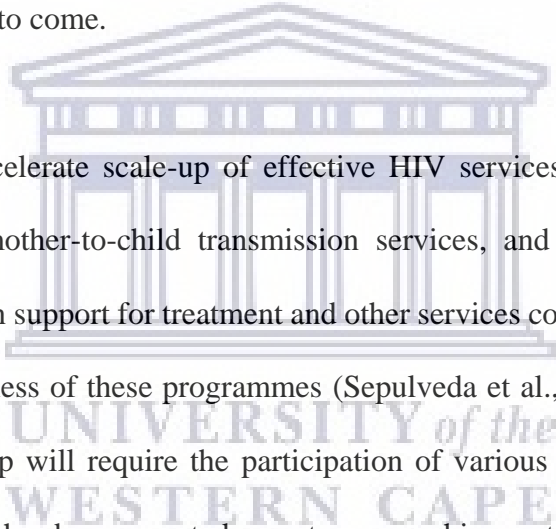
However, ending the AIDS epidemic can only occur if a robust response to HIV is sustained over time (AMFAR Research, 2015). Scientific modelling indicated that a failure to build on current

coverage levels will, by 2030, erase all the gains made to date and produce a global epidemic that is much larger and rapidly increasing (Harries et al., 2016). Experience from South Africa, Botswana, Namibia, and the Eastern Caribbean, all countries that have transitioned out of PEPFAR support, suggests that transitions must be well managed if any gains are not to be reversed. In South Africa, transition is reported to have resulted in the loss of 50,000–200,000 patients from care due to high-impact prevention activities being left unfunded (Kavanagh & Baker, 2014). Romania also witnessed an increase in HIV prevalence among people who inject drugs from a baseline of < 2% in 2006 to 53% in 2013 due to Global Fund transition (Burrows et al., 2016).

Health Policy Project, (2011) identified four key factors that are essential to ensure programme sustainability: country-level financing; policy and regulation to ensure an enabling environment; strengthening of both government institutions and non-governmental organisations (NGOs); and host government leadership and stewardship. However, the negative effects of all three global health initiatives (GHIs) have been reported, including examples of how GHIs have distracted governments from coordinated efforts to strengthen health systems and ownership. This has been done by distorting national priorities and through imposing donor implementation conditions (Stillman & Bennett, 2005). Both Malawi and Kenya reported public sector health worker shortages, which key informants believed was aggravated by selectively investing in health workers to work in GHI-funded programmes for control of focal diseases such as HIV/AIDS (Biesma et al., 2009). In Ethiopia, even though the picture was encouraging because PEPFAR was working with the government to align with its priorities, the PEPFAR programme was nevertheless accused of channelling its funds to its preferred implementing partners (Banteyerga, 2010). An evaluation commissioned by the US Congress reported that PEPFAR's commitment to country

ownership had been undermined by its rigid budget allocations to specific control measures (Sepulveda et al., 2007).

Increased country ownership is fundamental to long-term progress in global health, but too rapid a transition runs the risk of undercutting access to services and squandering the potential to accelerate progress in HIV/AIDS (Collins & Beyrer, 2013). Not all partners are ready; countries heavily affected by HIV include some middle-income countries with substantial internal resources, and some less-developed nations that will likely need sustained donor support and building of technical capacity for years to come.



Rapid transitions could decelerate scale-up of effective HIV services, including antiretroviral treatment, prevention of mother-to-child transmission services, and voluntary medical male circumcision. Major shifts in support for treatment and other services could slow the pace of scale up, and, thus, the effectiveness of these programmes (Sepulveda et al., 2007). The transition to increased country ownership will require the participation of various stakeholders in decision-making on health issues. As has been reported, country ownership must not come to mean simply government ownership; if it does, the voices of affected communities might not be heard and accountability will suffer (Health Policy Project, 2013).

However, there are concerns from government and civil society regarding the effectiveness of HIV treatment programmes run by local partners, including their readiness to manage the transformations in ART that are needed to implement the new policy. The extent of and future consequences of this devolution process on ART performance at health facilities is not clear. It is

anticipated that there will be government ownership of ART programmes through effective leadership, oversight, coordination and proper funding allocation. This requires strategic guidance, planning, experience and knowledge of the on-going change paradigm. To date, however, there is little or no empirical evidence to inform managers in Nigeria about the effects of devolution of funding, and nor is there oversight from external donors to local managers on ART performance.

Although ART drugs for HIV/AIDS patients are free at designated health facilities and ART centres in Nigeria, evidence suggests that expenditure on HIV/AIDS care and treatment can be catastrophic to patients and their households due to the cost of other components of care. Patients pay for non-ART drugs for opportunistic infections, non-routine tests, medical consultations, transportation, feeding and hospital stays (Moon et al., 2008; World Health Organisation et al., 2013). These costs can have impoverishing effects on some households and hinder patients from getting the necessary care, especially in settings like Nigeria where payment for healthcare remains predominantly through out-of-pocket payments (Moon et al., 2008). The provision of free ART is currently confounded by dwindling government income in Nigeria due to the falling oil price, leading to reductions in government health budgets that may translate to the introduction of user fees for HIV/AIDS treatment. The implications of introducing fees for service on the economic burden of HIV/AIDS are not known and there is inadequate evidence of the economic burden of even free services on different population groups in Nigeria (De Geest & Sabaté, 2003).

In view of the fragile financial realities of many countries heavily affected by HIV, quick transitions could seriously undermine sustainability. Findings from an analysis of domestic financing for HIV in lower-income and middle-income countries showed an increase of three times

in country spending from 2000–2010, with greater spending associated with increased economic growth and higher burden of HIV (Ávila et al., 2013).

1.5 CAPACITY BUILDING AND ART PROGRAMME DEVOLUTION IN NIGERIA

A participatory approach where all stakeholders are involved at all stages, from the design, situation analysis, and the provision of technical assistance, is essential in building the capacity of organisations to deliver quality HIV care and treatment programmes in resource-constrained settings (Sharma et al., 2013). Capacity building is a process for improving the ability of persons, groups, organisations or systems to meet objectives, address stakeholders' needs and, ultimately, perform better (Horton, 2002; Lafond & Brown, 2003; Steckler et al., 1992). It refers to the creation, expansion or upgrading of a stock of desired qualities and features called capabilities that can be continually drawn on over time. Capacity building generally involves an ongoing, systematic, and planned process with measurable performance objectives, defined outcomes, implementation strategies and ways to measure capacity-building outcomes and performance over time (Goodman et al., 1998).

The US government's mandate for HIV care and treatment programmes funded by PEPFAR required the transition of the management of these emergency programmes from international organisations (referred to as international implementing partners (IIPs) in this thesis) to local implementing partners (LIPs) that were capable of delivering a sustainable, country-owned programme. This required a programme with the capacity to maintain and adapt itself and its services, independent of major financial, managerial, and technical assistance from its original donor. Therefore, the new US government strategic plan focused on the transition of the

management of these emergency programmes to local implementing partners (Crye, 2011). PEPFAR defined local partners as legally-registered governmental, non-governmental, academic, and privately-owned organisations that are at least 75% owned, staffed, and managed by citizens or permanent residents of the host country (Crye, 2011). In addition, where Boards of Directors exist, a membership composed of at least 51% citizens or permanent residents was expected. The US government later released a new legislatively-required PEPFAR Five-Year Strategy, which specified that the treatment target should provide direct support for over 4 million people.

Supply chains and treatment logistics are an additional area where capacity strengthening is important. Although Nigeria adopted a test-and-treat policy in 2015, under which anyone with a positive diagnosis was eligible for treatment, take-up was slow in reality. Nevertheless, efforts have been made to scale-up treatment access, and 212,000 more people were enrolled on antiretroviral treatment between 2016 and March 2017 (UNAIDS, 2018b). Yet weaknesses in the health system still exist and create a barrier to many people accessing or staying on treatment. Even when ART can be accessed, drug supplies are known to run out and cause stockouts (NACA, 2018). Stockouts of ARVs lead to delays in treatment initiation, unstructured treatment interruptions, and disengagement of patients with care (Boyer et al., 2011; Lubega et al., 2010). These situations have negative consequences for individuals and populations, as they increase the risk of opportunistic infections, treatment failure, viral resistance and death (Kranzer & Ford, 2011). To address this, the National Strategic Framework for the HIV response has prioritised the strengthening of supply chains and improving of logistics around treatment.

In 2017, Nigeria was also selected as a key focus country for the WHO drug resistance strategy. Results from 2008, the most recent data available, showed that in some clinics levels of drug resistance mutations had reached 2.1% among new patients and 50% among those who had previously been exposed to ARVs (WHO, 2012).

PEPFAR also emphasised capacity-building efforts aimed at realising the potential of nations and organisations to identify and solve problems in health systems through strong leadership and management, sufficient finances, and technical innovations (Virji et al. 2012). With shrinking funds at their disposal, donors have intensified their support to build local capacity to more effectively meet the Millennium Development Goals (MDGs) related to maternal and child mortality, HIV, malaria, and tuberculosis. MDGs were crucial for structuring HIV/ART efforts. In 2015, the MDGs were replaced by 17 Sustainable Development Goals (SDGs), each with specific targets to be achieved by 2030 (Mackey et al., 2018). Under the SDG framework, three MDGs relating to health were replaced by SDG 3 that included universal access to HIV prevention services as an overarching priority of the health goal (UNAIDS, 2015b). Attempts have been made to address weaknesses in health systems, human resources, and absorptive capacity that impede the achievement of the MDGs. Research shows that involving managers to explicitly identify and address capacity gaps increases the likelihood that relevant, sustainable, country-owned health programmes that lead to desired health outcomes can be developed (Bushe, 2011).

Strengthening the stewardship, funding and coordination role of federal and state governments for multi-sectoral and evidence-based HIV and AIDS responses is a major priority for enhancing country programme capacity (UNAIDS, 2019). The 2013 PEPFAR report shows that, in 2011, the

Nigerian government made a commitment to provide 50% of HIV/AIDS funding to ensure the smooth devolution of PEPFAR-supported ART programmes; and, in 2019, the Nigerian government pledged to release US\$12 million to end epidemics of HIV/AIDS, tuberculosis, malaria and other preventable disease (Adebowale N., 2019). Although these are impressive commitments, the pledges were never put into action. In fact, the Global Fund has withdrawn a portion of funding from Nigeria because the government had not fulfilled counterpart funding commitments (Rotinwa A., 2018).

There was a further promise in 2013 in which the Nigerian government asked NACA to develop a 2-year plan called the President's Emergency Response Plan (PERP). However, there was no guarantee the plan was going to be fully funded or that the earmarked budget would actually be released. PEPFAR transferred 54 US government-supported treatment sites, serving over 67,000 patients to NACA, which was expected to provide on-going support using Global Fund resources (PEPFAR Nigeria, 2013 report). The extent to which these sites are being managed by the LIPs is not yet clear. Although PEPFAR is the main donor supporting ART programme in Nigeria, joint planning and procurement design around sexual transmission prevention and OVC care and support occurred with the United Kingdom (UK) Department for International Development (DFID), the United Nations Children's Fund UNICEF, and the World Bank. At lower levels, organisational and technical capacity among government offices and staff remained low in states and local government areas (Idoko John, 2014).

The Partnership Framework signed in 2010 between the US and Nigerian governments identified the following key strategies in order to ensure ownership: the devolution of ART programmes to

local implementing partners; addressing institutional arrangements and infrastructure requirements; and human and financial resource management. PEPFAR hence resorted to direct engagement with local implementing partners. It later became obvious that there was a significant lack of organisational and technical capacity in these local, indigenous organisations, thereby limiting the extent to which the most vulnerable beneficiaries could be identified and reached with ART services (PEPFAR Nigeria 2013 Report). It therefore became paramount to assess the local partners' readiness to fully manage and implement ART programmes (El Sadr et al., 2012). Change management experts have emphasised the importance of establishing organisational readiness for change and recommended various strategies (Lewin, 1951). These strategies include highlighting the discrepancy between current and desired performance levels, fermenting dissatisfaction with the status quo, creating an appealing vision of a future state of affairs, and fostering confidence that this future state can be achieved (Armenakis et al., 1993; Armenakis & Harris, 2002; Hardison, 1998; Levesque et al., 1999).

Implementing complex organisational changes such as the devolution of large scale PEPFAR programmes from external to local NGOs involves collective action by many people, each of whom contributes something to the implementation effort (Shea et al., 2014). Because implementation is often a 'team sport,' problems arise when some feel committed to implementation, but others do not.

1.6 ORGANISATIONAL READINESS FOR CHANGE

The aim of this research therefore, is to analyse the effects of devolution of funding for and oversight of Nigeria's ART programme from international to local PEPFAR implementing

partners on ART performance in Kano State, Nigeria. Findings will be used to inform policy makers and other managers on more effective and sustainable ways for change management. This study looks at readiness using a macro-, meso- and micro lens of change readiness. The macro level refers to local implementing partners' capability of implementing the devolution; the meso level refers to a group's (implementer's) capacity and decision to support the devolution process; and the micro level focuses on the individual's perception of the devolution (Judge et al., 1999).

1.6.1 Organisation

Different authors have defined organisation in different ways. Barnard (1948) defines organisation as "a system of co-operative activities of two or more persons", whilst Mooney (1939) describes it as a "form of every human association for the attainment of a common purpose" (as cited by Ennis, 1967:7)." However, for the purpose of this study, an organisation refers to a group of individuals, large or small, that is cooperating under the direction of executive leadership in accomplishment of certain common objectives (Davis, 1960). All PEPFAR implementing partners fall into this definition.

1.6.2 Readiness for change: collective, individual, or both

Readiness for change of the local implementing partners reflects their perceptions and the behaviours of either resistance to, or support for change efforts (Achilles & Bedeian, 1999). Organisational readiness for change (ORC) is identified as a critical precursor to the successful implementation of complex changes in healthcare settings such as the giant ART programme devolution from IIPs to LIPs. Indeed, it has been suggested that failure to establish sufficient readiness accounts for one-half of all unsuccessful, large-scale organisational change efforts

(Kotter, 1996). Organisational readiness for change is the extent to which targeted employees (especially the implementers) are psychologically and behaviourally prepared to make the changes in organisational policies and practices that are necessary to put the innovation into practice and to support innovation use (Weiner et al., 2008). This study will use this concept to explore LIPs and health facilities' preparedness to implement the ART programme devolution policy.

The level varies at which researchers conceptualise readiness for changes. Some view readiness as an individual psychological state, where individuals interact with potential change, develop a stance toward it, and then act accordingly (Rampazzo et al., 2006). Components of individual readiness might involve self-efficacy, in other words the perception that one will be able to undertake change successfully (Cunningham et al., 2002), or fear of the consequences of change (Weeks et al., 2004). This level of change at the individual level is also termed as micro organisational change. It embraces the behaviours that are more individual in nature, yet influence the organisation as a whole in a striking way (Cummings & O'Connell, 1978). Other research suggests that if individual work roles are unclear or in conflict with other organisational priorities, participants in change will be less able to undertake reform successfully because they are unclear about their job requirements or are constrained by inconsistent or competing organisational procedures (Madda et al., 2007). Similarly, when staff experience role overload, that is when work expectations are too many or exceed an individual's capacity, they will lack the time and energy required for effective change (Conley & Woosley, 2000). Miner (2006) asserts that micro organisational behaviour not only ranges from working alone but also working in groups. To improve organisational and individual performance, researchers acknowledge the effect of micro organisational behaviour. Stress, job satisfaction, creativity, and leadership all indicate the

influential effect that micro organisational behaviour can have on individual and organisational performance (Miner, 2006).

At the meso level, sociologists tend to study the experiences of groups and the interactions between groups in the change dynamics (Creative Commons, 2012). Whelan and Conway (1991) see readiness for change as an organisational, structural, or collective characteristic. At the meso level, high readiness facilitates change implementation because, through the diagnostic stage, those responsible for change can create a feasible change plan addressing the organisation's specific needs. Organisational conceptualisations focus, for instance, on programme coherence (Shelton & Scoresby, 2011), availability of resources to support change (Collins et al., 2007), effective group decision-making processes (Lu et al., 2006), collective pressure for change (Jessup, 2007), or organisational climate (Bollar, 1996). The way in which information about change is communicated across an organisation may also influence readiness; poor communication about change may, in fact, inhibit readiness. There are other perspectives that approach readiness for change as both an individual and organisational or collective notion (Austin & Claassen, 2008). Such conceptualisations additionally focus on the relational or networking aspects of change (Frank et al., 2004) or the influence of social relationships external to the change environment (Hanpachern et al., 1998a).

Sociologists who conduct macro level research study change readiness at the broadest level, such as interactions between nations or comparisons across nations. Macro organisational change has also been researched extensively. It studies how organisations move in markets, and how their strategies regarding employees and leadership affect the performance of the entire organisation

(Lacoma, 2017). The macro level stresses, for example, the need to incorporate readiness into the strategic plan of a country because through the creation of constant change readiness, organisations gain flexibility and adaptability (Vakola, 2013). Researchers acknowledge macro organisational readiness to be a compelling dynamic that improves both organisational and individual performance (Greenberg, 2011; Miles, 1980; Robbins et al., 2014) and describes macro organisational change to be the social structures of the organisation. Macro organisational behaviours are found to affect the performance of the entire organisation (Colquitt et al., 2016).

1.7 ORGANISATIONAL CAPABILITY

At the organisational level, organisational capability has been highly regarded as a determining factor for organisational performance. In the field of strategic management, dynamic capability of business firms is deemed as the source keeping firms continuously more competitive than their competitors in the market (Eisenhardt & Martin, 2000; Peteraf et al., 2013). There are various definitions of organisational capability in the literature and a mix of concepts was adopted for this study. Some authors view it from a knowledge perspective where they refer to organisational capability as knowledge integration (Berends et al., 2011) or multi-layered knowledge corresponding to different types of organisational capabilities (Kusunoki et al., 1998). Other scholars take the resources-based context in which they either see capability as a firm's dynamic capability to use resources - specifically the processes to integrate, reconfigure, gain and release resources - to match and even create market change (Eisenhardt & Martin, 2000) or the ability to perform a coordinated set of tasks, utilising organisational resources (Helfat & Peteraf, 2003). Human resource management experts define organisational capability as the ability to manage

people to gain a competitive advantage (Ulrich & Lake, 2011), while those in management assert that dynamic managerial capabilities reside in managerial cognition (Eggers & Kaplan, 2013).

1.8 THEORETICAL FRAMEWORK FOR ART PERFORMANCE

Scott, (2004) define performance as accomplishing a given task that is measured against pre-set known standards of accuracy, completeness, cost, and speed. In the context of this study, ART performance assessment was measured based on the continuum of HIV care model (Ahonkhai et al., 2012). Successful patient outcomes are contingent on a high degree of success at each and every point on this continuum (Eisenberg & Power, 2000; McNairy & El-Sadr, 2012). While barriers to optimal care are not yet fully elucidated, quality indicators that re focused on essential points along the care continuum are necessary to identify weaknesses and design interventions to maximise performance. Seven key process steps in the HIV care continuum were highlighted: HIV testing and diagnosis; linkage to care; ART eligibility, including clinical, laboratory and psychosocial assessment; ART preparation, including literacy training, OI prophylaxis and adherence assessment; ART initiation; retention in care; and clinical outcomes.

1.9 CONTRIBUTION OF THE STUDY TO THE BODY OF KNOWLEDGE

To date there have been few studies published or reported on the transition of external donor programmes to the host government of Nigeria (Banigbe et al., 2019; Vogus & Graff, 2015), and very little on this crucial public health issue elsewhere (Bennett et al., 2015; Fox & Rosen, 2015; Vogus & Graff, 2015). In addition, published research assessing the impact of global health initiatives has focused on critical appraisal and aimed at informing and supporting local policy (Biesma et al., 2009; Cavalli et al., 2010; Samb et al., 2009) but has not fully addressed issues

related to readiness for change. This study is innovative in its dual focus of analysing and supporting local policy, and in its application to this analysis of organisational readiness for change models together with programme performance evaluation. Assessing the process and effects of devolution of HIV funding from international to local organisations will contribute to the ongoing policy discussions on the sustainability of HIV programmes in recipient countries. Over the last few years, a number of international organisations have reduced their donor funding for HIV and have been gradually devolving the funding and management of HIV programmes to local institutions.

Therefore, it is important not only to assess the readiness of the local institutions but also to document the lessons learnt from this devolution process, as this study set out to do. This study contributes new knowledge and lessons from this emerging HIV programme transformation. The rationale for conducting this study is to inform policy makers, district managers and programme managers on factors that are likely to contribute to better performance of devolved ART services in Nigeria and other sub-Saharan countries that are currently going through the same process. An ART devolution model of change that will be developed using research outcomes is intended to be a reference framework for local and external stakeholders. The rationale for conducting this study is to inform policy makers, district managers and programme managers on factors that are likely to contribute to better performance of devolved ART services in Nigeria and other sub-Saharan countries that are currently going through the same process. Finally, since Nigeria is the most populous country in Africa and the country with the world's second largest HIV burden, research on Nigeria's HIV response is in itself a significant contribution to knowledge and, potentially, to public health policy and practice.

1.10 RATIONALE FOR THE STUDY

This study takes the perspective of programme devolution from external to local ownership by examining its initiation, planning and implementation management of the large-scale change programme. To study this interaction, the concepts of organisational culture (Hartnell et al., 2011; Leifer & Delbecq, 1978; Weeks et al., 2004) are adopted from organisational theory.

There are many skills, traits and attributes that are needed to effect large-scale change such as ART programme devolution from external to local NGOs in Nigeria (Burke, 2014). An in-depth understanding of the context and the process is necessary in order to implement change within organisations (Hiatt & Creasey, 2003; Kezar, 2014). Devolution of a large initiative such as an HIV treatment programme is complex and may have far-reaching consequences if not properly managed.

Therefore, a careful analysis of ART devolution processes and outputs, especially in terms of organisational readiness for change and the ART performance of health facilities, is necessary in specific contexts – in this case, Kano, Nigeria - and possibly for relevant global managers. The understanding of how ART programme devolution evolves and how it translates into local NGO and facility-level organisational readiness for change and then into actual programme performance, will help to inform discussions about sustainability of the programme and health planning.

1.11 AIM OF THE STUDY

The overall aim of this study is to examine how the processes and organisational structures are affected by the devolution of funding for, and oversight of, Nigeria's ART programme from international PEPFAR implementing partners to local NGOs on health facilities' ART performance in Kano State, Nigeria.

1.11.1 Research questions

Although there are benefits for devolution of ART programmes from external to local NGOs, little is known about how the devolution is implemented, and how effectively it will contribute to programme ownership and sustainability. It is against this background, and the knowledge gaps highlighted in the literature, that the present study attempts to answer the following questions:

1. How has the devolution of funding for and oversight of Nigeria's ART programme from international to local PEPFAR implementing partners affected ART programme performance at health facility level in Kano State?
2. To what extent are the employees in LIP-supported ART sites ready for devolution implementation? This is sub-divided into 3 sub-questions:
 - 2.1 How has devolution readiness been perceived by ART employees?
 - 2.2 How has the LIPs' organisational performance been perceived by ART employees?
 - 2.3 Are there relationships and/or correlations between: a) demographic variables and employee devolution readiness? b) employees' devolution readiness and perceived LIPs' organisational performance?

3. What are the factors associated with ART performance levels for pre and post devolution periods?
4. What are the elements necessary for the effective devolution of ART programmes from external to local NGOs?

1.11.2 Study objectives

1. Assess IIPs' and LIPs' ART performance in the pre and post-devolution periods.
2. Assess readiness for change of local implementing partners over the devolution period 2011-2016:
 - 2a) Assess employee devolution readiness
 - 2b) Explore employees' perspective of LIPs devolution readiness
3. Identify and describe factors associated with the levels of ART performance before and after programme devolution.

1.12 STRUCTURE OF THE THESIS

This thesis consists of six chapters. Chapter One outlines the **Background** to the research study, including an overview of the HIV burden and funding in Nigeria and the ART programme and how it relates to ownership, sustainability and its devolution dynamics. Chapter One also provides highlights on ART performance and theoretical frameworks for organisational readiness for change. Finally, this chapter defines the research questions, aims and the objectives of the study.

Chapter Two presents a **Review of the literature** on organisational readiness for change; it describes findings from researchers particularly with respect to competing value frameworks of

organisational climate. Literature concerned with ART performance in terms of the HIV care continuum assessment, is also revised.

Chapter Three provides a detailed description of the **Methodology**, which explains the study design, study population and sampling, data collection methods, analysis of the data and rigour of the study and ethical issues raised by the research and how these were addressed. There are also comments on the position of the researcher in the research, and the limitations of the study.

The **Results of the Study** are presented under Chapters Four and Five. Chapter Four covers the quantitative results of the employees' readiness for ART devolution and their opinions regarding LIPs' devolution implementation. Results in Chapter Five present findings that include document analysis of pre- and post-devolution health facility records to assess ART performance for the pre- and post-devolution eras. Interviews of ART programme managers are analysed to deduce their perspectives of ART performance levels for the periods.

Chapter Six highlights the **Discussion, Interpretation, Policy Implications and Future Research**. The chapter discusses the key findings, identifies the contribution of the study to the existing body of knowledge, and compares the findings to available literature. This is followed by interpretation, a discussion of strengths and limitations, the implications for future research, policy and practice, and recommendations and conclusions.

1.13 SUMMARY OF CHAPTER ONE

This research aims to address an important gap in the literature and offer a significant contribution to the effects of ART devolution from external to local implementing partners by exploring change readiness as a function of ART programme performance organisational culture. It describes critical programme areas such as ART funding, country ownership and sustainability, and new empirical evidence about ways to promote effectiveness and sustainability of devolution rollout. The results of this research may help inform government, implementing partners, and other stakeholders to take practical steps to create a culture that is ready for change, ultimately strengthening ART performance.



CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

The purpose of this chapter is to provide an overview of the literature in relation to the focus of the study and to situate the research within the existing body of literature on change (devolution) readiness and organisational culture. Change is conceptualised with regard to its meaning, its forms and the forces that are necessary for change. The chapter also reviews ART performance and looks at studies that show a relationship between HIV care continuum and ARV performance. In addition, the existing literature relating to organisational readiness for change and ART performance is reviewed, with special attention on the effects of devolution on ART performance and how the constructs ‘change’ and how ‘change readiness’ and ‘ART performance’ are defined and measured in the literature. This chapter defines organisational culture, the elements that are thought to create culture, and the role culture plays in achieving organisational outcomes.

Through the literature review, this chapter details the competing value framework (CVF), a model frequently used to assess organisational culture models. ART performance is examined based on the HIV care continuum assessment framework. Importantly, the literature review establishes that organisational culture helps us to understand employees’ behaviour and is the setting in which employees define their environment, express their feelings, and make judgements (Schneider et al., 2013). The review also establishes that ART performance is defined along each step of the HIV care continuum.

The chapter concludes by describing a theoretical framework which guides the focus of the study. The body of literature on change management, organisational culture and ART performance is

large; hence this literature review is a critical analysis of the relevant business and management literature specific to the constructs that are explored in this research.

2.2 ORGANISATIONAL CHANGE

Currently, organisations are facing more change than ever before (Conner, 1992). Change has become synonymous with standard business practice and an organisation needs to change to remain competitive (Mutihac, 2010). While typologies offer excellent reviews of the extant literature, they fail to adequately define what is meant by the concept of change. In much of the literature, the construct of change lacks clarity (Suddaby, 2010). The underlying assumptions are not articulated, the contextual conditions under which it applies are not clear, and the concept of change is generally not defined (Suddaby & Foster, 2017). Critics suggest that the greatest weakness of change management scholarship is that change is a universal but undefined construct (Pettigrew et al., 2001), and its epistemological status is left unexamined (Quattrone & Hopper, 2001). The theory is that the founding conditions of an organisation exert a powerful influence over the initial structure of the organisation and therefore exert a restrictive pressure on subsequent change (Stinchcombe, 2000).

Psychologists, social scientists and business scholars have taken an interest in organisational change because it has become a necessity for organisations who wish to survive and be sustainable in the highly competitive and ever-evolving business environment (Todnem By, 2005). Organisational change has been the subject of formal research since the 1950s when Kurt Lewin (1951) suggested that there should be a planned strategy that assists organisations to adopt change.

Over the years, numerous studies have attempted to understand organisational change with the hope of finding a formula that allows organisations to implement workplace change successfully.

Burnes (2004a) refers to change as the total or partial adaption of a new idea, concept or behaviour by organisational members. From a broader perspective, change refers to a system of continuous transformation that takes place in one or more organisational domains, such as organisational technology, structure and human resources (Sofat et al., 2015). Organisational change usually originates from discrepancies created by environmental dynamism, and take the form of a series of activities that support the process of improvement in the capabilities of individuals and groups that work in organisations (Abdul Wahid et al., 2010). According to Daft (2008), organisational change is a consequence of changes in the business activities as well as the outcome of managerial perception, choice, and action. Kotter & Schlesinger (2008) describe organisational change to mean the same thing as organisational transformation. However, change implementation is a more rigorous activity than is often perceived (Szabla, 2007), which is why it is estimated that two thirds of all organisational change efforts do not succeed.

Change is concerned with the development of an organisation. It is used to solve the problems and challenges of the organisation. In an organisation, most problems and challenges are generated, on the one hand, by competition, advanced technology, mergers, expansion, product quality maintenance, or enhancing employee efficiency on the one hand, and, on the other hand, rapid growth, new business ventures, exciting opportunities, innovations, and new leadership and management approaches (Ehie & Madsen, 2005). Change is an ever-present feature of organisational life, both at an operational and strategic level (Burnes, 2004b).

Therefore, organisations should be in no doubt about the importance of identifying where it needs to be in the future, and how to manage the changes required for reaching that goal. Consequently, organisational change cannot be separated from organisational strategy, or vice versa (Burnes, 2004b). Due to the importance of organisational change, how this change is managed is becoming a highly required managerial skill (Crawford, 2005).

Graetz and Smith (2010) describe a rationalist approach to organisational change in terms of the gap between what an organisation's leaders see as the current position and where they would like the organisation to be at the end of the change process. The difference between the two positions then dictates the requirements for change (Graetz & Smith, 2010). Some authors define organisational change as an empirical observation of the difference in form, quality, or state over time in an organisational entity (Van de Ven & Poole, 2004). The entity may be an individual's job, a work group, an organisational strategy, a programme, a product, or the overall organisation. This suggests that change can occur in multiple modes and forms and on multiple levels.

2.2.1 Different forms of organisational change

Organisational change may be distinguished by different characteristics. Another distinction is based on the extent of changes in terms of depth and continuity. These are classified as either episodic or continuous change (Weick & Quinn, 1999). While episodic change is more radical and is started intentionally, continuous change is an ongoing process of small adjustments. In contrast to long-term adaptability to the business environment, the aim of episodic change is to adapt quickly.

Conversely, revolutionary change is differentiated from evolutionary change (Burke, 2008). While revolutionary change causes loops and disruptions in a non-linear fashion, evolutionary change is an attempt to amend specific aspects of the organisation for higher performance. It is important to note that the identity of an organisation, characterised by its mission, culture or main strategy, remains unaffected by an evolutionary change. Huy (2001), focusing on the time and content of change, also builds on the differentiation between revolutionary and evolutionary change. Heifetz and Linsky (2002) present a broadly comparable distinction of technical versus adaptive change. These authors argue that technical problems may need to be solved by applying existing knowledge, while adaptive changes challenge organisations to alter their habits, beliefs or general idea of doing business. In line with that understanding, i.e. a change in values, Bartunek and Moch (1987) characterise first-order change as single-loop learning (tacit reinforcement of present understandings) and second-order change as double-loop learning (change in values of theory-in-use). Considering these differences, the context for the research in this thesis (devolution) is a revolutionary or second-order change, due to environmental forces increasing the need for change.

Ansoff (1980) and Chandler (1962) cluster change management into the following approaches: rationally-planned change management; politically-governed change management; and emergent, bottom-up-based change management. Despite the criticism of the planned change approach, due to a high rate of failure, it remains a typical procedure, with a perceived need for change increasing to the point of management launching a planned change process. With regard to the perspective that planned change is needed, despite a high rate of failure, the focus is on a rationally-planned

change management perspective. Jarrett (2009) differentiates between the following dimensions of organisational change:

- Temporary change (when there is some change, but then the organisation reverts to the traditional status quo)
- Incremental or process change (easy and quick implementation of small improvements or smaller adjustments)
- Organisational restructuring (change that affects structures, fundamental systems and relations within the company)
- Transformational or cultural change (redefining the organisation's strategy, culture, mind-set or identity).

In view of the extent and focus of change, Luecke (2003) gives these categorisations of change types as a response to challenges of the environment:

- Structural change (remodelling of the functional system to increase performance)
- Cost cutting (elimination or reduction of nonessential activities)
- Process change (modifying how things are done operationally)
- Cultural change (altering the organisation's mind-set and general approach of doing business).

Change may also be categorised by other characteristics, for example, by an increasing level of risks and depth of change (Ackermann, 2001):

- Developmental change (improves something that already exists and can take place on every level from the individual to the entire organisation)

- Transitional change (aims to implement a different known state)
- And transformational change (seeks a new, previously unknown state).

2.2.2 Drivers of organisational change

To better understand and determine the need for organisational change, it is helpful to consider the forces that cause an imperative for change to take place. Porras and Silvers (1991) state that rapidly-changing environments increase the need for companies to adapt to external changes. Following this idea, it can be assumed that the more radical the influence of external shifts, the more radical a company's adaption has to be. Even though this relationship is not linear, it can be conjectured that an accumulation of influencing factors intensifies the need for a company to change. The organisational change process therefore can be considered as a reaction to events.

A more specific reason for the need of a special type of change is a decrease in earnings, which usually leads to a call for organisational downsizing (Cameron et al., 1993). Huber et al. (1993) propose a more comprehensive set of factors that can induce change: environment; performance; top management; strategy; and structure. Stakeholders, especially shareholders of a company, will put pressure on management to start action to increase earnings, when a distinctive downturn in financial performance has been experienced.

2.2.3 Individuals and change

A major criticism of the theories that place a primary focus on 'the change' itself is that change is not a simple process because it involves people, their reactions, emotions, and participation (Giniat et al., 2012; Jessop et al., 2008). This means that the reactions and responses of individuals can

either help or hinder the change process. Therefore, gaining an understanding of employees' attitudes towards change can assist the change process (V. D. Miller et al., 1994).

According to Bridges (2003), people go through a period of transition when change occurs. He argues that this process begins with an 'endings' phase which involves letting go of the old way of doing things and understanding what must be relinquished. Then there is a transition through the 'neutral zone', which is a period of accepting what has ended but not yet being fully comfortable or accepting of the new way of doing things. Bridges (2003) states that this neutral zone can be a time when people feel uncomfortable and confused - or creative and excited. It is the time when people either resist change, or when they see change as an opportunity. When people have made sense of change and are more comfortable with what it means for them, they arrive at the third phase of transition, the 'new beginning'. In this final phase, people have accepted and embraced a new way of doing things. Using Bridge's (2003) theory, research that was conducted with graduating nurses (Duchscher, 2009) found that nurses often identify their initial professional adjustment in terms of the feelings of anxiety, insecurity, inadequacy and instability their job produces. Duchscher (2009) found that the phases of transition had multiple effects on the nurses - physically, emotionally, intellectually and socio-developmentally. The effects were both expressions of and mitigating factors within the experience of transition.

Many other studies also reveal that organisational change can have different effects on individuals, with competing narratives of change often found within the same organisation (Duchscher, 2009; Eriksson, 2004). Dresewski and Lang (2005) explain that change can be perceived by stakeholders as either additive, subtractive or neutral, with the negative reactions and resistance to change often

being due to anxiety. Anxiety can lead to behaviours that work against or resist change, and fear can lead to rumours, speculation and ultimately employee turnover (Linden & Muschalla, 2007).

A recent study of the health effects that organisational change has on employees, involving 92,860 employees working in 1,517 large Danish organisations, found that broad and regular organisational changes are associated with significant risks of employee health problems (Card & Dahl, 2011). Employees were more likely to receive stress-related medication prescriptions for insomnia, anxiety, and depression if they were employed in organisations undergoing change. The authors suggest that this psychological impact is problematic for organisations, as employees are likely to be less productive or alert under such conditions and this can be costly for employers as well as employees (Card & Dahl, 2011). The study noted that particularly harmful were periods of overlap between old and new ways of doing things, when confusion, frustration, and lost productivity occur. It is suggested that an employee's perception of the quality of information about change can buffer these negative effects and increase affective commitment to change. This indicates the importance of good communication during any type of change.

2.3 ORGANISATIONAL READINESS FOR CHANGE

While organisational readiness for change (ORC) is widely recognised as a necessary component for implementation success (Holt et al., 2010), its assessment remains challenging. Efforts to synthesise the relevant literature over the last decade have led to a standardised definition (Weiner et al., 2008) and a useful conceptual framework to guide the operationalisation of the concept (Holt et al., 2010). Based on their review of 106 articles, Weiner et al, (2008) define ORC as the extent to which organisational members are psychologically and behaviourally prepared to implement

change (Weiner et al., 2008). This definition has since been widely adopted in the ORC literature and provides the operational definition for much of the work in this study (Attieh et al., 2013; Gagnon et al., 2011; Khan et al., 2014; Shea et al., 2014). Holt et al. (2010) conceptualise ORC as a framework of three dimensions: structural and psychological factors (each operating at the two levels of individual and organisational contexts) and the third dimension (operating at the level of analysis). The authors emphasise the importance of considering and assessing ORC within each of these dimensions in preparation for implementation. This concept is used in this thesis to assess employees' readiness for change.

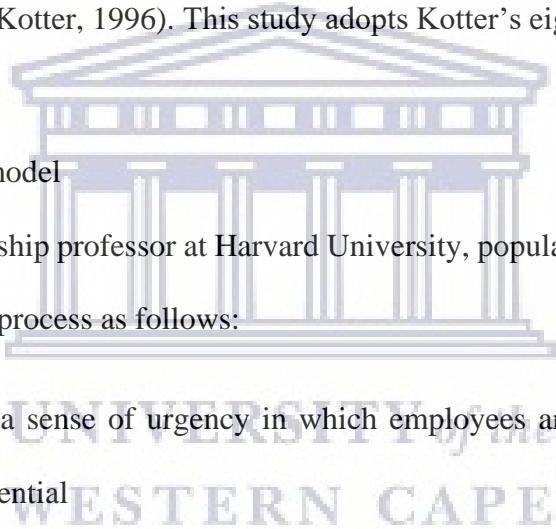
It is stated by many authors that the implementation of organisational change is one of the most important success factors of companies, but also the point where many organisations fail. While many approaches are found to lead to successful change implementation, relatively little has been written on organisational change readiness (Collins et al., 2007). As a possible factor for success, organisational readiness for change is an appealing construct, but comparatively little empirical research has focused on this aspect. At the theoretical level, examining the antecedents of readiness for change may help researchers better understand the organisational change process (Eby et al., 2000). Organisational change is a very complex process; when it is contemplated, strategies and tactics to plan the change process should be considered. The practical use of the concept of organisational readiness involves assessing readiness to deploy active change agents to seek out potential problems, such as low readiness, and intervene before this factor results in active resistance to change (Baker et al., 1995).

2.3.1 Models of organisational change

The change management literature is replete with prescriptive models, largely directed at senior managers and executives and advising them how to best implement planned organisational change. Typically, these models specify a sequence of steps that are could be applied across a variety of organisational change interventions. The popular and widely-used prescriptive models include: Lewin (1951) three-phase change process, Beer's Six Steps to Effective Change model (Beer, 1980); appreciative inquiry (AI) (Cooperrider et al., 1995); Judson's (1991) Five Steps; Kanter, Stein and Jick's Ten Commandments (Wright et al., 1993); ADKAR model (Hiatt, 2006): and Kotter's eight-step model ((Kotter, 1996). This study adopts Kotter's eight-step model.

2.3.1.1 Kotter's eight-step model

John Kotter (1996), a leadership professor at Harvard University, popularised an eight-step model which describes the change process as follows:

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- Step 1: Establishing a sense of urgency in which employees are alerted to the fact that change is essential
 - Step 2: Forming a guiding coalition, which leads to
 - Step 3: Developing the change vision
 - Step 4: Communicating the vision to employees
 - Step 5: Involving the coalition and employees) in the change process by developing change plans
 - Step 6: Promoting short-term wins to reinforce the change implementation

Step 7: Consolidating and strengthening the improvements and continuing with further change to align with the initial vision

Step 8: Institutionalising the change by integrating it with the organisation's structures and systems.

2.3.2 Resistance to change

Zander (1950) , defines resistance to change as "behaviour which is intended to protect an individual from the effects of real or imagined change" (Dent & Goldberg, 1999:34). Zaltman & Duncan (1977) define resistance as "any conduct that serves to maintain the status quo in the face of pressure to alter the status quo"(Parker & Bradley, 2000:76). During organisational change, an employee is likely to have two responses: either readiness or resistance. Readiness enhances an employee's willingness to embrace change, while resistance can be assumed as a passive response. Chawla and Kelloway (2004:485) define resistance to change as "an adherence to any attitudes or behaviours that thwart organisational change goals." A passive response may be the expression of the fear of loss of something valuable, a sense of loss of control caused by fear of an unknown situation, and fear of failure in the new situation which is likely to trigger the resistance to change (Bridges, 1986; Cohn & Dirks, 1996; Oreg, 2006). Resistance to change can be understood as a construct of three dimensions: behavioural; emotional; and cognitive (Piderit, 2000). They are interpreted as follows:

- Behavioural: undesirable behaviours as a response to a change effort (Bartunek & Moch, 1987; Coch & French, 1948) or a particular kind of action or inaction (Brower et al., 2000), which is viewed as an obstacle to change (Kotter & Schlesinger, 2008)

- Emotional: resistance is caused by frustration and anxiety of employees and may result in aggression (Coch & French, 1948) and arises from defensive routines (Argyris & Schon, 1974)
- Cognitive: resistance is caused by negative thoughts or reluctance (Watson, 1971) and can be overcome cognitively (Bartlem & Locke, 1981).

In the literature, employee resistance might be better viewed as comprising of the two components of attitudinal and behavioural responses to change. In attitudinal resistance to change, an employee response depends on a psychological rejection of change on the basis of need, whereas behavioural resistance relates to individual behaviours that reflect an unwillingness to support the change or an unwillingness to stay with the organisation through the troubled period (Chawla and Kelloway 2004). In other words, it is a lack of commitment to change. According to Dent and Goldberg (1999), people do not necessarily resist change, but instead resist the loss of status, pay, or comfort that may be associated with it. The response manifests itself as anger or fear and then translates into a resistance to change.

Bovey and Hede (2001) suggest that an organisation experiences resistance because the change process involves going from a known to an unknown situation which makes individuals uncertain. As a result, an employee can develop different thoughts, beliefs, and attitudes regarding the organisational change. Numerous researchers have underlined the importance of employee perceptions regarding organisational change. Authors argue that most of the failures of change programmes are due to human factors which are directly related to individual and workplace determinants (Armenakis & Bedeian, 1999; Kotter, 1996). Through these factors, employees may

develop positive attitudes and behaviours that can indicate employee satisfaction with the organisation (Martin, 1994).

Pardo Del Val and Martínez (2003) identify key sources of resistance during the implementation of change: the organisational culture; departmental politics; disagreement about the nature of a problem and how it should be solved; deep-rooted values and emotional loyalties; and the social dimension of change. The most significant cause of resistance for employees was identified as a clash between the change and the deep-rooted values of employees (Pardo Del Val & Martínez Fuentes, 2003). Resistance to change clearly has an impact on the successful implementation of change; however, for this study, the focus is on change readiness rather than resistance to change.

2.3.3 Role of employees in organisational change

A wide range of change attitudes have been examined as employee outcomes of organisational change. Some of the commonly-researched change attitudes include: acceptance of change (Leiter & Harvie, 1998), change readiness (Armenakis et al., 1993), change openness (Wanberg & Banas, 2000), resistance to change (Coch & French, 1948), cynicism about change (Wanous et al., 2000), and commitment to change (Herscovitch & Meyer, 2002). These change attitudes span both positive (i.e. change acceptance) and negative (i.e. resistance) ends of the spectrum in terms of potential employee responses to change. Literature on change management suggests that before or during the launch of any change programme, change promoters and agents should develop employee-positive attitudes, beliefs, and intentions towards the proposed organisational change (Armenakis et al., 1993).

Researchers and practitioners are interested in how to deal with unknown situations created by organisational change. Furthermore, the literature contends that, by changing the status quo or any transformation, those primarily affected are employees whose response might be positive or negative (Armenakis & Harris, 2002; Rafferty & Simons, 2006). The success of organisational change is often determined by employee attitudes and beliefs towards the change (Beer & Walton, 1990). Some researchers focus on positive attitudes and behaviours to promote effective change programmes (Kotter, 1996; Martin, 1994). Others argue that an employee can be happy or excited or angry and fearful when confronted by change (Vakola et al., 2004). This indicates that an individual's perception towards the new situation primarily affects the goals and objectives of organisational change.

To develop a positive response towards change from an employee is imperative because of the sheer scale of involvement of individuals who have different life experiences (Armenakis et al., 1993; Sepulveda et al., 2007). Armenakis and Bedeian (1999) report that “as open systems, organisations depend on human direction to succeed” (Metcalf, 2005:291). The response of employees towards change largely arises from their positive or negative perceptions. An employee-positive response shows willingness towards change while a negative response reflects resistance. If an employee's response is negative, this means that there is a reluctance to accept or believe and that there may be an intention to resist or quit. Given such a response, an organisation might face threats from employees, high turnover rates, uncertainty, frustration, lower efficiency, anxiety, and a decline in output and decreased organisational commitment (Coch & French, 1948; Kotter & Schlesinger, 1979; Martin, 1994).

Conversely, a positive response shows employee readiness which can lead to a support for organisational change. This response may provide high commitment, low turnover, high performance and low absenteeism (Desplaces, 2005). Thus, in the domain of organisational change management, the human factor has been found to be the most crucial, complex and dominant factor in supporting effective and successful implementation of change in an organisation (Armenakis et al., 1993; Smith, 2005). Acceptance and resistance are affected by how the change is seen to affect the sense of the individual's identity in the organisation. It is pointed out that individuals will promote change efforts under conditions fulfilling their needs for self enhancement (Cohn & Dirks, 1996). The literature further points out that a positive employee response can be obtained by fulfilling basic needs such as financial and psychological (E. H. Schein, 1990).

A significant body of literature is available on the employee-readiness domain relating to individual and workplace factors (Cunningham et al., 2002; Ehie & Madsen, 2005; Rafferty & Simons, 2006; Weber & Matthews, 1978). However, the impact of both factors can be envisaged by employee attitudes, beliefs, and perceptions. Individual factors are associated with the personal and social aspects of individuals, such as an active problem-solving approach, beliefs, autonomy, depression, emotional exhaustion, demography, self-efficacy, and locus of control (Cunningham et al., 2002; Weber & Matthews, 1978). These characteristics show an individual's influence and support for reducing the uncertainty and ambiguity of the change process. Another important factor is the workplace i.e. the organisational environment, culture, and services. In the workplace factor, employees hold expectations and assumptions which affect their perceptions regarding change.

Table 2.1 Classification of employee work place and individual factors that affect organisational change

Category	Factor(s)	Reference(s)
1. Work place	Active and passive job	(C. E. Cunningham et al., 2002); (Madsen et al., 2005)
	Appropriateness	(Achilles A. Armenakis & Harris, 2002); (D. T. Holt et al., 2007)
	Change efficacy	(Achilles A. Armenakis & Harris, 2002); (Holt et al., 2007)
	Communication	(Wanberg & Banas, 2000)
	Decision latitude	(C. E. Cunningham et al., 2002)
	Discrepancy	(Achilles A. Armenakis & Harris, 2002) ; (A A Armenakis et al., 1993)
	Flexible policies and procedures	(Rafferty & Simons, 2006); (Eby et al., 2000)
	Job demands	(C. E. Cunningham et al., 2002); (Madsen et al., 2005); (Hanpachern et al., 1998b)
	Job knowledge and skills	(D. Miller & Le Breton-Miller, 2006); (Hanpachern et al., 1998b); (C. E. Cunningham et al., 2002)
	Logistic and system support	(Rafferty & Simons, 2006); (Eby et al., 2000)
	Management and leadership relationships	(D. Miller & Le Breton-Miller, 2006); (Hanpachern et al., 1998b)
	Organisational commitment	(Madsen et al., 2005); (Costa et al., 2009)
	Organisational culture	(Hanpachern et al., 1998b); (Lehman et al., 2002b); (McNabb & Sepic, 1995)
	Perceived organisational support	(Rafferty & Simons, 2006); (Eby et al., 2000); (D. T. Holt et al., 2007)
	Personal valence	(C. E. Cunningham et al., 2002); (D. T. Holt et al., 2007)
	Social relations at workplace	(Madsen et al., 2005)
Social support	(C. E. Cunningham et al., 2002); (Wanberg & Banas, 2000)	
Wellness	(Madsen et al., 2005)	

Category	Factor(s)	Reference(s)
2. Individual factors	Adaptability	(Lehman et al., 2002a)
	Autonomy	(Weber & Matthews, 1978)
	Beliefs	(Achilles A. Armenakis & Bedeian, 1999)
	Demography	(Madsen et al., 2005); (D. T. Holt et al., 2007); (Weber & Matthews, 1978)
	Depression	(C. E. Cunningham et al., 2002)
	Emotional exhaustion	(C. E. Cunningham et al., 2002)
	General attitude	(D. T. Holt et al., 2007); (Achilles A. Armenakis & Bedeian, 1999)
	Intention to quit	(Wanberg & Banas, 2000)
	Self-efficacy	(Rafferty & Simons, 2006); (Eby et al., 2000); (D. T. Holt et al., 2007); (Achilles A. Armenakis & Fredenberger, 1997); (C. E. Cunningham et al., 2002); (Achilles A. Armenakis & Bedeian, 1999)
	Job satisfaction	(Wanberg & Banas, 2000)
	Participation	(Rafferty & Simons, 2006); (Eby et al., 2000); (D. T. Holt et al., 2007); (Achilles A. Armenakis & Fredenberger, 1997); (C. E. Cunningham et al., 2002); (Weber & Matthews, 1978)
	Personal resilience	(Wanberg & Banas, 2000)
	Rebelliousness	(D. T. Holt et al., 2007)
	Skills variety	(Eby et al., 2000)
	Supervisory support	(Weber & Matthews, 1978)
	Team work	(Eby et al., 2000)
	Trust (in peers; management; senior leaders)	(Rafferty & Simons, 2006); (Eby et al., 2000)
	Turnover	(Wanberg & Banas, 2000)
	Work irritation	(Wanberg & Banas, 2000)
Affective commitment	(Costa et al., 2009)	

Armenakis and Bedeian (1999) define readiness as a cognitive state which comprises beliefs, attitudes and intentions toward a change effort, and suggest proactively creating readiness for change. This definition of readiness, focusing on beliefs and intentions, suitably fits the aim of this research to explore the readiness of health facility employees for ART programme devolution; this can be achieved through a rich analysis of situational factors regarding attitudes and opinions.

Armenakis et al., (1993) suggest in their readiness model the importance of building readiness according to the assessed level of readiness and the context of the organisation. The primary mechanism for creating readiness for change is the change message, which should incorporate the need for change (discrepancy between the actual state of the organisation and the desired end-state) and the individual and collective efficacy for change.

In a survey on four profit-oriented companies from northern Utah, Canada, Miller & Le Breton-Miller (2006) focused on employee readiness for change by applying workplace factors such as management and leader relationships, job knowledge and skills, and job demands. The researchers found that these workplace factors had a significant influence on employee readiness for change. Employee relationships with their managers emerged as the strongest predictor of readiness for change.

In their research in five Australian organisations, Rafferty and Simons (2006) focused on the factors that create readiness for two types of change, such as corporate transformation and fine-tuning trust in peers. Findings suggested that trust and self-efficacy in senior managers play an important role for corporate transformation changes. Fine-tuning trust in peers, and logistical and

system support antecedents, showed a strong, positive relationship with readiness. One important finding was that participation in change was not significantly concerned with readiness for corporate transformation changes.

A study conducted by Holt et al., (2007) received 464 questionnaire surveys from fulltime employees in four public and private companies in two areas of northern Utah, Canada. Researchers found that readiness for change was influenced by employee beliefs of self-efficacy, appropriateness, management support, and personal valence.

Using structured questionnaires, 878 employees from a public sector organisation in Turkey, Ertürk, (2008) found through structural equation modelling that trust in supervisors mediates between managerial communication and openness to change and a partial relation was found between participation and openness to change via trust in supervisors.



2.4 INTEGRATED ORGANISATIONAL CLIMATE AND CULTURE MODEL

In this study, employee readiness and organisational performance for ART programme devolution from external to local NGOs will be based on an integrated model of organisational climate and culture. Organisational culture and climate focus on how organisational employees observe, experience, and make sense of their work environment (Schneider et al., 2013) and are fundamental building blocks for describing and analysing organisational phenomena such as readiness to change (Edgar H Schein, 2000). Both concepts rest on the assumption of shared meaning - a shared understanding of aspects of the organisational context. Various scholars have asked the question whether the constructs of culture and climate are different, the same, or

interrelated, primarily highlighting the similarities and differences between them (Denison, 1996; Payne et al., 2005; Schein, 2000).. Researchers took a step further, focusing on how and why the two constructs can be linked to provide a more comprehensive view of the higher order social structure of an organisation (Schneider et al., 2013; Zohar & Hofmann, 2012).

Culture and climate are viewed in this study as two complementary constructs that reveal overlapping, yet distinguishable, variations in the psychological life of organisations, such as readiness for ART programme devolution (S. Schneider, 2000). Therefore, the social processes associated with organisational culture and climate influence both employees' readiness for ART devolution and organisational performance indicators (Schneider et al., 2013).

2.4.1 Organisational performance

In this study, the local implementing partners' performance will be assessed based on organisational culture construct. Organisational performance comprises the actual output or results of an organisation as measured against its intended outputs (or goals and objectives) (Richard et al., 2009). This definition is shared by Cho and Dansereau (2010) and Tomal and Jones (2015).

At the organisational level, cultural values and assumptions lead managers to the explicit or implicit adoption of structural features and practices that influence the organisational climate. Organisational culture is a function of industry and environmental characteristics, national culture, the founder's values, and an organisation's vision, goals, and strategy (Aycan, 1997).

Organisational culture is expected to align with and relate to the structure, practices, policies, and routines in the organisation that in turn provide the context for climate perceptions. Collective attitudes and behaviours of employees are shaped by organisational climate and, in turn, impact organisational performance (Edgar H. Schein, 2010).

Many researchers have found that strong organisational cultures are associated with organisational effectiveness and performance (Deal & Kennedy, 1982; Ouchi, 1977; Waterman et al., 1980). Increasing globalisation, technological innovation, changing government laws and regulations, political events, and workforce characteristics constitute the foremost triggers of organisational flexibility (Pfeffer, 1993), and require ongoing, often major changes in organisations.

Given the broadness of the definition of organisational performance, the term can be observed according to the different financial and non-financial types of objectives, which, in turn, are associated with a number of indicators (Kennerley & Neely, 2002; Richard et al., 2009; Tangen, 2005). By definition, a performance measure is the numerical or quantitative indicator that shows how well each objective is being met (Sinclair & Zairi, 1995). However, performance measurement requires the extensive use of quantitative and qualitative data, with clear definitions and specific frequency for analysis, so the choice depends on the purpose of the measurement and, in many cases, the availability of the data (Grünberg, 2004; Popova & Sharpanskykh, 2010; Slack et al., 2012).

This study focused on seven organisational performance categories, namely: organisational tradition; reflexivity; efficiency; feedback; performance evaluation; innovation; and quality. These

organisation performance measurement elements have been identified by various scholars (Buchanan et al., 2005; Fitzgerald, 1998; Hung, 2018; Kaplan & Norton, 1992; Keegan et al., 1989; Kennerley & Neely, 2002). These seven organisation performance indicators chosen for this research are discussed further in the sections below.

2.4.1.1 Tradition

The essence of tradition is sequential pattern - a sequence of related meanings that are received and transmitted over time. The meanings can be related by association to common themes, in the contiguity of presentation and transmission, or in descent from a common origin (Shils, 1971). Tradition represents an accumulation of experience that is continuously updated or corrected as new experience challenges accepted beliefs or practices (iResearchNet, 1992). Traditions as tacit knowledge can enter into organisational life by stifling learning or creating resistance to organisational change. For example, at the US DEC Corporation a tacit 'engineering culture' developed that made it impossible for managers to focus fully on the needs of customers who desired simple or technologically-unsophisticated products (Schein 2003). Researchers who study organisations have seen tradition as the enemy of organisational health and success. Dalton (1959) launched a broad-based attack on traditions in organisations - what he called 'moral fixity' - in an effort to increase organisational rationality by removing all traditional constraints on action (Feldman, 1996:65). Crozier et al. (1994) data on organisational behaviour, decades later, is quite consistent with Dalton's.

However, positivists of tradition theorise that, to exist, an organisation must be continually re-enacted (M. S. Feldman & Pentland, 2003). Its statements about its goals, plans, activities, and

identity must repeatedly be restated. A further reason why tradition is so widely accepted is that most people do not have the imagination to create new guidelines for the situations they encounter (Shils, 1971: 198).

As long as we desire to act collectively, we will need organisations; as long as we need organisations, we will utilize structures of authority; as long as we create structures of authority, authority will enmesh itself in tradition to stabilize and prolong itself (iResearchNet, 1992).

2.4.1.2 Reflexivity

Reflexivity is a construct historically anchored in different disciplines and related to the exercise of meta-cognitive skills in reflecting on one's own learning process (Flavell, 1979; Schippers et al., 2015). West (1996, p. 559) defines task reflexivity as the "extent to which team members collectively reflect upon the team's objectives, strategies and processes as well as their wider organisations and environments, and adapt them accordingly". Reflexivity in an organisational setting involves individuals or teams reflecting on their preferred work methods and modifying them where necessary and according to the needs of the task or environment. Reflexivity is a multifaceted concept involving questioning, reviewing, evaluating, debating, and adapting and, hence, is more than merely reflecting on what has already taken place. West (2002) describes a team demonstrating high reflexivity as one characterised by greater attention to detail, inclusiveness of potential problems, critical debate, long as well as short range planning, and adaptation.

These behaviours can create a conceptual readiness for innovation (Michael A. West, 2002) as the continuous monitoring and adaptation enable the team to develop new meaning and shared understanding (Hoegl & Parboteeah, 2006). Carter & West, (1998) found employees' reflexivity to be a predictor of a senior manager's rating of programme effectiveness and creativity. Employees with a high level of reflexivity and minority dissent were found to be more effective and innovative than those that had low levels of reflexivity (Anderson et al., 2004).

2.4.1.3 Efficiency

Efficiency was originally an industrial engineering concept that came of age in the early twentieth century. Management theorists like Frederick Taylor and Frank and Lillian Gilbreth designed time and motion studies primarily to improve productive efficiency by eliminating waste in the production process. These two techniques became integrated and refined into a widely-accepted method applicable to the improvement and upgrading of work systems. This integrated approach to work system improvement is known as methods engineering (Zandin, 2001) and it is applied today to industrial as well as service organisations, including banks, schools and hospitals (Ben-Gal et al., 2015).

The words *efficiency* and *effectiveness* are often considered synonyms, along with terms like *competency*, *productivity*, and *proficiency*. However, in more formal management discussions, these words take on very different meanings (CENCAGE, 2020). Lon Roberts (1994: 19) defines efficiency as “to the degree of economy with which the process consumes resources - especially time and money,” while he defines effectiveness as “how well the process actually

accomplishes its intended purpose”. Another way to look at these meanings is as follows: efficiency is doing things right and effectiveness is doing the right things.

2.4.1.4 Feedback

Even though the outcome of feedback might be individual depending on the culture, personality and life experiences of the recipient of the feedback, the idea of getting feedback is extremely valuable (Bechtel et al., 2015). Morrison and Bies (1991) define feedback as a way of informing employees about what they need to self-assess and how to improve their performance. Feedback can be seen as one of the most prevalent interventions in the field of organisational behaviour management and is highly popular in the domain of applied behaviour analysis (Marthouret et al., 2016). This is due to the many benefits feedback provides, such as its low cost, flexibility, ease of use, and simplicity (Prue & Fairbank, 1981). The results of feedback can differ according to the feedback mechanism used, such as verbal or written feedback, i.e. whether the feedback is given orally or provided by text. The outcomes also depend on the recipient of the feedback, i.e. whether the feedback is given individually or in a group. The level of the feedback is also critical, as are the temporal characteristics of feedback, such as when the feedback is given and the duration of feedback, i.e. how much time it takes to give or receive the feedback (Prue & Fairbank, 1981).

Studies have shown that feedback can also have drawbacks. Completeness is a dimension that can strongly hamper the outcome of feedback (Castellaneta et al., 2015). The authors argue that, when feedback is incomplete, i.e. delayed, interrupted or indirect, the receiver might get an inaccurate assessment of his or her abilities. Furthermore, according to Fleenor and Taylor (2008), specific feedback strategies, such as the 360-degree feedback technique, have some notable disadvantages.

The 360-degree feedback is a multisource assessment, where several actors including managers, subordinates, colleagues and customers provide feedback.

2.4.1.5 Performance evaluation

Attainment of a high level of performance through productivity and efficiency has always been a high-priority organisational goal. Performance appraisals are a vital tool that measure against a framework set by an organisation for its employees. The importance accorded to performance appraisal systems in part arises from the nature of the current business environment, which is marked by the need to achieve organisational goals, as well as remain relevant in intensely competitive markets (Chen & Eldridge, 2010). Within this context, various studies suggest that organisations cannot easily control the behaviour of their employees (DelPo, 2007). However, organisations can control how employees perform their jobs. In addition, performance management research shows that a significant number of employees tend to want to perform their jobs well as part of their individual goals, as well as a demonstration of loyalty towards the organisation (Wright & Cheung, 2007).

Extant literature on performance management still indicates that performance evaluation, when undertaken in the correct manner, can contribute significantly to employee motivation which enhances organisational performance (Tuytens & Devos, 2012). When undertaken in the absence of clear goals, performance appraisals can have serious ramifications in terms of employee dissatisfaction and, consequently, a reduction in productivity and organisational performance (Liu, 2019). On the positive side, it has been argued that performance appraisals provide an important avenue to recognise employees' work efforts. Recognition has long been considered as a key

employee incentive. Its importance is underscored by authors who indicates that human beings prefer negative recognition as opposed to no recognition at all (Samarakone, 2010).

2.4.1.6 Innovation

Organisational innovation is the process of transforming ideas or inventions into goods or services that generate value and for which customers will pay. This is the case, for example, when a new personality test is developed in order to meet the new selection and assessment demands of an organisation (Cubico et al., 2010; Sartori et al., 2014). Put more broadly, organisational innovation means the application of new and useful methods in undertaking practices of business, and the organisation of workplace or external relationships. This specifically describes of the concept of open innovation, which is a kind of innovation process based on the cooperation between people, teams, groups, and organisations (Chesbrough, 2012).

To achieve success, any kind of organisational innovation requires proper competences. This means that the workforce of an organisation, even when highly skilled, might not be sufficient for innovation processes that want to keep up with a fast-changing world. A key innovative factor is cooperation and the collaboration between people (Pedrazza et al., 2016), both working in the same organisation (closed innovation) and belonging to different organisations (open innovation). This requires trust and, in general, those relational and communication skills in the workforce which cannot always be taken for granted. These skills are usually developed by training activities (Sartori et al., 2014).

2.4.1.7 Quality

The key aspect of quality is essentially the extent to which an LIP is able to meet employees' expectations on certain dimensions that have value for them (Gavrea et al., 2011). The object is to identify the employees' perspective on the extent to which implementation of such devolution meets their expected quality standard as this has a significant influence on LIP performance. Quality is usually defined as a measure of how well the delivered organisational services level matches customer's expectations (Santos, 2003). Parasuraman et al. (1988) defines quality as the total evaluation of a specific service of a firm that comes from comparing the performance of that firm with the customers' general expectations of the firm's performance in that industry. With greater visibility and insight into these processes, managers will be able to transform the original goals of quality in a continuous improvement process that will have a positive impact on programme performance.

Research highlights two key themes that are related to how the quality of delivered services influences organisational performance. The literature suggests that quality directly enhances and affects organisational performance (Ramayah et al., 2011; Sim & Mackie, 2015) and indirectly through organisational commitment (Ko & Ko, 2012) or customer satisfaction (Mohammed & Ward, 2006).

2.4.2 Employee readiness for change

Employee readiness for change will be assessed in this study under the implementation climate domain. Implementation climate is defined by (Klein & Sorra, 1996:21) as “the absorptive capacity

for change, shared receptivity of involved individuals to an intervention and the extent to which use of that intervention will be rewarded, supported, and expected within their organisation”.

Employee readiness for change is measured in different ways. Those measures that focus on the characteristics of individuals within an organisation, define readiness as the extent to which organisational members are psychologically and behaviourally prepared to implement organisational change (Weiner et al., 2008). Others focus on macro-level factors, which refer to organisational readiness for change as a comprehensive attitude that incorporates factors at an organisational level (Holt et al., 2007).

In the absence of a consensus on a conceptual framework for organisational readiness for change, knowing what needs to be included in such an assessment may remain a challenge (Rabin et al., 2016). Researchers have worked on refining and standardising the measurement of organisational readiness for change to improve conceptual clarity, comparison across sites and studies, and predictive validity. In practice, however, using an existing measure may be a challenge (Miake-Lye et al., 2020). Some assessments are developed with a particular setting or intervention in mind (Gagnon et al., 2014), for example, describing transitions related to a hospital relocation (Gray et al., 2015) which makes it difficult to generalise. On the other hand, broader assessments, in their attempts to be inclusive, may be lengthy or imprecise and thus require adaptation to meet the needs of a given context such as employees’ readiness for ART devolution from external to local NGOs (Miake-Lye et al., 2020).

Assessment of organisational readiness for change is an essential precursor to the successful implementation of workplace health programmes (O’Connor & Fiol, 2006). Employee readiness

can be assessed under seven elements that contribute to a positive implementation climate of an intervention such as ART devolution from external to local NGOs (Damschroder et al., 2009): involvement; supervision; training; communication; welfare; flexibility; and motivation. These variables within the characteristics of individual domains serve as a catch-all for nonspecific items about employees' knowledge, behaviours and beliefs about the ART devolution implementation.

2.4.2.1 Involvement

Employee involvement is the process concerned with the participation and empowerment of employees to use their inputs to achieve higher individual and organisational performance. Involvement refers to employee participation in decision-making and problem-solving and increased autonomy in work processes (Sofijanovna & Chatleska, 2013). Indeed, it has been established that employee involvement results in job satisfaction, positive mood and commitment to their employers and their careers (Carson et al., 1995; Cohen, 1995). Noah (2008) reiterates that involvement of employees in decision-making creates a sense of belonging and cohesive environments in which the management and workers willingly strive to achieve readiness for change, healthy industrial relation.

Employee involvement enables employees to understand the importance of creativity and to be committed to change their behaviour while working to new and improved ways (Singh, 2009; Kingir & Mesci 2010). Elele and Fields (2010) note that employees are often more knowledgeable about their work than their seniors or supervisors. Thus, decisions are made by consulting employees who have more information. Consequently, employees involved in decision-making are better equipped for the implementation of such decisions and readiness for change.

2.4.2.2 Supervision

Supervisory support refers to the extent to which employees perceive supervisors and managers to be supportive and understanding with regard to their needs (Eisenberger et al., 2002). Making use of supportive leadership styles results in higher levels of performance and satisfaction (Robbins & Milliken, 1977) (Robbins, 2005). Supervisory support is effective when employees perceive their supervisors to be approachable, friendly, confident, and view them as people that can be relied on to give guidance and support.

2.4.2.3 Training

The training dimension of organisational climate has to do with the extent to which the organisation invests in the training and development of employees (Patterson et al., 2005). Investing in the training of employees helps them feel like valued members of the organisation and enables them to undergo personal growth, thus leading to increased work performance. Training can also increase the self-efficacy of employees and reduce job stress and related health and performance issues (Robbins, 2005). Training is not only necessary when introducing new employees to the organisation or for career advancement, but also when implementing new processes or equipment, dealing with unsatisfactory job performance, preventing employee skills from becoming obsolete, and for satisfying the personal growth needs of employees (Grobler et al., 2005).

In order to gain competitive advantages in the 21st century, the employees and workers of organisations need to update skills, knowledge and capacity-building for the development of

human capital and perceived organisational performance (Chen & Klimoski, 2007). Many researchers show that training is a valuable investment which gives maximum outcome and is beneficial for firms (Bartlett & Smith, 2001). Training and development build the capacity of workers and improve their future and current abilities, knowledge and skills (Quartey et al., 2012).

2.4.2.4 Communication

Communication has also been acknowledged by authors as an important element in organisational readiness; this is because it focuses on building internal and external relationships, sending and receiving messages for achieving common goals, and exchanging information through speaking and writing (Şeitan, 2018). The discipline of communication studies how people use verbal and nonverbal messages to generate meanings within and across various contexts, cultures, channels, and media. As a discipline, there is no omnibus definition of communication, as the philosophical perspectives that are a foundation for communication scholarship can be conflicting or complementary (Keyton, 2017).

Organisational communication is described by Torp (2014) as comprising everything an organisation speaks and does as well as everyone who is affected by the existence and activities of the organisation. Correspondingly, Kuhn (1984) defines organisational communication as the process of creating and negotiating collective, coordinated systems of meaning through symbolic practices oriented toward the achievement of organisational goals. The way in which information about change is communicated across an organisation also influences readiness; poor communication about change may, in fact, inhibit readiness (Cinite et al., 2009).

At the outset of any organisational change, uncertainty due to lack of information regarding the process and intended outcomes can be more stressful to employees than the practical aspects of the change (Schweiger & DeNisi, 2013; Schweiger & Walsh, 1990). The timely and adequate provision of information regarding upcoming changes reduces those levels of anxiety. In practice, when employees receive useful and timely information about a change, they tend to evaluate the change more positively and exhibit greater willingness to cooperate (Miller et al., 1994; Wanberg & Banas, 2000).

The degree to which employees are able to offer informed input into the change strategy is largely contingent on whether organisations share information through a variety of communication media, and enable workforce participation at the planning and implementation stages (Armenakis & Harris, 2002; Elving, 2005; Goodman & Truss, 2004; Lines, 2004), which allows employees to understand the scope and strategy underlying change plans, and provides opportunities to raise issues of concern.



2.4.2.5 Welfare

Welfare refers to the extent to which the organisation takes care of the employees and values their health and safety (Patterson et al., 2005). Promoting safe working conditions and a healthy environment leads to a decrease in absenteeism and turnover and an increase in employee morale. When employees feel that the organisation looks after their interests and that everybody is treated fairly and equally, they feel positive towards their work environment. Human resources theories highlight the importance of motivating employees in the workplace and suggest that satisfied

employees are more productive, innovative and efficient (Maslow, 1943). The theory of motivation was the first attempt to conceptualise the organisational climate theories.

2.4.2.6 Flexibility

It is widely accepted that organisations are currently facing the issue of continually responding to an environment which is increasingly dynamic, complex and uncertain as a consequence of demographic changes, a more global economy, and knowledge-based competition (Daft & Lewin, 1990). The interest in organisational flexibility has been growing in the last decade and different approaches have emerged with a focus on the dimensions of organisational flexibility (Hatun & Pettigrew, 2006; Eppink, 1978).

Volberda (1999:97) states that “organisational flexibility derives from the control capacity of the management and the controllability of the organisation”. From this definition, organisational flexibility is treated as a two-dimensional concept: the managerial task and the organisational design task constituting the two most important blocks of organisational flexibility (Volberda, 1999).

2.4.2.7 Motivation

Motivation is a process that takes place within the person, which affects the degree, direction and duration of the effort involved in achieving a goal (Greenberg, 2003). Work motivation is proved to be one of the most important assumptions of the effectiveness of work, employee readiness for change and the achievement of the given goals of both individuals and the whole organisation (Jovanovic & Bozilovic, 2017). Motivation can be defined as a set of factors that drive and guide people and encourage them to persevere in their efforts to achieve a specific goal (Williams & Williams, 2011). People who are committed to the organisation in which they work, tend to be ready to fight for the realisation of its goals and feel satisfaction over the progress of the organisation (Đorđević-Boljanović, et al., 2013, p.253).

2.4.3 Impact of organisational change on ART performance

Organisational culture is important as it reflects the attitudes, values and behaviours of organisational members (O'Neill et al. 2001); and how these features may influence employee readiness of a reform, such as ART devolution from external to local NGOs (Unger et al. 2000). Although funding for first- and second-line ART remained after the devolution, studies have shown that other equally critical inputs for effective ART administration were compromised. Clinicians described difficulty obtaining laboratory results to determine eligibility for and response to ART. Critical laboratory infrastructure was undermined and many patients did not pay for the required laboratory tests that were no longer supported by PEPFAR (Banigbe et al., 2019). The downstream impact of these changes, included delays in ART initiation, delays in identifying treatment related toxicities, and reliance on clinical criteria for HIV treatment failures - a practice

which has proven inferior to viral load and CD4 testing (Mee et al., 2008; Rawizza et al., 2011). All these downstream effects have major potential for worsening clinical outcomes.

2.5 ART PERFORMANCE AND HIV CARE CONTINUUM

Despite improved care resulting from the scale-up of the global HIV/AIDS response, substantial morbidity and mortality could still be traced to inadequacies in care delivery at any of the distinct points along the care continuum. Successful patient outcomes are contingent upon a high degree of success at each point on the continuum platform. Given the large amount of previous research about ART performance assessment, this study has taken a measurement framework and set of programme-level quality indicators that revolves around the HIV care continuum. Despite improved care resulting from scale-up of the global HIV/AIDS response, substantial morbidity and mortality can still be traced to inadequacies in care delivery at distinct points along the HIV care continuum. These critical points include diagnosis, linkage to care, initiation of antiretroviral therapy, treatment or prophylaxis of opportunistic infections, and retention in care over time (Bassett et al., 2009; Egger et al., 2002).

2.5.1 HIV testing and diagnosis

The entry point to HIV treatment is through testing and diagnosis. Although HCT interventions are key to controlling the HIV epidemic (Matovu & Makumbi, 2007; Witzel et al., 2017), yet approximately 67% of new HIV infections in West Africa in 2017 occurred in Nigeria. Despite achieving a 5% reduction in new infections between 2010 and 2017 (UNAIDS, 2017b), Nigeria along with South Africa and Uganda, accounts for around 50% of all new HIV infections in sub-Saharan Africa every year (UNAIDS, 2017a).

Low uptake of HCT services by people living with HIV/AIDS often increases the prevalence rate of HIV/AIDS, since people who are HIV negative may not be counselled, while people living with the virus may not access appropriate treatment and care consequently leading to the inevitable spread of the infection (Kolawole Jospeh, 2019). Quality measures for HIV/AIDS treatment programmes should first assess how the system performs regarding HIV testing. The UNAIDS, PEPFAR, and Global Fund indicators measure HIV testing in several sub-populations (UNAIDS, 2010). In 2016, 34% of adults that were HIV positive were aware of their status.

2.5.2 Linkage to care

After diagnosis, HIV-infected patients must be successfully linked to treatment programmes. The success of an ART programme depends on its ability to find, enrol, treat, and maintain access to care for HIV-positive individuals. Loss to follow-up (LTFU) is high at each step in the HIV treatment cascade, varies greatly between treatment clinics, and is especially high before patients begin ART (Micek et al., 2009; Rosen & Fox, 2011a). Linkage to care is described as the process (interventions and programmes) put in place to ensure that HIV-positive individuals are successfully entered into HIV medical care, and psychological and social services (Dombrowski, 2013; Philbin et al., 2014; Sanga et al., 2019). The process of linkage to care includes educating patients about the benefits of being in care and providing facilitating services such as referral letters and guidance in selecting a treatment centre and treatment options (Bureau of HIV/AIDS, 2013). Linkage to care is a crucial early step in successful HIV treatment and is typically defined as the completion of a first medical clinic visit after HIV diagnosis (Dombrowski, 2018). Linkage to care plays a key role in the HIV care continuum - it is a necessary precursor to antiretroviral therapy

initiation and viral suppression. Delayed linkage to care is a major barrier to ‘treatment as prevention’ to reduce HIV transmission rates in the United States (Fauci et al., 2019). Thus, identifying persons with HIV and successfully linking them to care plays a key role in the overall HIV epidemic, both from a treatment and a prevention standpoint.

The evidence available indicates that delays in linkage to care results in delayed receipt of ART, quicker disease progression, and increased mortality (Centers for Disease Control and Prevention, 2017; Croxford et al., 2018). Also, ART significantly reduces HIV transmission rates and is important in preventing new infections (Centers for Disease Control and Prevention, 2017; Gray et al., 2014). Therefore, successful linkage to care is undoubtedly critical in fighting the epidemic. Various HIV programmes around the world have recorded varying rates of linkage from less than 50% after six months of HIV diagnosis to 90% being ever linked (Fox et al., 2014; Fox & Rosen, 2015; Iwuji et al., 2016; McNairy et al., 2015). Results from Western countries have been relatively high with previous studies reporting 85% for the World Health Organisation (WHO) European region, 84% in the United States of America, 73% for Canada and 90% in Australia (Centers for Disease Control and Prevention, 2017; McNairy et al., 2015). However, very poor results have been obtained in sub-Saharan Africa as the majority of infected persons start ART in the advanced stages of infection (Mugglin et al., 2012; WHO, 2013).

A synthesis of available literature from sub-Saharan Africa indicates that 54% of HIV-positive persons were not linked to care (Fairall et al., 2008; Fox & Rosen, 2010; WHO, 2013). Delays in linkage are associated with lower levels of viral suppression, higher likelihood of viral resistance, increased HIV morbidity, mortality and transmission (Siedner et al., 2015; Wanyenze et al., 2011).

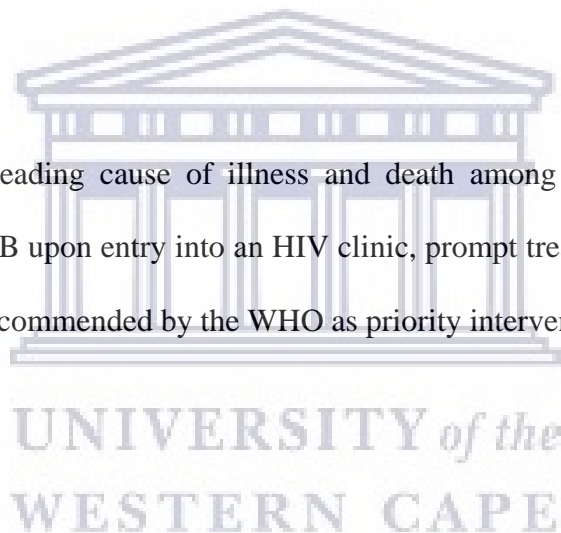
In Tanzania, the HIV Impact Survey (THIS) found that only 52% of HIV-positive adults aged 15 and older in the general population had viral load suppression, in part because of delayed or low linkage to care (NACP, 2018). Two stages are defined to address care linkage. Stage 1 begins after receipt of a positive HIV test, and ends with the receipt of a CD4 count or clinical staging result and referral to ART or pre-ART care; stage 2 begins after referral to pre-ART care, and ends with ART eligibility (Rosen & Fox, 2011b). Adoption of such standard definitions would be an important step in developing quality measures.

2.5.3 ART eligibility

Individual and population-level benefits of ART are maximised when treatment is initiated soon after HIV infection occurs (Bock et al., 2016; Danel et al., 2015; Eholié et al., 2014). Recent studies have shown that immediate versus delayed initiation of ART reduces risks of AIDS and severe opportunistic illnesses (Eholié et al., 2016). Studies suggest that earlier initiation of ART may also improve rates of retention in care and medication adherence, and promote more rapid achievement of viral load suppression (Clouse et al., 2013; Jain et al., 2014). As a result of this evidence, the WHO now recommends immediate initiation of ART for all people diagnosed with HIV, regardless of their CD4 count (WHO, 2015). Other reviews of losses along the HIV care continuum in sub-Saharan Africa have estimated that 54%–69% of those ineligible for ART at the time of HIV care enrolment are lost to care prior to ART initiation, with the poorest retention rates among adolescents, young adults, and those enrolling in care at earlier stages of infection (Kranzer et al., 2012; Mugglin et al., 2012).

This study, however, has based its methodology and findings on the WHO treatment eligibility guidelines for 2013. Once enrolled in HIV care, patients should be staged with clinical and psychosocial evaluation, in addition to CD4 count testing, to assess eligibility for ART, and to screen and prescribe prophylaxis for opportunistic infections (WHO, 2013). Given evidence that starting treatment earlier reduces the risk of AIDS and death, the WHO in 2009 increased the recommended threshold for ART initiation from <200 cells/uL to <350 cells/uL. Nonetheless, patients in most low-income countries present to care much later (mean rank CD4 108 cells/uL) than their counterparts in high-income countries (mean Rank 234 cells/uL) (Brinkhof, et al., 2009; Sani et al., 2006).

Tuberculosis (TB) is the leading cause of illness and death among people living with HIV worldwide. Screening for TB upon entry into an HIV clinic, prompt treatment for active TB, and disease prophylaxis were recommended by the WHO as priority interventions in 2010, but uptake is poor (WHO, 2010).

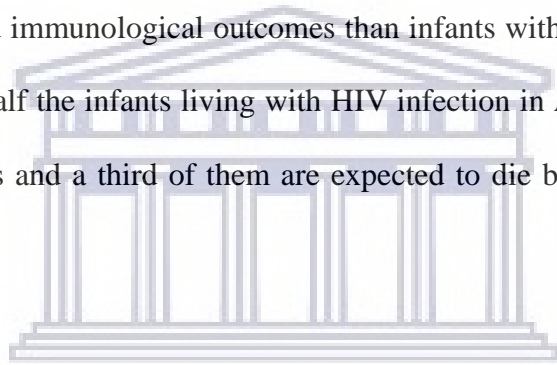


2.5.4 Antiretroviral therapy – preparation and initiation

Reports have shown that less than 60% of people living with HIV in sub-Saharan Africa have access to ART (UNAIDS, 2017b). Access to ART for everyone who requires it is central to the attainment of the global goal of eliminating HIV. Even though Nigeria, together with South Africa, accounts for over 40% of the HIV burden in sub-Saharan Africa (WHO et al., 2013), less than 25% of all estimated people living with HIV in Nigeria were accessing antiretroviral treatment at the end of 2014 (NACA, 2015). Evidence clearly demonstrates that antiretroviral treatment significantly reduces the risk of developing HIV-related complications (Bock et al., 2016; Eholié

et al., 2014; Group et al., 2015). In addition, antiretroviral therapy dramatically reduces HIV transmission to others (Hernán, 2010; Lundgren et al., 2015).

After disease staging, most HIV treatment programmes have incorporated a process to assess antiretroviral therapy readiness that includes psychosocial assessment, adherence counselling, and identification of a treatment supporter. Early initiation of ART has been shown to significantly reduce early infant mortality by 76% and HIV disease progression by 75% (Violari et al., 2008). A study conducted among South African children demonstrated that infants with early, but limited, ART had better clinical and immunological outcomes than infants with deferred ART (Cotton et al., 2013). Without ART, half the infants living with HIV infection in Africa are expected to die before the age of two years and a third of them are expected to die before the age of one year (Newell et al., 2004).



ART preparations typically span several clinical visits (Bassett et al., 2007; Wanyenze et al., 2008). Many programmes describe long delays in ART initiation, with patients waiting up to 120 days to complete adherence training (Bassett et al., 2009). Stockouts of essential drugs affect at least 11% of patients on ART treatment, according to a study in Côte d'Ivoire. Resultant treatment discontinuation is associated with increased risk of care interruption or death.

Substantial delays also exist in the time from enrolment in care to full clinical assessment and ART initiation (Bassett et al., 2010). Potential indicators could measure the percentage of patients enrolled in an HIV care programme that receive a CD4 count within 3 months of HIV diagnosis, or the delay to initiation of ART in eligible patients. Indicators could also be defined to determine

the proportion of patients screened for concomitant TB infection, which is a critical problem in those who are HIV infected.

2.5.5 Retention in care

The Rosen and Fox (2011b) report states that the proportion of adult patients retained between any two points from testing positive for HIV to initiating ART in sub-Saharan African HIV/AIDS care programmes are categorised in three stages: Stage 1 is from HIV testing to receipt of CD4 count results or clinical staging; Stage 2 is from clinical staging to ART eligibility; and Stage three is from ART eligibility to ART initiation respectively. In their 2011 report, the range for the proportions of patients retained in Stage 1 was 35%-88% with a mean rank range of 59%. For Stage 2 the range was 31%-95% with a mean rank range of 46%. While for Stage 3 the range was 14%-84% and a mean rank range of 68% (Rosen & Fox, 2011b).

Once initiated on ART, patients should be monitored for medication adherence and toxicity in accordance with local guidelines. These efforts require reliable medication supply chains and laboratory services, which can be assessed through specific indicators such as the number of stockouts of essential medications per 6-month period. These measures would identify the greatest delays in the system, potential interventions, and appropriate targets for future performance.

2.5.6 Clinical outcomes

There is no doubt that HIV/AIDS presents a huge global burden, but ARTs are becoming more accessible worldwide and their effectiveness has been proven with studies reporting viral load suppression in up to 86% of patients receiving treatment (Gardner et al., 2011). Additionally,

ARTs have shown to increase CD4 cell counts by up to 123 cells/uL if the patient is adherent to medication (Bollar, 1996), and drop AIDS mortality rates by up to 40% per year. However, the effectiveness of the treatment is highly dependent on adherence to the medication; otherwise, the patient can develop drug-resistant strains that will no longer respond to treatment.

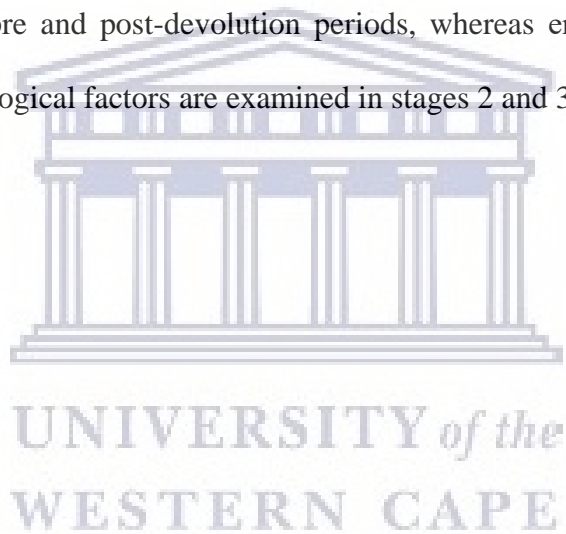
2.6 ADOPTION OF CONCEPTUAL FRAMEWORKS FOR THE RESEARCH

This thesis is based on Kotter's eight-step organizational change model which best fits ART devolution from external to local NGOs. If some of the steps are hurried, the changes implemented in the latter stages cannot be sustained and collapse or stall due to poor foundations in the first stages (Kotter, 1995). The greatest challenge for organizations undergoing a change process is to have managers who will inspire the entire organization towards achieving the desired change on a platform of a widely shared vision and direction (Njoroge, 2010). However, for a change readiness assessment, a differentiated concept of organisational readiness is believed to be more feasible. The association of organisational cultures with employee readiness, organizational performance (Deal & Kennedy, 1982; Ouchi, 1977; Waterman et al., 1980), managers roles (Muafi & Uyun, 2019) and the unique interplay of performance indicators needed across ART continuum of care (Ahonkhai et al., 2012) were then used to form the structure of the research instruments (Appendix 6: Employees readiness Survey Questionnaire) and (Appendix 7: ART Performance Assessment Checklist for pre devolution period, 2005-2011).

With a readiness assessment based on the expanded model above, the research on organisational readiness in this specific context provides further insights into the overall processes. In the context of devolution from external to local NGOs, collective readiness resources, organizational

operations, and work culture to implement changes in service delivery and how supportive an organization is in terms of the collective attitudes, beliefs, and intentions of the employees to adopt and sustain changes in the ART program.\

The conceptual framework (Figure 2) outlines the 3 main antecedents for readiness that are linked to the successful change implementation. These 3 components are ART performance for pre- and post-devolution phases, the effects of devolution on ART programme performance and, factors associated with pre- and post-devolution performance levels. The first stage assess IIPs and LIPs ART performance in the pre and post-devolution periods, whereas employees and managers' attributes and other psychological factors are examined in stages 2 and 3 of the model.



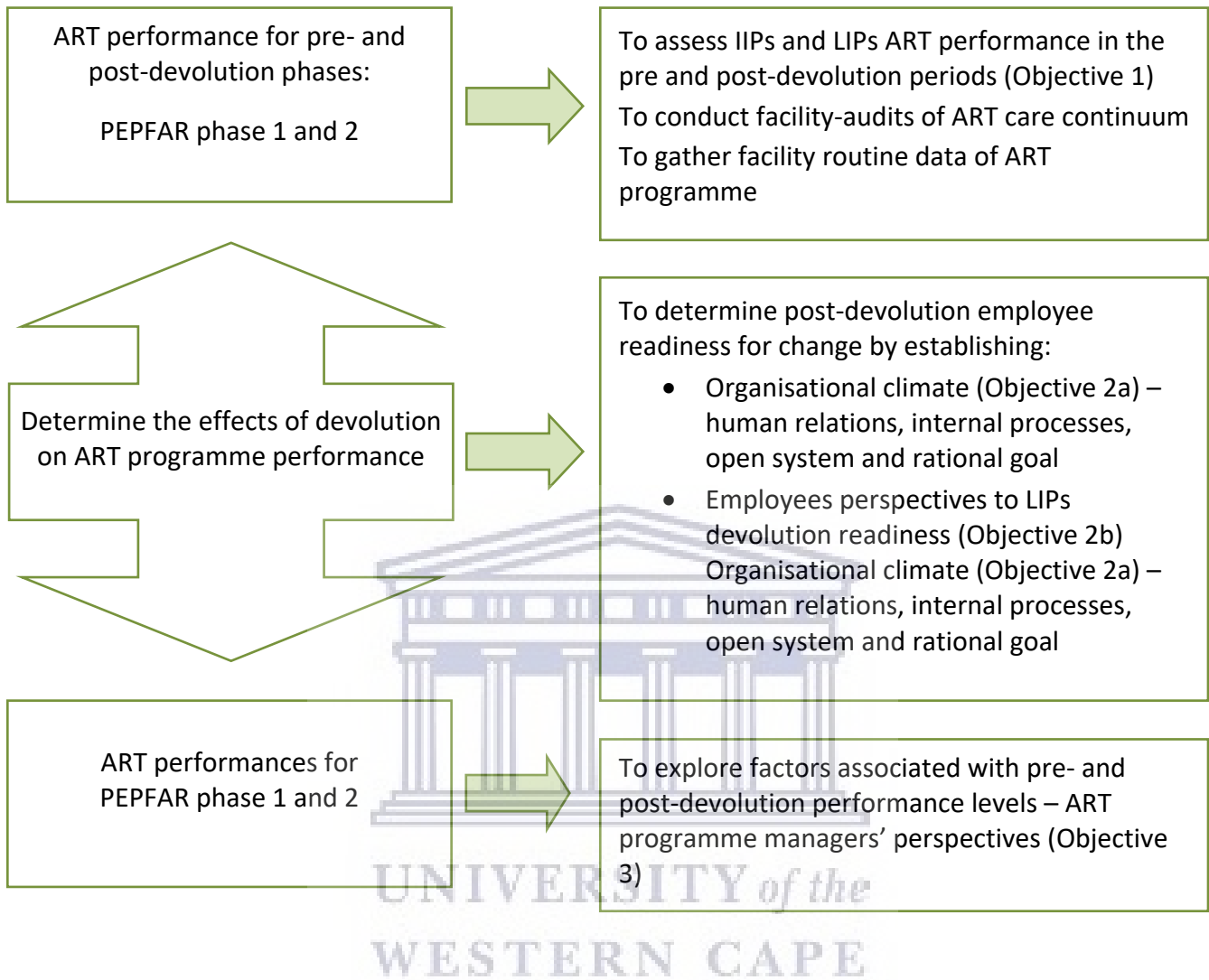


Figure 2 Conceptual framework of research activities

Figure 2 highlights the link between baseline ART performance of the health facilities before and after devolution (Objective 1) and employees' devolution readiness (Objectives 2a & 2b). Factors associated with level of ART performance for pre- and post-devolution performance levels were deduced by exploring the managers' perspectives (Objective 3).

2.7 CHAPTER SUMMARY

This literature review focused on the concepts of organisational change theories and ART programme performance. Distinctions were made between different forms of organisational change (Weick & Quinn, 1999) and change drivers (Porras & Silvers, 1991). The chapter also expanded on organisational readiness for change including the integrated climate and culture model (Schneider et al., 2013) that fits the ART programme devolution from external to local NGOs. The organisational climate and culture integrated model, including the role of employees in organisational readiness for change, were elaborated on. Key elements of organisational performance and readiness upon which the organisational assessments of the study will be conducted, were categorically highlighted.

A sub-section was presented that detailed the influence of programme devolution on ART performance along the HIV care continuum (Ahonkhai et al., 2012). This was accomplished through a narrative literature review. The narrative review section of this chapter played an important role in focusing the scope of the systematic literature review.

ART programme devolution appears to be influenced by a variety of factors at different levels, but those which relate to organisational structure, climate and culture appear to be the most prominent. Change readiness and organisational performance factors were cited to describe inter-relationships. HIV care continuum variables were discussed including how each influences ART programme performance.

The literature particularly pointed out high levels of employee perception as a major predictor that might positively impact on devolution readiness.



CHAPTER THREE

METHODOLOGY

3.1 INTRODUCTION

To conduct research on establishing organisational readiness for change, many considerations and decisions must be made about how the research should be undertaken and which methodology should be applied. The chapter describes the planning and conduct of this study. It includes a description of the study design which is referred to as the overall plan or structure to answer the research questions (Tharenou et al., 2007), its rationale and sequence of processes involved; including description of data collection, management and analysis.

3.2 RESEARCH PHILOSOPHY

Research is based on assumptions about how the world is perceived by humans and how it is understood (Saunders et al., 2016). Kuhn & Hawkins, (1963) introduced the concept of paradigm (gr. paradeigma—example model) in the science philosophy. A researcher applies a certain paradigm, i.e. a worldview which provides the researcher with philosophical, theoretical, instrumental, and methodological foundations (Žukauskas et al., 2018). Therefore, a paradigm with basic beliefs about the world and the creation of knowledge is guiding the research design, the collection and analysis of data, and the entire progress of a research project (Collis & Hussey, 2003).

Although there are several paradigms or worldviews that structure and organize modern social work research (e.g., postpositivism, constructivism, participatory action frameworks, or

pragmatism), they are all essentially philosophical in nature and encompass the following common elements: axiology—beliefs about the role of values and morals in research; ontology—assumptions about the nature of reality; epistemology—assumptions about how we know the world, how we gain knowledge, the relationship between the knower and the known; methodology—shared understanding of best means for gaining knowledge about the world; and rhetoric—shared understanding of the language of research(J W Creswell, 2008).

This study assumes a pragmatic research philosophical view point upon which the mixed method design is based. The underlying justification for choosing pragmatism research philosophy was because combination of qualitative and quantitative methods was necessary to find answers to the complex devolution from external to local NGOs’ research questions. Pragmatics “recognise that there are many different ways of interpreting the world and undertaking research, that no single point of view can ever give the entire picture and that there may be multiple realities”(Saunders et al., 2009). According to pragmatism research philosophy, research question is the most important determinant of the research philosophy. Pragmatics can combine both, positivist and interpretivism positions within the scope of a single research according to the nature of the research question.

Figure 3.1.1 presents the philosophical model which are significant in assessing effects of devolution from external to local NGOs research project implementation. It outlines the interplay of theoretical perspective, research question, aim & research design of the project organizational readiness for change research model.

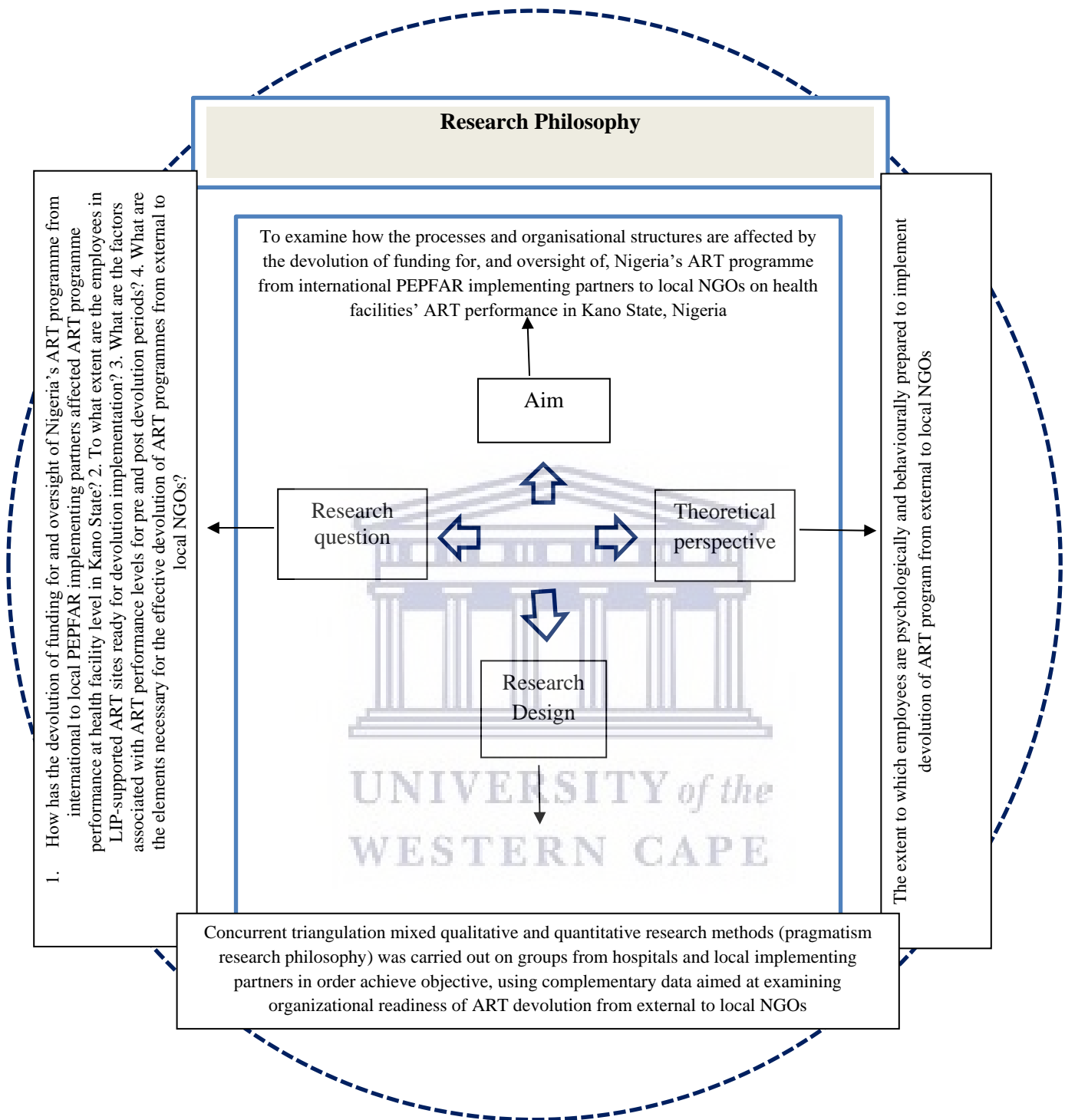


Figure 3.1.1 Research philosophy: the main aspects of the research. Source: Adapted by the authors according to Žukauskas et al., 2018

3.3 RESEARCH DESIGN

The study is a mixed-method design developed on the basis of a literature review and conceptual framework (Tashakkori & Teddlie, 2003). By definition, the mixed method is a procedure for collecting, analysing, and ‘mixing’ or integrating both quantitative and qualitative data, in one study, in order to gain a better understanding of the research problem (John W. Creswell & Miller, 2000; Tashakkori & Teddlie, 2003). The rationale for combining both kinds of data within one study is because neither quantitative nor qualitative methods are sufficient, by themselves, to capture the trends and details of the complex phenomena, i.e. the ART programme devolution from external to local NGOs in Kano State, Nigeria. When used in combination, quantitative and qualitative methods complement each other and allow for a more robust analysis, by taking advantage of the strengths of each method (Greene et al., 1989; Miles et al., 2014).

The concurrent triangulation mixed-methods design was specifically adopted for the study. This approach consists of obtaining different but complementary data on the same topic (J. M. Morse, 1986). It is the collection of both quantitative and qualitative data concurrently, followed by a comparison of the two databases to determine if there is convergence, differences, or some combinations. Some authors refer to this comparison as confirmation, disconfirmation, cross-validation, or corroboration (Greene et al., 1989; Steckler et al., 1992).

The quantitative and qualitative data collections were carried out concurrently, and occurred in one phase of the research study. The integration of the two data is presented in the discussion section (Chapter 6) where both data are merged, i.e., quantitative data was transformed into narrative form so that both could be easily compared). In some cases, side-by-side integration of

both quantitative and qualitative data is presented in which statistical results are followed by qualitative quotes that support or disconfirm the quantitative results.

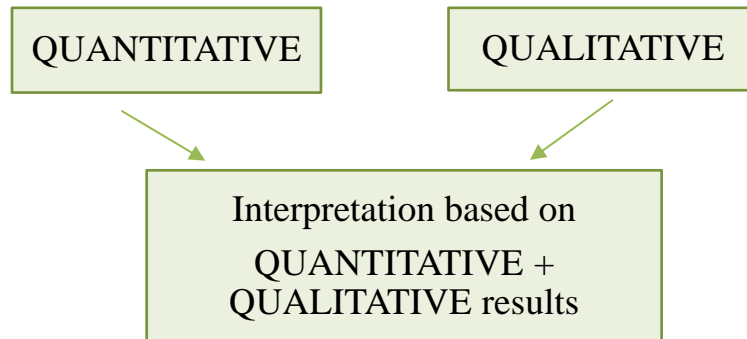


Figure 3.1 Concurrent triangulation mixed-methods design

The data collection section is described as follows: the study setting; the orientation of research assistants and instruments; the study populations and sampling; and data collection. Each of the steps taken during data collection, including sample selection and participation, is described under the relevant sections.

3.4 STUDY SITE

This study was conducted in Kano State, one of the seven states in north-west Nigeria. Examining ART devolution implementation in Kano State is indeed critical because the state is the commercial nerve centre of northern Nigeria with over 9 million people. Kano State has very large health facilities, including teaching hospitals, which receive patients from within the state, and from the neighbouring states of Jigawa, Katsina, Kaduna, Bauchi and Zamfara (Iliyasu et al., 2011). The state is administratively divided into 44 local government authorities (LGAs). According to the 2006 government census, Kano has the highest population of 9,401,288 in Nigeria (Ministry & Health, 2010; National Bureau of Statistics, 2013). The capital is the city of

Kano which is the third largest city in Nigeria and the largest in northern Nigeria. In addition, Kano city is a commercial hub attracting visitors from Nigeria and beyond.

A survey conducted by Kano State Ministry of Health (2013) showed that, at the end of 2012, there were an estimated 2,542,045 women of reproductive age (WRA), i.e.15-49 years old in Kano State of whom 577,738 were pregnant during the same year. Contraceptive prevalence in the state was 0.7%, while the unmet need for contraception was 17.6%. The same survey reported 55.5% of pregnant women received antenatal care from skilled personnel, while 18.9% of deliveries were attended by a skilled birth attendant. Kano State reported a total of 1,132 health facilities, 638 (56%) of which provide antenatal care services.

Over the years, Kano State has recorded varying HIV prevalence. From zero prevalence in 1991, the prevalence rose to 4.3% in 1999 and then dropped to 4.1% in 2003, and to a very low prevalence of 2.2% in 2008, only to rise 1.2% again in 2010 to a prevalence of 3.4%. In addition, the Integrated Biological and Behavioural Surveillance Survey (IBBSS) conducted in 2007, showed the following prevalence amongst the various high-risk groups in the state: brothel-based female sex workers (FSW) - 49.1%; non-brothel-based FSW - 44.1%; men who have sex with men (MSM) - 11.7%; intravenous drug users (IDU) - 10%; armed forces - 3.7%; police - 4.4%; and transport workers - 1.4%.

Since 2004, US-based external HIV implementing partners have pioneered the expansion of ART in resource-limited countries, including Nigeria. Prior to 2004, HIV care and treatment services were only available in 25 tertiary treatment centres across Nigeria. Only a total of 13,500 people

living with HIV/AIDS (PLHIV) were on ART (NACA 2009c); a small fraction of the estimated 550,000 people requiring ART at that time (FMOH, 2009). Kano State was among the states where the new HIV epidemic phase 1 response was rolled out. Global efforts such as the WHO 3 by 5 initiatives and the US PEPFAR have provided resources that have supported treatment scale-up in Kano and other states in Nigeria.

The Kano State Action Committee on AIDS (SACA) annual report (unpublished) shows that as of December 2012 there were 22,178 HIV clients enrolled in treatment in Kano State. HIV care and treatment services were expanded to all 44 LGAs in Kano State, supported by two lead LIPs - FHI 360⁰ and the Institute of Human Virology, Nigeria (IHVN). The HIV treatment programmes that were previously supported by Pathfinder International, FHI-Global HIV/AIDS Initiative Nigeria (GHAIN), AIDS relief, University of Maryland Institute of Human Virology (IHV) and the Global Fund, were transferred equally among only two new LIPs: FHI 360⁰ and IHVN. Each LIP supports 22 LGAs following the 2010 devolution framework implementation.

This research was conceived to design and examine organisational readiness for ART devolution and how the devolution affects ART performance in Kano State. The Management of the state Ministry of Health and those of the LIPs and ART sites were contacted to obtain ethical approval and support. The support that evolved from these consultations were ethical approvals for the research (Appendices 1 and 4) and letters written to the heads of the ART sites in Kano State government to ensure their cooperation for the research.

NIGER



Source: From <https://allafrica.com/stories/202009230068.html>: accessed 11th August 2021.

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3.5 DATA COLLECTION

3.5.1 Planning for the mixed methods study

We used two data collection techniques in this study: 1) a quantitative questionnaire and 2) Key Informant Interviews (KII). The multi-tasking requirements of mixed methods studies require additional researcher training to enhance the missing skills (Tashakkori & Teddlie, 2003). Hence proper training sessions for skill acquisition of the researcher and assistants, and planning were carried out in this mixed methods study. The researcher undertook skills enhancement programmes

through formal courses and capacity building workshops in qualitative and quantitative research methods including use of Nvivo, SPSS software in 2016/2017 under the African Doctoral Dissertation Research Fellowship program anchored by the Africa Population and Health Research Centre in Nairobi Kenya. He used the knowledge and skills acquired in training research assistants used in this study.

3.5.2 Data Sources

The initial decision researchers make is sourcing data to address a specific research question. Data sources could include government testimony or inquiry (Gephart, 2007), internal documents produced by organizations (Nachmias, David, Frankfort-Nachmias, 1996), and many more. Given this study focus, secondary health facility records data are used for the quantitative component while interviews with employees and managers were the data sources for the qualitative data. In this study, the units of analysis in the quantitative survey and qualitative interviews were both individual and clustered: secondary health facility records of patients in ART supported sites, managers working in AIDS control program and two LIPs, employees working in four ART supported sites and two LIPs. The secondary data consist of facility data from HCT, pre-ART and ART, ANC/PMTCT and TB registers from 2005-2016 were reviewed and extracted from the registers and health facility HMIS databases and were captured using ODK software. The extracted data were validated with respective facilities to ensure accuracy of the data. A facility audit was conducted in all health facilities (ART sites) in the state.

A sub-sample of participants in the quantitative survey and managers were interviewed in the concurrently to explore their perspectives to ART devolution from external to local NGOs.

3.5.3 Study population and sampling

The study was carried out on two Local Implementation Partners (LIPs) (IHVN and FHI 360⁰) and four ART sites supported by LIPs. The ART sites were Aminu Kano Teaching Hospital (AKTH), Infectious Disease Hospital (IDH), General Hospital Bichi (GHB), and General Hospital Wudil (GHW). The LIPs were purposively selected because they are the only lead LIPs supporting HIV treatment programmes in Kano State; each was responsible for half (22 of the 44) local government areas in the state. The criteria for the purposive selection of the four ART sites were based on the following: high HIV client enrolment levels during PEPFAR 1 and 2; receipt of support from one of the LIPs; and the provision of ART services for both the pre- and post-devolution periods.

The target population in this study was: a) employees (including managers) of the two LIPs (i.e. Institute of Human Virology Nigeria (IHVN) and Family Health International 360⁰ (FHI 360⁰) to which the PEPFAR IIPs ART programmes were devolved in Kano State. These employees had knowledge of the former IIP programmes prior to December 2010 (before devolution) and after December 2010 (devolution implementation); b) Kano State AIDS control programme managers; and c) ART and service providers working in the four selected health facilities in Kano State.

General criteria for including participants in the study were: being an employee of the IHVN/FHI 360⁰, Kano State AIDS control programmes or selected ART facilities supported by the LIPs; working in ART prior to devolution roll out; and direct involvement in an ART programme or service delivery activities.

Study population-quantitative survey

Population sampling

A sampling of employees for change readiness assessment was carried out from six primary sampling units as described in figure 3.3 (two LIPs – IHVN and FHI 360⁰; and four ART sites supported by the LIPs).

The total of ART employees from the six selected institutions is 369: AKTH = 249 (67% of total); IDH = 42 (11% of total); GHW = 21 (6% of total); GHB = 26 (7% of total); FHI 360⁰ = 27 (7% of total); and IHVN = 3 (1% of total) (Kano-State wide rapid Health Facility Assessment report 2013; AKTH annual report, 2012).

Sample size

A critical component in sample size determination is the estimation of variance from primary variables (Cochran, 1977). A survey questionnaire (Appendix 6) was used to assess the employees' change readiness. It contains continuous variables based on a five-point Likert scale.

Based on the five-point Likert scale and given that four standard deviations (two to each side of the mean) would capture 98% of all responses, the variance is calculated as follows:

$$\text{Variance } (S) = \frac{5 \text{ (number of points on the scale)}}{4 \text{ (number of standard deviations)}} = 1.25$$

$$4 \text{ (number of standard deviations)}$$

The sample size for continuous data is then estimated using Cochran's formula:

$$n_0 = \frac{(t)^2 \times (s)^2}{(d)^2} = \frac{(1.96)^2 \times (1.25)^2}{(5 \times 0.03)^2} = \frac{3.84 \times 1.56}{0.0225} = 266$$

$$\frac{(t)^2}{(d)^2} = \frac{(1.96)^2}{(5 \times 0.03)^2} = \frac{3.84}{0.0225} = 1.56$$

Where: n_0 = sample size, t = value for the selected alpha level of .025 in each tail = 1.96 (level of error which indicates the probability that differences revealed by statistical analyses do not exist). The alpha level used in determining sample size in most educational research studies is either .05 or .01 (Ary & Razavieh, 1996). s = estimate of standard deviation in the population (variance) = 1.25. d = acceptable margin of error for mean = 5 (number of points on scale) x 0.03 (acceptable margin of error). The general rule in educational and social research for continuous data is that a 3% (0.03) margin of error is acceptable (Krejcie & Morgan, 1970).

However, the sample size obtained (266) far exceeds 5% of the total population (18), hence Cochran's correction formula (Cochran, 1977) is used to calculate the final sample size:

$$n = \frac{n_0}{(1 - n_0/\text{population})} = \frac{266}{(1 - 266/369)} = 156$$

Where n = final sample size after correction, n_0 = sample size before correction.

Hence, 156 employees were planned to be selected for the change readiness survey. Selection of employees based on proportion was used to ensure that all the six purposively-selected primary sampling units were included in the survey.

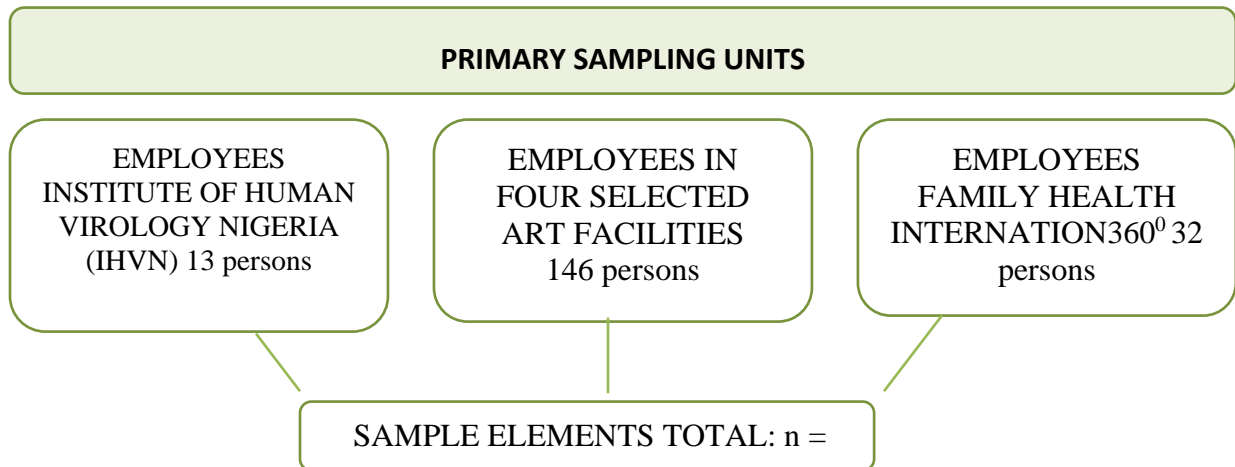


Figure 3.3 Survey sampling for employees' readiness to change

Study population-qualitative component

Sample selection for Qualitative (ART Employees & Program Managers) interviews

Sub-population of ART employees from the survey participants who provided consent for qualitative interviews constituted the study population in the qualitative segment of the study. In addition, health professionals constituting the leadership cadre (Program Managers) from the state AIDS control program & two LIPs, made up another study population in this part of the research. This was to capture the perspectives of health care employees and health program managers on devolution experiences in terms of staffing, organizational readiness and range of ART performance outcomes.

Sample size

Samples for qualitative studies are generally much smaller than those used in quantitative studies (Ritchie & Ormston, 2014). This is because one occurrence of a piece of data, or a code, is all that is necessary to ensure that it becomes part of the analysis framework. Moreover, because

qualitative research is very labour intensive, analysing a large sample can be time consuming and often simply impractical(Atran et al., 2005). Within any research area, different participants can have diverse opinions. Qualitative samples must be large enough to assure that most or all of the perceptions that might be important are uncovered, but at the same time if the sample is too large data becomes repetitive and, eventually, superfluous. Studies that use more than one method require fewer participants, as do studies that use multiple (very in-depth) interviews with the same participant(Lee et al., 2002). While there are other factors that affect sample size in qualitative studies, researchers generally use saturation (the point at which the researcher was no longer hearing new information) as a guiding principle during their data collection(Mitroff et al., 1979).

In this mixed methods research, two forms of interviews were carried out that consist of a) employee devolution readiness interviews on a sub-sample of 20 employee readiness survey participants to help explain the quantitative results and b) Program Managers' ART devolution experience interviews conducted with five out of a total of eight purposefully selected managers available in the state AIDS program and two LIPs. Three managers were excluded from participating based on (1) their lesser experience in devolution implementation (2) long appointment time (3), travels and or other engagements. The five managers were considered adequate to produce rich, detailed and valid data that could yield proper saturation.

3.5. Research assistants' orientation and instruments

The researcher recruited five research assistants to support both quantitative and qualitative data collection. Three of the assistants were adequately experienced in both qualitative and quantitative data collections. One was a senior research consultant selected from Aminu Kano Teaching

Hospital with support from the local supervisor. The senior research professional supported the research assistant with coordination, training of other assistants, addressing challenges associated with access to ART sites and participants, and providing additional guidance to many field activities. The remaining two assistants were university graduates with very little experience, but proven potential to comprehend research orientation and training sessions.

An orientation workshop for the research assistants was conducted over three days. Methods used during the orientation workshop included presentations using power point and flip charts, and practical field sessions on both quantitative and qualitative data tools to ensure an in-depth understanding of research tools and methodology. In addition, the orientation workshop for research assistants and co-researchers was used to gather inputs that enhanced tool reliability and validity. Specifically, construct domains that were qualitatively identified during the tool development phase, were reviewed during the workshop to familiarise the research assistants with the contents for ART devolution readiness of the LIP employees, organisational performance, and HIV care continuum performance.

The research tools were developed through an extensive literature review, and in consultation with experts in the field. They were revised by a pool of research assistants and co-researchers experienced in the field of global health initiatives (GHIs) operational research. The purpose of the review of the tools was to evaluate their content validity. There was unanimous agreement that organisational readiness, performance and readiness variables, and those for HIV continuum of care, had to be measured by using both the qualitative and quantitative tools. Ensuring the validity of the tools is critical because “the conclusions researchers draw are based on the information they obtain using these instruments” (Fraenkel & Wallen, 2003:158). The research tools were uploaded

onto an Open Data Kit (ODK) platform and the researcher trained the research assistants on how to apply the tools electronically.

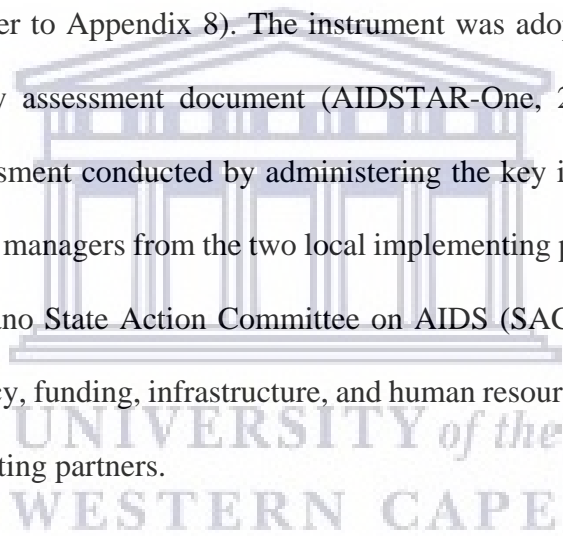
Questionnaires for quantitative data collection

Quantitative research instruments generally consist of an employee readiness survey questionnaire (Appendix 6) based on the competing values framework (CVF) of organisational climate (Hartnell et al., 2011). As a quantitative measure, a questionnaire was designed to collect data from the employees of ART sites supported by the local NGOs. The first part of the questionnaire collected demographic information, such as age, sex, educational status, and marital status. Another section of the questionnaire examined participants' organisational readiness perceptions. A five-point Likert-type scale was used to measure the individuals' level of agreement with each statement, with the score for each statement ranging from 1 to 5, where 1 represented strong agreement with the statement. The total score for each participant was then computed by adding together the individual's response to each statement. The questionnaire was used to collect data on the human relations model of the CVF variables. The ART performance assessment checklist (Appendix 7) is a checklist used to collect data on ART performance for periods before and after devolution. The checklist was adopted from the work of Ahonkai et.al (2012) which examines ART programme quality variables. The instrument contains seven measures spread across the HIV care continuum at the four ART sites.

Interview guides for qualitative data collection

Two qualitative research tools were used for the study:

1. A semi-structured interview guide that explored employee perspectives of factors associated with the levels of ART performance during the PEPFAR 1 and PEPFAR 2 periods, and employee perspectives of factors associated with the levels of ART performance during PEPFAR 1 and PEPFAR 2 periods (Sharma et al., 2013) (refer to Appendix 9). The instrument was administered to non-management staff working in FHI 360, IHVN and four ART sites. It has seven dependent variables used to qualitatively assess ART programme performance measures.
2. A semi-structured interview guide that assessed the managers' experience of the devolution implementation (refer to Appendix 8). The instrument was adopted from a USAID HIV programme capacity assessment document (AIDSTAR-One, 2013). It is a qualitative organisational assessment conducted by administering the key informant interview (KII) guide to programme managers from the two local implementing partners - FHI 360/ IHVN and the director, Kano State Action Committee on AIDS (SACA). The KII specifically dwelled on key policy, funding, infrastructure, and human resources issues associated with new local implementing partners.



3.5.5 Quantitative assessment

Objective 1: To assess ART performance

An important strategy embedded within the partnership framework was to implement a smooth devolution process that would ensure quality ART programmes performance post-devolution (Crye, 2011). The performance of ART programmes before and after devolution of funding and oversight to local implementing partners in Kano State were measured. The setting was the LIPs and four ART sites (the selection is described in 3.3). Records for ART performance assessment were selected using a systematic sampling method. This involved first obtaining a sampling interval followed by a random starting point using a random number table. Source documents that were sampled include patients' records (paper and electronic), the IIP programmes' computerised management information system (CMIS); and the LIPs' CMIS for the pre- and post-ART devolution periods.

The assessment was done by measuring the health facilities' ART performance from June 2005 to December 2010 before devolution (PEPFAR 1). ART performance for the period after devolution, 2011 to 2016, was also assessed (PEPFAR 2). It was a retrospective quantitative assessment. Two research assistants helped the researcher in administering the checklist (refer to Appendix 7). The checklist contains 24 questions addressing care continuum domains (HIV counselling and testing, linkage to care, ART eligibility, ART preparation, ART initiation, retention in care and clinical outcomes).

ART performance for pre- and post-devolution periods was assessed based on the seven key process steps in the HIV care continuum highlighted in the introduction to this methodology

chapter. A major barrier to expanding ART coverage is the complex continuum of HIV care, which Gardner et al. (2011) referred to as the ‘spectrum of engagement in HIV care’. Each of the seven defined steps along the continuum has been demonstrated as programmatic vulnerabilities, where individual patients can and do disengage from treatment, ultimately resulting in morbidity and mortality and also uncontrolled viral load and increased transmission risk.

To assess IIPs and LIPs ART performance in the pre- and post-devolution periods, data was collected for the two periods. The steps were:

- Pre-devolution period data was collected retrospectively for the period from January 2005 to December, 2010 through analysis of hospital records
- Post-devolution period data was collected from January 2011 to December 2016 using the same method.

A facility audit was conducted in the four NGOs which were supporting health facilities. The questionnaire was adopted by the researcher from the work of Ahonkhai et al. (2012). The plan for the audit was presented to the research committees at AKTH and Kano State Ministry of Health in order to monitor the overall process of this research and other research activities taking place in the State. Amendments to the audit tools (Appendices 4 and 7) were made based on the feedback from the committees. Research assistants were contracted to conduct the survey in collaboration with the researcher.

The purpose of the assessment was to determine the ART performance in the health facilities for pre- and post-devolution periods. An ODK version of the assessment checklist was provided to

research assistants. This step was conducted to respond to Objective 1 (to assess ART performance for pre and post devolution).

Data analysis

For the facility audit, the data was captured using ODK software and classified into continuous variables. Descriptive statistics, such as frequency and proportions, were used to analyse data using the statistical package for social sciences (SPSS). ART performance audit data was summarised using tabular form and presented in a descriptive statistical format using means and frequencies. Frequency analysis was conducted to identify a valid percentage of results. Others include proportions for categorical variables and means for continuous variables to deduce ART performance for the pre- and post-devolution periods. The difference in proportions was tested using the χ^2 test, while those for means were tested using t-test. The analysis of this data source contributed to answering Objective 3.

Objective 2a: To assess employee devolution readiness

The survey data was collected from 191 sampled LIPs and ART site employees on change readiness exceeding the proposed sample size of 156 (see detailed population and sampling in Chapter 3, section 3.3).

Questions were asked to cover the full range of LIPs organisational climate. Closed statements were used, with a five-point Likert scale: strongly disagree, disagree, not sure, agree and strongly agree. Some of the measures were negatively worded while others were positively worded. This was done to reduce the likelihood of agreement bias (Fowler, 2002). The researcher and four

assistants administered the questionnaire. A day-long orientation was provided by the researcher to ensure understanding and uniformity. The tools were piloted and reviewed by the research team.

The quantitative data was collected through cross-sectional surveys using devolution readiness questionnaires based on the competing values framework (CVF) of organisational climate variables (Hartnell et al., 2011). The CVF data elements consist of the following: employees' involvement; supervisory support; training; welfare; innovation/flexibility; outward focus; reflexivity; clarity of organisational goals; efficiency; effort; performance feedback; the pressure to produce; and quality.

Data collection for employee readiness

Two LIPs (Org A and Org B) and four ART health facilities (AZ, QX, WF, RV) supported by NGOs experiencing devolution, were approached and agreed to participate voluntarily in the research. The data collection method was primarily conducted through a cross-sectional survey from the two LIPs (Org A and Org B) and the four ART sites. The employee readiness survey was conducted using an ODK-based questionnaire administered by the researcher and the assistants (Appendix 2).

A limited number of healthcare workers (HCWs) cover each shift at each facility (on average five staff per shift at HCT and ART clinics, and TB units at hospitals). Data collection was due to occur over 20 days, to cover a sample size of 156 employees. However, the sample size was exceeded during the field work (the sample size exceeded the size of sample as shown in Chapter 3, section 3.3). This was done to maximise the breadth of coverage across the NGOs and ART sites. At the

end of the data collection exercise, a total of 233 employees were recruited for participation; 24 were excluded while the remaining 199 eligible employees participated fully in the survey. Prior to data collection, the questionnaire was piloted in Murtala Muhammad Hospital, a facility that had not been selected for the study. The final, revised questionnaire is included in Appendix 6. In addition, before the survey commenced, the CEOs of Org A, Org B and Kano State Hospitals Management Board communicated with employees about why the research was being conducted, that ethical approval had been granted, and that the research was undertaken under the guarantee of respondents' anonymity.

A week later, the survey commenced. The typical time required for completion of the survey on ODK was between 15 to 20 minutes. The survey took 15 days to complete. Data was cleaned by the researcher, assisted by two data assistants. The ODK was filled in by researchers and sent to the platform.

Data analysis

Categorical data was analysed using frequencies, cross-tabulations with Chi-square and 95% confidence intervals (CI) for odds ratios and p-values less than 0.05 were considered as statistically significant. Continuous data was analysed using means and variance, and comparison of mean differences and 95% CI around the mean differenc

3.5.6 Qualitative assessment

Objective 2b: To explore employees' perspective of LIPs devolution readiness

Two qualitative research tools were used for the study. The first was a semi-structured interview guide that explored factors associated with the levels of ART performance during the PEPFAR 1 and PEPFAR 2 periods (Sharma et al., 2013). The instrument was administered to non-management staff working in FHI 360, IHVN and four ART sites. It has seven dependent variables used to qualitatively assess ART programme performance measures. The second tool was a semi-structured interview guide to assess managers' experience of the ART programme devolution. The instrument was adopted from USAID HIV program capacity assessment document (Gutmann et al., 2013.) It is a qualitative organisational assessment conducted by administering the KII guide to programme managers from the two local implementing partners; FHI 360; IHVN; and Director, Kano State Action Committee on AIDS (SACA). The KII specifically focused on key policy, funding, infrastructure and human resources issues associated with new local implementing partners.

Semi-structured interviews were conducted to assess employees' devolution experiences. Data was obtained from 14 purposively-selected informant health workers from different dimensions of the programmes and service delivery: ART coordinators, laboratory, pharmacy, adherence, and HCT units. The selection was based on their in-depth knowledge of devolution policies and their participation in its implementation. Individual in-depth semi-structured interviews were conducted with fourteen employees; two from each institution (two LIPs, Kano State AIDS control programme, and 4 ART sites).

The content of the KII questions was grounded within seven organisational capacity domains (AIDSTAR-One, 2013). These include: strategic leadership, funding/financial management, organisational structure, organisational infrastructure, human resources, process management, linkages/networking, programme growth and expansion of the LIPs programme.

Qualitative data analysis

Thematic analysis (TA) used in this study, is an established method of organising qualitative data and has good potential for capturing the knowledge and experiences of workers and managers (Salleh et al., 2017). Thematic analysis is a method for identifying, analysing, and reporting patterns (themes) within data. It minimally organises and describes data sets in detail. Furthermore, it also interprets various aspects of the research topic (Braun & Clarke, 2006). TA entails a qualitative method that looks to provide an explanation or theory behind a perspective of devolution readiness (Mills et al., 2014).

The qualitative data was analysed using thematic analysis. Thematic analysis focuses on finding patterns in the data which can be gathered and interpreted under major themes. According to Braun and Clarke (2006:82), “Thematic analysis can be an essentialist or realist method, which reports experiences, meanings and the reality of participants, or it can be a constructionist method, which examines the ways in which events, realities, meanings, experiences and so on are the effects of a range of discourses operating within society”.

The six phases of thematic analysis strategies explained by Braun and Clarke (2006) were adopted to guide the analysis process. Following the transcriptions of the 19 interviews, analysis of the data set began with the familiarisation phase.

Qualitative data collected by audio-recorded interviews was transcribed verbatim and analysed using thematic analysis to identify core knowledge and understanding of employees' readiness and factors associated with ART performances for pre- and post-devolution periods for each individual. Transcriptions of the first three recordings were reviewed line-by-line for accuracy against the audiotape and then five other randomly-selected recordings were audited. The first three recordings were also reviewed to assess depth and informational richness of the interview data by identifying any gaps in interview technique, questions, or probes. There were no significant changes to the technique or interview guide, which supported overall in-depth and information-rich data. Transcribed data was analysed using Nvivo11 software.

Preliminary coding was based on a priori codes derived from the theoretical framework guiding the study. Reliability of preliminary coding was confirmed by a second, independent qualitative researcher, and the iterative analysis process included a review of the whole data set by the research team. Themes that emerged from this analysis were then examined across cases to identify commonalities and variations of the themes. The within- and across-case analysis was an iterative process; the researcher moved back and forth between individual cases and across cases to track variability of themes (Ayres et al., 2003).

Twenty interviews from the employees' perspective of factors associated with ART performances for PEPFAR 1 and 2, and five interviews for managers' devolution experiences, were imported into Nvivo11 for coding respectively. Data coding and analysis was completed to answer each of the research questions. The first review was a reading through the entire set of interview responses to develop preliminary coding categories that would answer the research questions. Open coding was conducted using line-by-line and sentence analysis. Primary, first-level categories were generated based on the research questions and from the answers given by the informants in the transcripts. (see Chapter 4 for the qualitative data analysis outcomes)

Objective 3: To identify and describe factors associated with the levels of ART performance before and after programme devolution

Qualitative methods were used to identify and describe factors associated with performance of the two periods. A total of seven semi-structured interviews were carried out with five purposively-selected programme managers, two each from the two LIPs, one from Org C, and two from the ART facility HIV national support NGO programmes. The interview guide (refer to Appendix 8) consisted of 24 open-ended questions. The content of the KII questions was addressed under seven domains that affect ART performance. These include: human resources; leadership; policy; operating system; infrastructure/resources; transparency and accountability; and partnership and alliances. Adequate information of the study, including interview guides, was provided to participants. The participants were informed that the interview would be audio-recorded and transcribed verbatim. The interview was facilitated by the researcher and two research assistants that helped in taking notes and recording.

A two-day orientation workshop was conducted to acquaint assistants with KII guide's content/methodology and to explain the aim/scope of the study and steps that would be taken to

adhere to ethical regulations. Additional questions outside the interview guides were asked where necessary. Each semi-structured interview generally spanned from 30 minutes to one hour, depending on how busy the informant was. Interviews were repeated until the required information was obtained. The researcher probed for views and opinions of the interviewee to explore new valid paths which were not initially considered (Gray, 2004).

A thematic data analysis method described under Objective 2b was used to describe ART health workers experience of factors associated with pre- and post-devolution performance levels.

3.6 VALIDITY AND RELIABILITY OF THE STUDY

The concepts of validity and reliability of the study were applied to the quantitative data, while credibility and trustworthiness were used for the qualitative data. In quantitative research, reliability and validity of the instrument are important in decreasing errors that may arise from measurement problems in the study. Reliability refers to the accuracy and precision of a measurement procedure (Thorndike, 1997).

Reliability refers to dependability or the way a tool such as a questionnaire will produce similar results in different circumstances if nothing changes (Sarantakos 1998). Reliability was assured by training interviewers on questionnaires and checking that they conducted interviews in a consistently similar way. Internal consistency reliability analysis of the items measured on the Likert-type scale also was conducted on the results of the pilot study. This helped in assessing how well the various items in a measure appear to reflect the attribute.

A triangulation approach for analysis of both qualitative and quantitative data reduces the possibility of bias, and produces results that are more reliable with complementary strengths (Rees & Bath, 2001). To ensure trustworthiness and credibility of qualitative data, procedures described by Mays and Pope (2000) were employed, such as:

- Prolonged engagement with the participants and persistent observations - the same participants and research assistants were involved throughout all stages of the study. This gave the researcher the opportunity to observe their interactions over a long period. The participants could then develop a sense of ownership and involvement in the outcome of the research, which strengthened the quality of their engagement with the issues. In addition, engaging key stakeholders, such as Kano State MoH, in the process of designing, pre-testing the tools, and data analysis added value regarding the credibility and validity of the study (respondent validation).
- Triangulation as described by Roberts and Priest (2006) refers to another way of enhancing the trustworthiness of qualitative research by combining two or more data sources, methods, theories, etc.
- The analysis of individual interviews and observations were compared and contrasted in order to achieve as rich a picture of the situation as possible and to increase credibility.

Validity is an indication of the extent to which an instrument measures what is thought it is supposed to be measuring (Sarantakos, 1998). Hence, for all the steps, questionnaires and interviews guides were designed in English and verification of the content was carried out by the team of researcher and assistants. A pre-test with people who were similar to the intended study participants was conducted to ensure content and construct validity.

The construct validity of the instrument used was analysed using factor analysis (Field, 2009). In order to assess the suitability of using factor analysis for the data, an initial examination was made with all 14 questionnaire items. Since the communality is a measure of the proportion of variance explained by the extracted factors, Stevens (2002) as mentioned in Field (2009) recommends a loading value greater than 0.364 for a sample size of 200 with an alpha equal to .01 (two-tailed), and greater than 0.298 for a sample size of 300 or more. On the other hand, Hair et al. (1998) suggested that a cut-off loading value of 0.50 be adopted if the number of variables analysed are many. In view of this, this study used a 0.5 cut-off loading value, given the large number of variables it used. Bart's Sphericity indicated that factor analysis was appropriate for the variables ($p = 0.0001 < 0.001$).

3.7 GENERALISABILITY

A pragmatic approach to assessing generalisability for qualitative studies is to adopt the approach of analytical generalisation (Leung, 2015) where one judges the extent to which the findings in one study can be generalised to another under the proximal similarity model, where generalisability of one study to another is judged by similarities between the time, place, people and other social contexts (Trochim, 2005).

For the quantitative components of Objective 2a, participants that were surveyed (ART employees) were representative of HCWs in the ART units; ART nurses, pharmacists, adherence and HCT nurses, laboratory scientists, and ART coordinators since they were working under similar

conditions (similar settings/towns/villages). The qualitative findings are backed up with findings from the survey data to indicate the generalisability of certain results.

3.7 RIGOUR FOR QUALITATIVE PARADIGM

Rigour of qualitative research continues to be challenged, from the idea that qualitative research is open to questions, as well as rigour and trustworthiness (Cypress, 2017). Morse et al. (2002) explained that without rigour, research is worthless, becomes fiction, and loses its use. The authors further defined rigour as the strength of the research design and the appropriateness of the method to answer the questions. It is expected that qualitative studies be conducted with extreme rigour because of the potential of subjectivity that is inherent in this type of research (Cypress, 2017). Rigour is simply defined as the quality or state of being very exact, careful, or with strict precision (Merriam-Webster Dictionary, 2014) or the quality of being thorough and accurate (Oxford, 2010). The qualitative paradigm does not generally use the term validity and reliability to assess its quality (Holloway & Wheeler, 1996). Lincoln et al. (1985) were the first to address rigour in their model of trustworthiness of qualitative research. Trustworthiness is used as the central concept in their framework to appraise the rigour of a qualitative study. Guba (1981) proposes alternatives to the positivist concepts of 'internal validity,' 'external validity,' 'reliability,' and 'objectivity' as 'credibility,' 'transferability,' 'reliability,' and 'confirmability'. These standards are widely used to assess the 'trustworthiness' of qualitative research. Moreover, these criteria of trustworthiness have been cited extensively in many other fields, such as nursing, midwifery, and education, where qualitative inquiry is an ideal way to do research.

3.9 CREDIBILITY

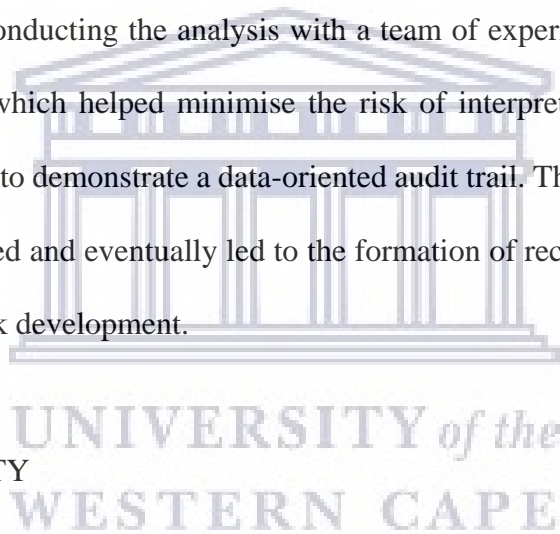
In qualitative design, the researcher seeks believability, based on coherence, insight, instrumental utility, and trustworthiness (Lincoln et al., 1985) through a process of verification. The uniqueness of the qualitative study within a specific context precludes it being replicated in another context. However, statements about the researcher's positions - the central assumptions, the selection of informants, the biases and values of the researcher - enhance the study's chances of being replicated in another setting.

To determine the credibility of the finding and whether it matches reality, four primary approaches were used in the study.

- Triangulation, i.e. converging different sources of information (employee readiness, ART performance assessment findings and interviews)
- Member checking, i.e. getting the feedback from the participants on the accuracy of the identified categories and themes. During this process, participants were requested to look at the rough draft of the transcripts in which he or she is featured. The purpose is for the participants to check for accuracy and possibly to encourage an alternate interpretation (John W. Creswell et al., 2007). The checking by participants was an integral part of creating trustworthiness used in the qualitative component of this study (John W. Creswell & Miller, 2000; Lincoln et al., 1985).
- Providing rich, 'thick' description to convey the findings
- External audit, i.e. asking a person outside the study to conduct a thorough review of the research and report back (Creswell & Miller, 2002).

3.10 CONFIRMABILITY

The concept of confirmability entails that “researchers must take steps to demonstrate that findings emerge from the data and not [from] their predisposition” (Shenton, 2004:63). This study used the method of triangulation to ensure confirmability (Guba, 1981). The triangulation strategy helped to minimise the investigators’ bias, and affirm that the findings reflect the participants’ perspectives and experiences (Forero et al., 2018; Miles & Huberman, 1994). Triangulation was achieved by abiding by a consistent method of data collection using interview guides (refer to Appendices 8 and 9) and conducting the analysis with a team of experienced research assistants and co-researchers, all of which helped minimise the risk of interpretation bias (Forero et al., 2018). Diagrams were used to demonstrate a data-oriented audit trail. This described how the data was processed and developed and eventually led to the formation of recommendations, including change readiness framework development.



3.11 TRANSFERABILITY

This involved demonstrating the degree to which the findings could be applied to other contexts and settings or with other groups; it is the ability to generalise from the findings to larger populations. It refers to how well the threats to external validity have been managed (Sandelowski, 2009). This was achieved through the effective training of research assistants and the periodic debriefing of fellow researchers and supervisors at every stage of the study. Additionally, there was ‘thick description’ (i.e. detailed description) of the research process so readers can decide for themselves if the results are transferable to their own contexts.

3.12 STUDY LIMITATIONS

Security was relatively good in Kano State. Nevertheless, sporadic Boko Haram attacks from perpetrators outside the state had been reported in previous years (The Guardian Newspaper 2014). Although this posed feasibility concerns, there was however no report that such attacks ever targeted health facilities. Obtaining ethical clearance from Aminu Kano Teaching Hospital took a time due to administrative bureaucracies; this led to slow progress in continuing the study. Permission was also obtained from Kano State Ministry of Health AIDS Control unit, Org A and Org B. The fact that multiple forms of data were collected and analysed, and that the mixed-method research required extensive time and resources to carry out the vast activities involved, getting adequate resources was a challenge. Multidisciplinary manpower involvement for some technical investigations, as well as analysis and interpretations, required financial resources that was difficult to secure.

Mixing quantitative and qualitative methods in the same research project has been criticised for its lack of an epistemological base. However, both methods used in the current research project fulfilled certain aims and responded to the research questions.

In merging the data during analysis, the findings sometimes appeared contradictory. A strategy of resolving these differences, such as gathering more data or revisiting databases, was adopted. Samples for quantitative data were more than adequate as per the sample size calculations, and those for qualitative assessments were robust enough to answer the research questions.

3.13 ETHICS STATEMENT

Ethical issues were addressed at each phase in the study. Ethical clearance was sought from the Senate Research Committee, University of the Western Cape. Ethical clearance was also obtained from Kano State Ministry of Health and AKTH. Permissions to conduct the research in LIPs were granted the CEOs of FHI 360⁰ and IHVN. Application for research permission contained the description of the study, methods and procedures, participants, research status, and its positive contribution to the welfare of ART clients. The participants' information sheet and informed consent forms (Appendices 1 and 2) were provided to all participants. The participant information sheet stated that the participants are guaranteed certain rights; their agreement to be involved in the study, and acknowledgement that their rights were protected. It contained sufficient details on the research to allow them to make an informed decision to participate or not. Participants also had the right to decide on which information to provide as part of the research and to withdraw from the research at any time. The informed consent form provided for certification by both interviewer and participant.



The anonymity of participants was protected by numerically coding each returned questionnaire and keeping the responses confidential. While conducting the individual interviews with the selected respondents, names and personally identifiable information were not recorded with the raw data. Respondents were assigned ID numbers and documents were mapped to link names with ID for description and reporting of results. All study data, including the survey electronic files, interview tapes, and transcripts, will be kept in secured place and destroyed after a reasonable period. Participants were told that the information they provided would be treated as confidential and used for research purposes only and that the results of the research would be put into the public

domain, including the university, and always anonymously with a view to transparency, scrutiny and peer review.

The researcher ensured that the study did not cause harm to any sectors of society and, in particular to the participants. Breaches of the ethical principles set out in this document are subject to investigations following the procedure for investigating allegations of scientific misconduct and may be subject to disciplinary procedures whenever they occur.

Refreshers for improving the competence to conduct interviews were carried out with peer support. Lastly, conducting research on ART programme transition may be very sensitive to LIPs, ART facilities, PLWHIV or government. Researchers may be vulnerable to physical, professional, legal or social conflicts that can result in secondary traumatic distress and compassion fatigue. This underscores the need for specific ethical inquiries and strict adherence to ethical requirements.

3.14 REFLEXIVITY

Reflexivity is an attitude of attending systematically to the context of knowledge construction, especially to the effect of the researcher, at every step of the research process (Cohen D & Crabtree B., 2006). Reflexivity is the “recognition of the influence a researcher brings to the research process” (Kuper et al., 2008:689). In simple terms, reflexivity is an awareness of the researcher’s role in the practice of research and the way this is influenced by the object of the research, enabling the researcher to acknowledge the way in which he or she affects both the research processes and outcomes (Haynes, 2011). It is often termed as the process by which research turns back upon and takes account of itself (Alvesson et al., 2008).

Reflexivity involves awareness that the researcher and the object of study affect each other mutually and continually in the research process (Alvesson & Kärreman, 2000). In other words, researcher reflexivity involves thinking about how our thinking came to be, how pre-existing understanding is constantly revised in the light of new understandings, and how this in turn affects our research (Haynes, 2011). Reflexivity goes beyond simple reflection on the research process and outcomes, to incorporate multiple layers and levels of reflection within the research. These would include considering the complex relationships between the production of knowledge (epistemology), the processes of knowledge production (methodology), and the involvement and impact of the knowledge producer or researcher (ontology). Reflexivity enables the research processes and outcomes to be open to change and adaptive in response to these multiple layers of reflection (Ibid). This explains the researcher's positionality in this research.

3.15 POSITIONALITY STATEMENT

The researcher is Habibu YAHAYA., a doctoral candidate in the Faculty of Health Sciences, School of Public Health at University of the Western Cape, South Africa. He also serves as Senior TB/HIV Advisor for the International Centre for AIDS Care & Treatment Program (ICAP), Nigeria. ICAP is involved in HIV/AIDS prevention, counselling, testing and treatment. ICAP has over 30 comprehensive sites in six states of Nigeria. ICAP also has primary healthcare centres some of which are fully developed as full ART or PMTCT centres and some are linked to the closest comprehensive health facilities as feeder sites. While at ICAP, Habibu was involved in the Columbia University Mailman School of Public Health internship programme in ICAP, Nigeria. This involved student coaching and mentorship in the field, especially in programming and ART

care in a tropical-country setting and culturally responsive evaluation. He supported the coordination of the overall ART care implementation, including other support initiatives for HIV support groups, and served on various national working groups, technical committees, and research groups focused on the devolution of ART programmes from external to local ownership in Nigeria.

Habibu's research interests include organisational behaviour and change as it pertains to large-scale ART programme transition and broadening stakeholders' participation, change agents, and complex system dynamics. His research investigates a narrative inquiry of US-based external PEPFAR-supported donors who use their organisations to engage in broadening participation, major ART facility up-scale and improved access to quality care services. Habibu received his M.B.B.S degree from the University of Ilorin and MPH from Ahmadu Bello University, Zaria, Nigeria and expects to receive his PhD in Public Health in 2021.

3.16 CHAPTER SUMMARY

The chapter provided an overview of the whole procedure involved in conducting the assessment outline of the design and methods used for each objective. It also provides a detailed description of each objective and step in the research in terms of the data sources, as well as the relative weighting of qualitative and quantitative methods. It unpacked the overall design of this study. Figure 3.2 presents a outline of methodology used for each objective.

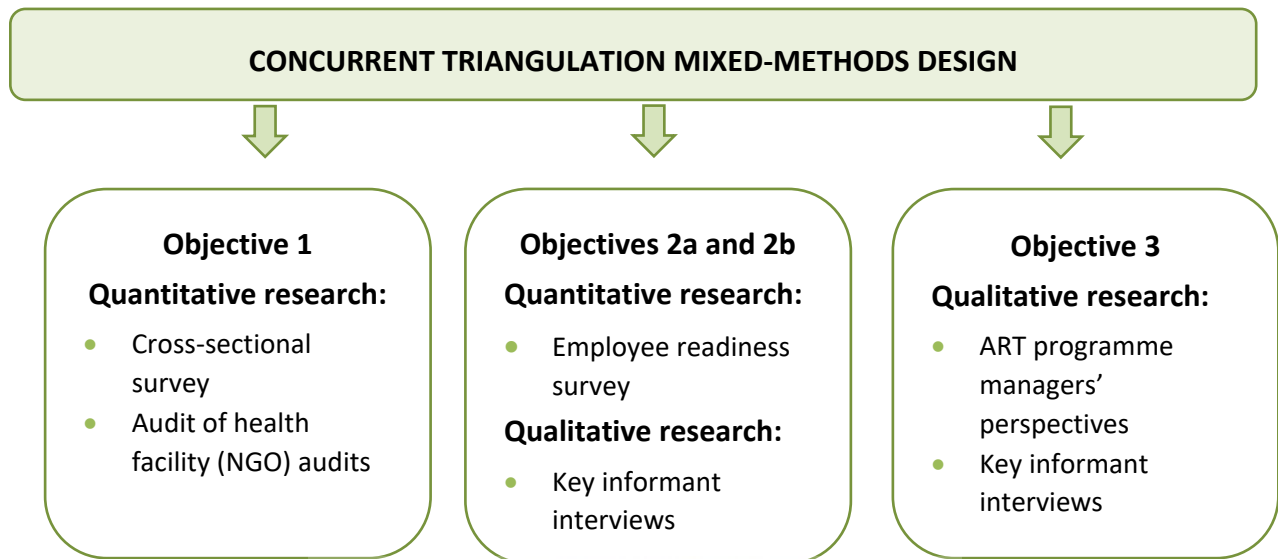


Figure 3.2 Description of the methods used for each objective of the study

Further more in this chapter, the philosophical assumptions and the practical methodological choices have been discussed in relation to the research's objectives and questions. The chapter also discussed ethical considerations and how the researcher approached them in this research project. The chapter focused on topics related to the research design, including those related to research participants, location, procedures, instruments, data collection and analysis. Finally, some of the difficulties and limitations in relation to the methodology were discussed.

The following chapter presents the findings of the present research based on the data collected through the research methodology.

CHAPTER FOUR

FINDINGS: EMPLOYEES' ORGANISATIONAL READINESS FOR ART PROGRAMME DEVOLUTION

4.1 INTRODUCTION

This chapter describes the socio-demographic characteristics of ART programme employees working in the four ART sites and two local implementing partner (LIP) organisations in Kano State. In addition, it describes the work environment of those who participated in in-depth interviews, their perceptions and experiences during pre- and post-devolution periods. Furthermore, it indicates their readiness for change (ART devolution from external to local NGOs). It should be noted that for the purpose of ascribing quotes from qualitative interviews (with the health workers), pseudonyms were used to maintain confidentiality. The chapter first presents the disaggregated descriptive statistics and the qualitative themes, and then subsequently presents the results of the testing of hypotheses, and answers to research questions.

Key themes that emerged from the data to explain employees' devolution readiness perspectives were as follows: government ownership and partnership of the ART programme; the decline in human resources; drug and laboratory commodity supply limitations; infrastructural upgrade concerns; reduced welfare and support; ART site expansion; and programme transparency.

The results presented in this chapter seek to address IIPs and LIPs ART performance in the pre- and post-devolution periods.

The chapter answers research question 2 including the sub research questions 2.1, 2.2 and 2.3:

RQ2: To what extent are the employees in LIP-supported ART sites ready for devolution implementation? This is sub-divided into 3 sub-questions:

2.1 How has devolution readiness been perceived by ART employees?

2.2 How has the LIPs' organisational performance been perceived by ART employees?

2.3 Are there relationships and/or correlations between: a) demographic variables and employee devolution readiness? b) employees' devolution readiness and perceived LIPs' organisational performance?

4.2 EMPLOYEE READINESS SAMPLE SIZE

The study was carried out in two LIP organisations and four LIP-supported ART health facilities. The consent of 257 employees was sought for participation in the study. A total of 223 employees working in the health facilities agreed to take part in the study. They were screened for eligibility (Figure 4.1) and 199 were eligible to participate while 24 were excluded based on their duration of employment in the ART programme being less than five years.

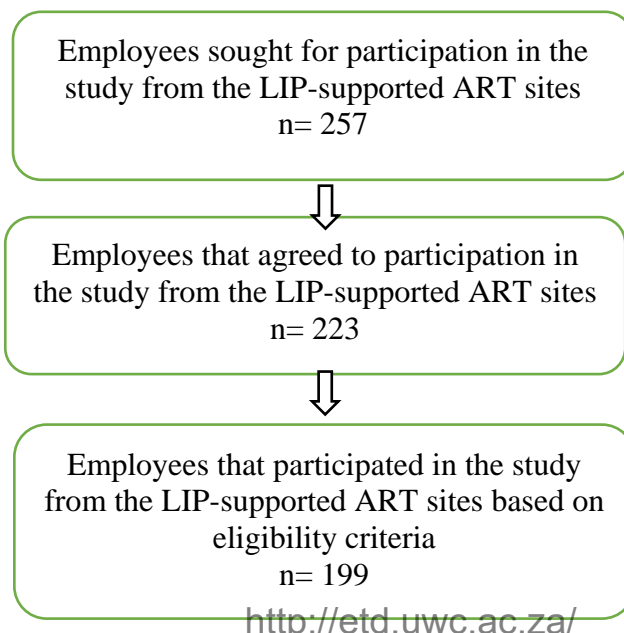


Figure 4.1 Study profile

The sample size of 199 was 106% of the expected sample of 188 employees. In relation to IHVN, FHI, IDH and Bichi GH, there was oversampling of the expected participants and under sampling in the AKTH and Wudil GH.

4.3 THE STUDY PARTICIPANTS

The participants in this study were working in the two LIPs (IHVN and FHI 360) and four ART sites (at the time of this research, in Kano State, Nigeria). Because ART programme devolution from international to local NGOs was implemented based on the USG/GoN Partnership Framework on HIV/AIDS 2010-2015, these ART employees had frequent experiences affecting their work environment and the clients they were managing over the periods. Many reported policy changes which required their readiness for a successful ART programme devolution from external to local NGOs.

The initial recruitment plan was to engage 188 participants from the NGOs and ART sites based on probability proportionate to size (PPS) sampling technique. However, the number expected varied compared to the number of participants found in the study sites. At the outset, the researcher sought employees' participation in the study by distributing questionnaires. Questionnaires were distributed to 257 employees out of which 34 declined. Among the 223 that agreed to participate, 24 were opted out because they did not fulfil the selection criteria of working in the LIP or an ART site for at least 5 years. A total of 199 participants finally took part in the study.

4.4 SOCIO-DEMOGRAPHIC CHARACTERISTICS OF THE STUDY POPULATION

The characteristics of ART employees that participated in the employees' readiness survey show their diversity in terms of age, marital status, education and occupation.

4.4.1 Age distribution

The mean age (\pm standard deviation, SD) of ART employees was 36.8 (\pm 5.76). Most of the employees were in the third or fourth decades of life (Table 4.1).

Table 4.1 Age distribution of ART employees

Age (years)	Frequency	%
25–34	66	33.2
35–44	112	56.3
45 and above	21	10.5
TOTAL	199	100



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4.4.2 Gender

There were 108 (54.3%) male and 91 (45.7%) female participants in the study (Table 4.2).

Table 4.2 Gender of ART employees

Gender	Frequency	%
Male	108	54.3
Female	91	45.7
TOTAL	199	100

4.4.3 Education

Nearly half of the ART employees had a university degree or higher national diploma (HND). The other respondents had primary, secondary, diploma or post-graduate education (Figure 4.2).

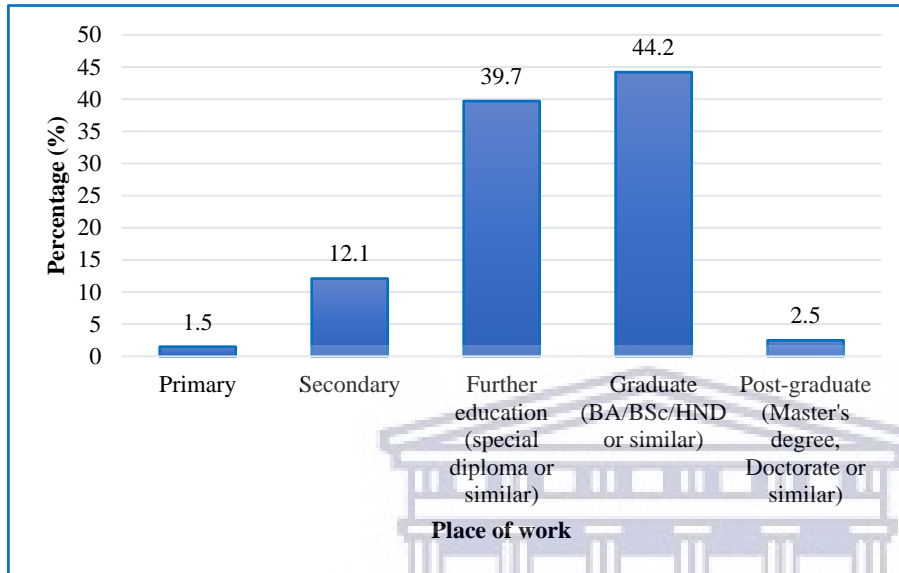


Figure 4.2 Highest educational qualifications of ART employees

4.4.4 Marital status of ART employees

The majority of employees (94%, $n = 199$) were married and 6% were single (Figure 4.3).

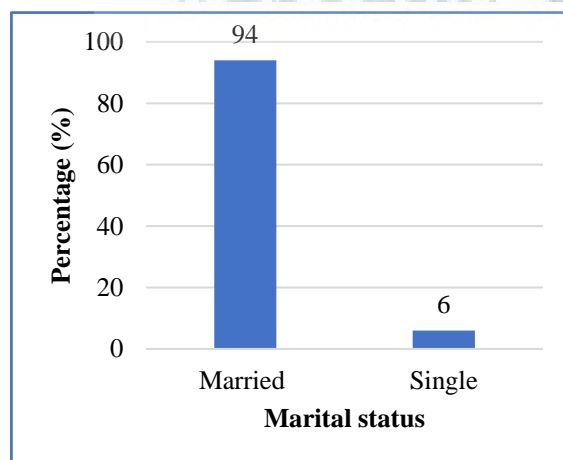


Figure 4.3 Marital status of ART employees

4.4.5 Place of work of ART employees

Most employees (51.3%) worked in Aminu Kano Teaching Hospital (AKTH). However, a high proportion (14.1%) of them also were working in Infectious Disease Hospital (IDH), the least proportion (5.0%) came from FHI 360 (Figure 4.4).

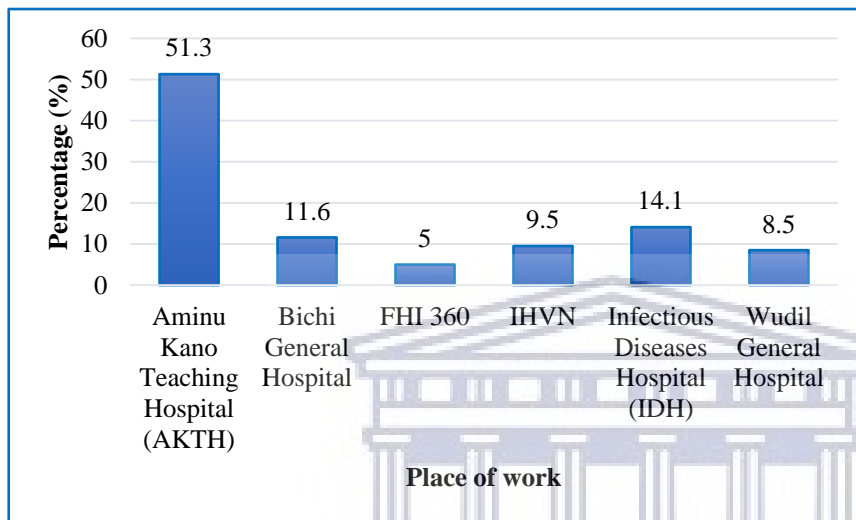


Figure 4.4: Place of work of ART employees

4.5 RELIABILITY AND VALIDITY

4.5.1 Reliability analysis

Reliability analyses were conducted in order to report the correlation between the variables to determine if they are reliable as a combined index. A Cronbach's Alpha score over 0.6 is considered reliable. The results showed moderately strong and strong positive correlations amongst 12 of the items in the reliability scale (Table 4.3). Two variables were found not reliable (tradition = 0.049 and reflexivity = -.02).

Table 4.3 Reliability analysis

Construct	No. of Items	Cronbach's Alpha
Involvement	2	0.994
Supervisory support	2	0.988
Training	2	0.984
Welfare	2	0.748
Tradition	2	0.049
Innovation and flexibility	2	0.792
Result-oriented	2	0.948
Reflexivity	2	-0.02
Communication	2	0.98
Efficiency	2	0.995
Effort	2	0.978
Performance feedback	4	0.928
Pressure to produce	2	0.996
Quality	2	0.983

4.5.2 Validity

Item loading for the single Factor in the factor analysis for all variables that contain the item loading showed that all of the items are loaded strongly, with all the items having loadings above the 0.5 cut-off loading value. Besides, the Kaiser-Meyer-Olkin (KMO) value ranged from 0.67 to 0.89, which is on or above the cut-off point of 0.5 recommended by Kaiser (1974). The 'Eigenvalue > 1' rule that the total variance = 57.5%, indicates the relatively compact patterns of the correlations, indicating factors that are distinct and reliable (Table 4.4).

Table 4.4 Factor analysis

Factor analysis		
Variable	Factor	
	1	2
Supervision	0.67	
Tradition	0.73	
Training	0.65	
Innovation and flexibility	0.68	
Outward focus	0.78	
Reflexivity	0.83	
Efficiency	0.83	
Effort	0.81	
Performance feedback	0.75	
Pressure to produce	0.80	
Quality	0.89	
Involvement		0.65
Welfare		0.80
Communication		0.71
Eigenvalue	9.77	1.88
% Variance explained	57.5	11.1

4.6 EMPLOYEES DEVOLUTION READINESS-RELATED PARAMETERS

Employees' ART devolution readiness was assessed using seven statements which were rated on a five-point Likert rating scale. The employees' knowledge assessed in this section included climate-readiness categories, namely: involvement in decision making; positive relationship with supervisors; training; communication; welfare; flexibility; and motivation. In addition, each climate-readiness category consisted of a number of statements to which the participants were expected to respond by answering one of the following: strongly agree, agree, don't know, disagree or strongly disagree.

With Likert scale data the mean cannot be used as a measure of central tendency as it gives no meaning, i.e. it questions the average of responses such as strongly agree and strongly disagree. The most appropriate measure is the mode; the most frequent responses. Hence, employees' readiness responses were distributed using bar charts for the seven readiness variables.

4.6.1 Employees' involvement in decision-making

Of the 199 ART employees that were surveyed, the majority (66.8%) disagreed with the statement "Management of IHVN/FHI 360⁰ involves people when decisions are made that affect them" (Figure 4.5).

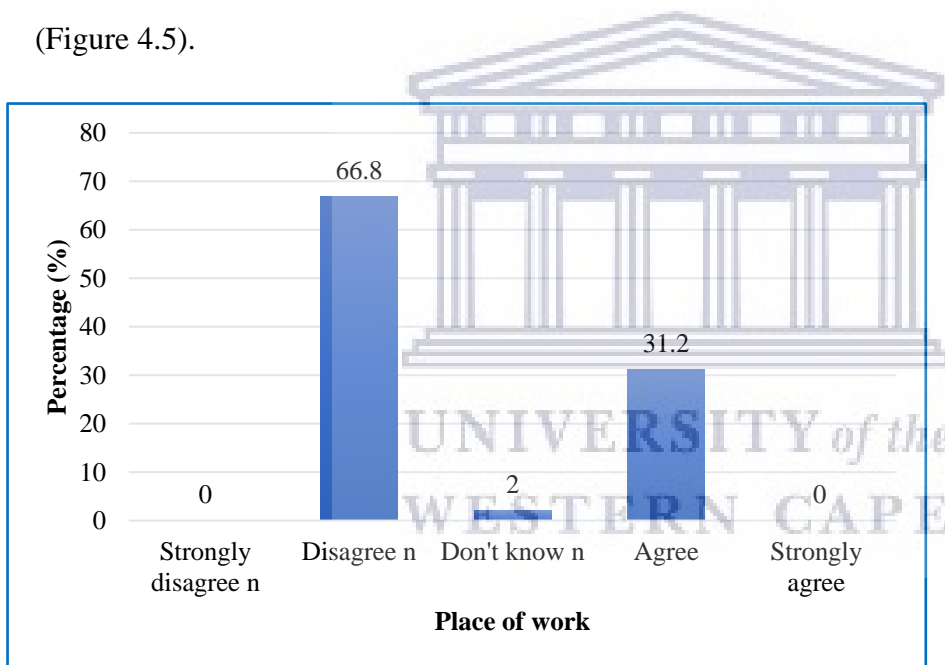


Figure 4.5 Employees involvement in decision-making

4.6.2 Positive relationship with supervisors from LIPs

Although some of the ART employees (27.6%) agreed, nearly two-thirds (69.3%) disagreed with the statement “Supervisors from Org A/Org B are really good at understanding/solving peoples’ problems” (Figure 4.6).

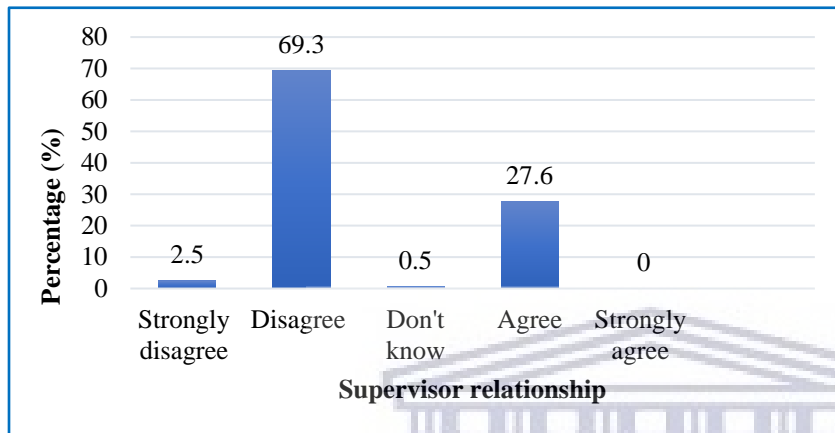


Figure 4.6 Positive relationship with supervisors

4.6.3 Training of ART health workers

Results showed that the overwhelming majority (72.4%) of respondents disagreed with the statement “People in this ART health facility receive proper training when there are new guidelines/SOP, equipment or as the need arises” (Figure 4.7).

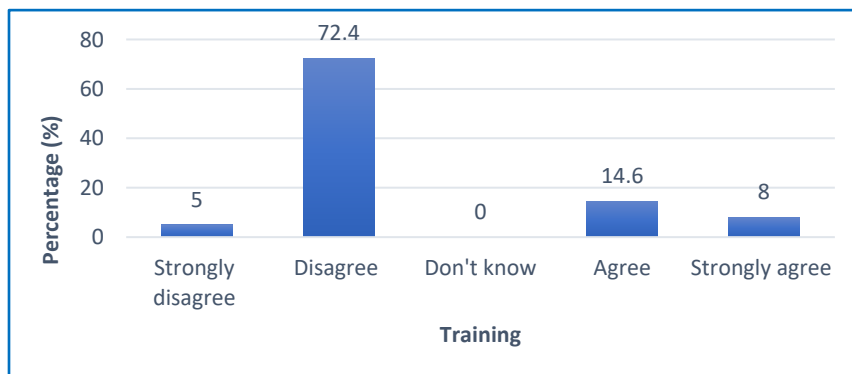


Figure 4.7 Training of ART health workers

4.6.4 Communication

An overwhelming majority of ART health workers (85.4 %), disagreed with the statement “The Org A/Org B clearly exchange information with health workers regarding the work and its future direction” and out of the remaining respondents, 13.6% strongly disagreed. There were none that either strongly agreed or agreed to the statement (Figure 4.8).

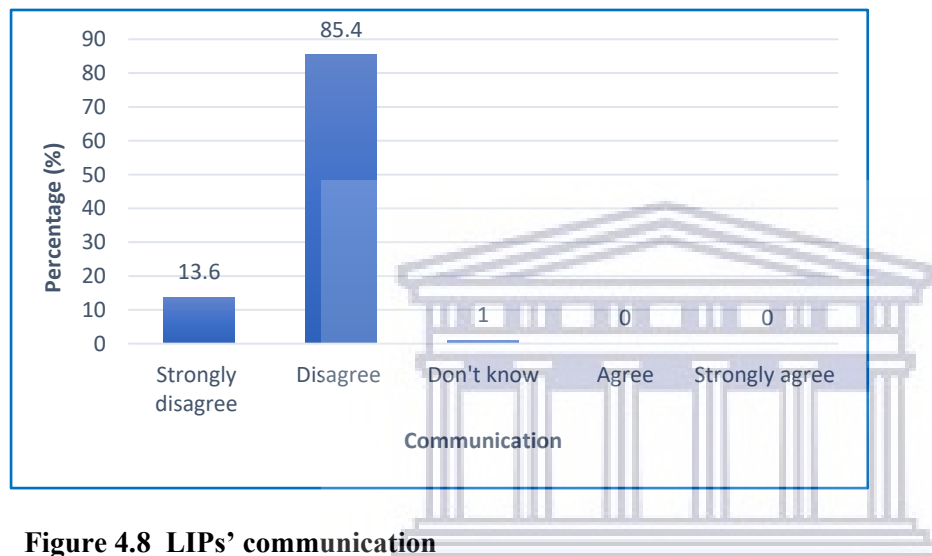


Figure 4.8 LIPs' communication

4.6.5 Welfare

Most ART health workers (70.4%) disagreed while few (8.5%) strongly disagreed with the statement “ORG A/ORG B tries to look after employees and HIV clients' welfare in this health facility” (Figure 4.9).

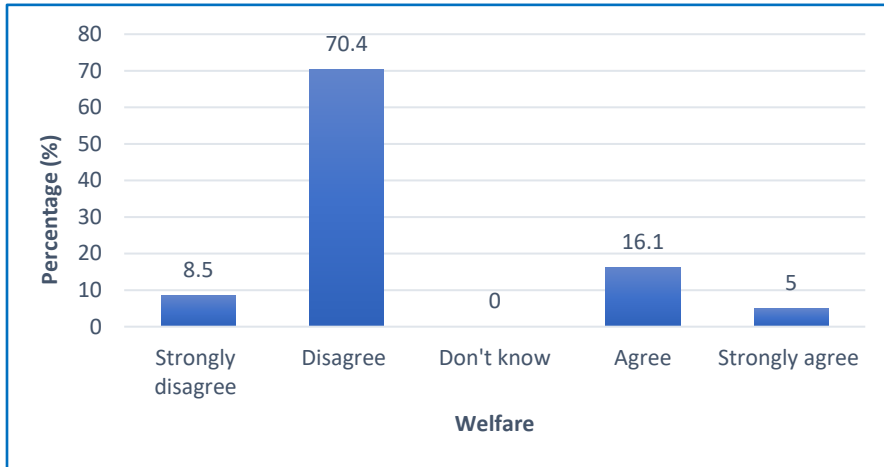


Figure 4.9 Welfare of ART health workers and HIV clients

4.6.6 Flexibility

The majority of ART health workers (75.4%), disagreed with the statement “Org A/Org B is very flexible; it can quickly change procedures to meet new conditions and solve problems as they arise”. Some respondents, however, strongly agreed (12.1%) (Figure 4.10).

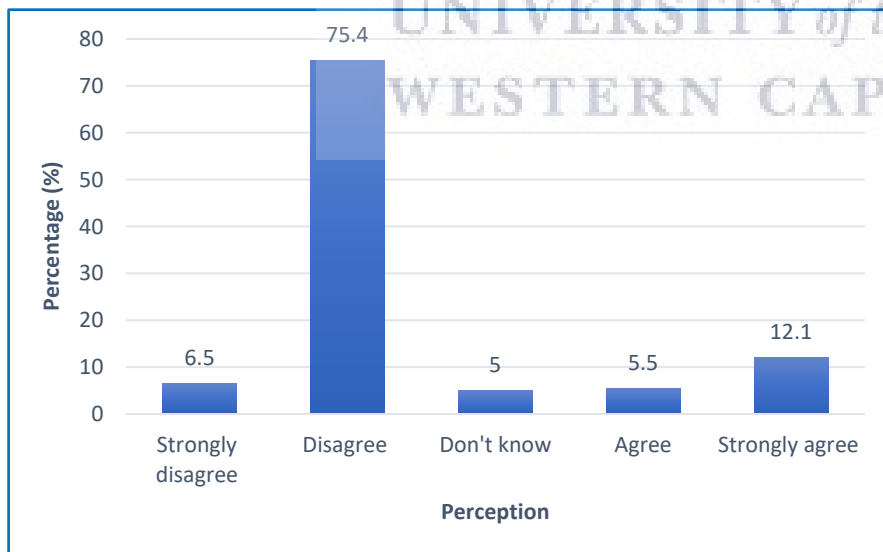


Figure 4.10 LIPs flexibility perception

4.6.7 Motivation

Out of the 199 ART health workers, the majority (66.8%), disagreed with the statement “People in this place are enthusiastic/motivated about their work”. Few respondents (11.1%) strongly disagreed, while (21.6%) strongly agreed (Figure 4.11).

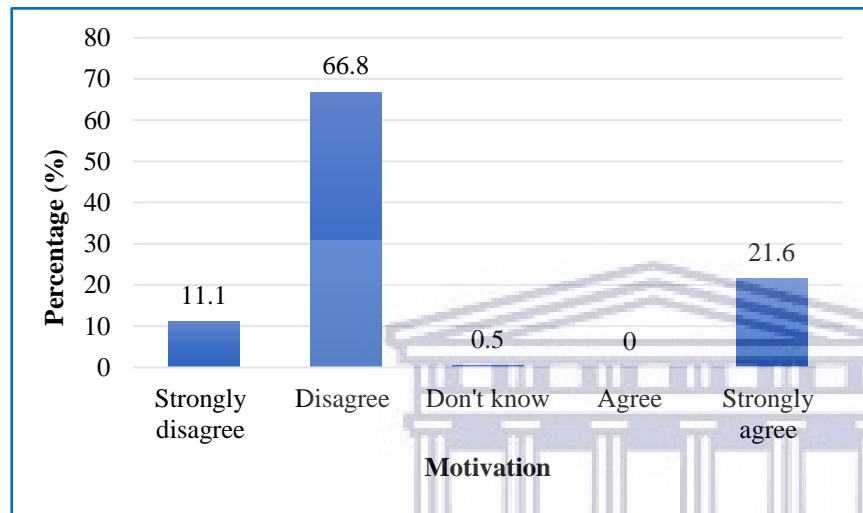


Figure 4.11 ART employees' motivation

4.7 LIPs' ORGANISATIONAL PERFORMANCE-RELATED PARAMETERS

LIPs organisational performance was assessed using seven statements which were rated on a five-point Likert rating scale. The employees' knowledge assessed in this section included organisational performance categories, namely: organisational tradition; reflexivity; efficiency; feedback; performance evaluation; innovation; and quality. In addition, each organisational performance category consisted of a number of statements to which the participants were expected to respond by answering one of the following: strongly agree, agree, don't know, disagree or strongly disagree. The employees' responses to LIPs organisational performance items are presented using bar charts.

4.7.1 Organisational tradition

An overwhelming majority of ART respondents (82.4%), agreed with the statement “IHVN/FHI 360⁰ senior management like to keep to established traditional ways of doing things” (Figure 4.12).

Seven percent strongly agreed with the flexibility statements.

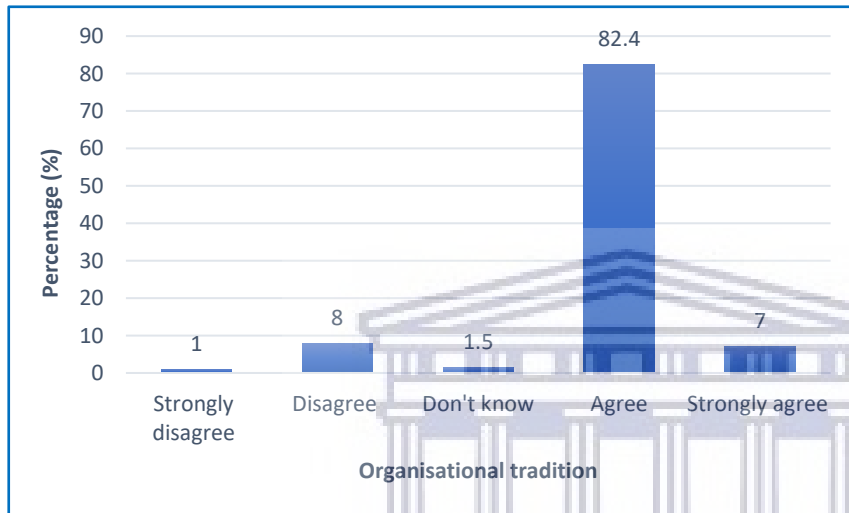


Figure 4.12 LIPs' organisational tradition

4.7.2 Reflexivity

Although the majority of ART respondents (38.7%), disagreed with the reflexivity¹ statement “Org A/Org B is concerned with reviewing and reflecting upon objectives, strategies, and work processes, in order to adapt to the changing environment”, many either disagreed (38.7%), agreed (36.7%) or strongly agreed (23.6%) (Figure 4.13).

¹ Reflexivity = organisational management concerned with reviewing and reflecting upon objectives, strategies, and work processes, in order to adapt to the changing environment

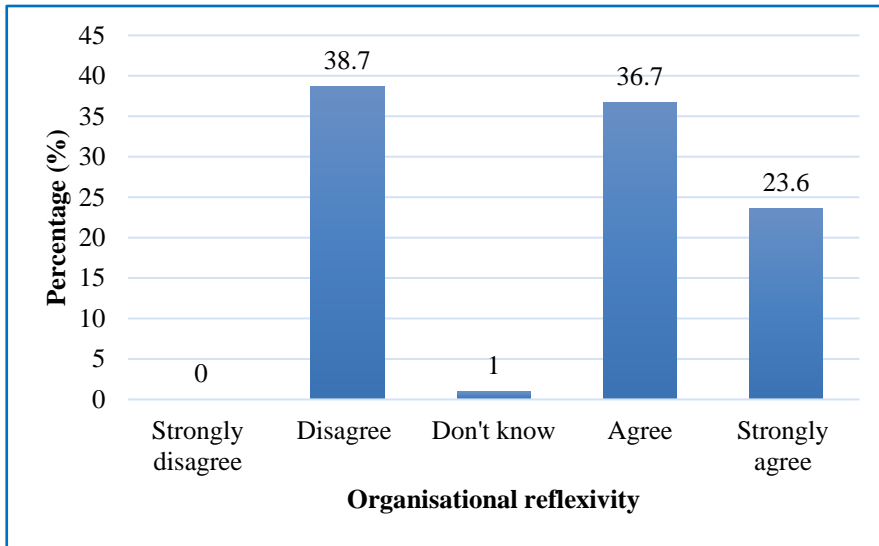


Figure 4.13 LIPs' organisational reflexivity

4.7.3 Efficiency

An overwhelming majority of respondents (92.5%) disagreed with the statement “I feel good results and targets are being met as a result of proper planning and use of resources by IHVN/FHI 360” (Figure 4.14).



Figure 4.14 LIPs' organisational efficiency

4.7.4 Feedback

The majority of respondents (84.9%) disagreed with the statement about dissemination of feedback by LIPs: “Managers from Org A/Org B and the employee discuss possible ways to effectively work together to achieve organisational goals”. Whereas a few expressed neutral responses (2%), and 13.1% agreed with the statement (Figure 4.15).

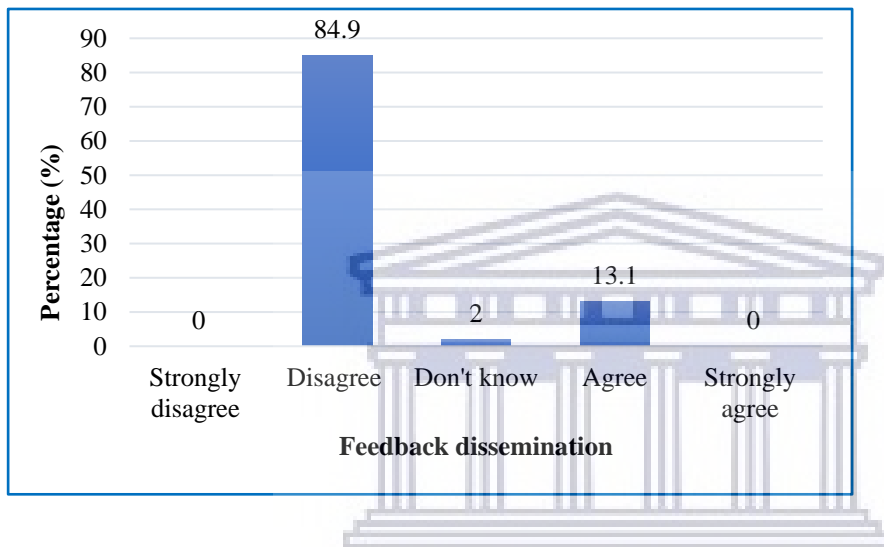


Figure 4.15 Positive feedback dissemination by LIPs

4.7.5 Performance evaluation

The majority of respondents (92.5%) disagreed with the statement about staff performance evaluation by LIPs: “People’s performance is measured on a regular basis” (Figure 4.16).

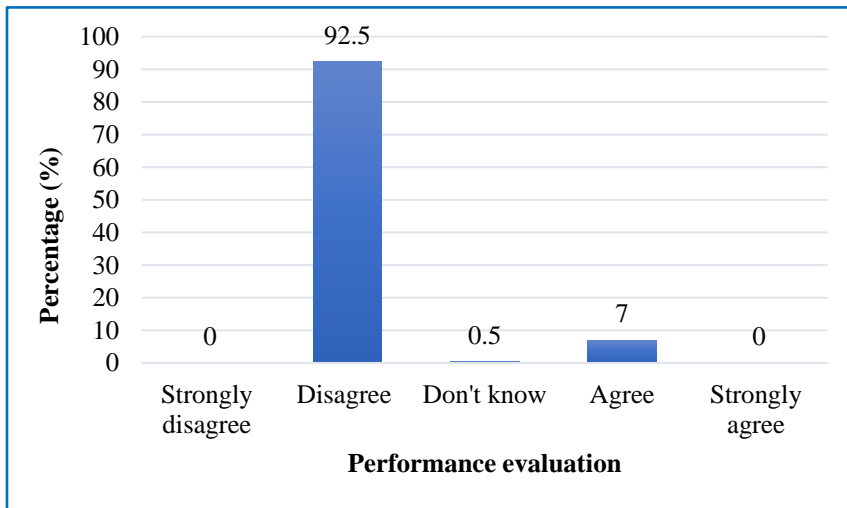


Figure 4.16 Staff performance evaluation by LIPs

4.7.6 Innovation

An overwhelming majority of the respondent (84.9%) disagreed with the statement about LIPs organisational innovation: “Org A/Org B supports development of innovations and new ideas”. However, some respondents (9.5%) agreed with the statement (Figure 4.17).

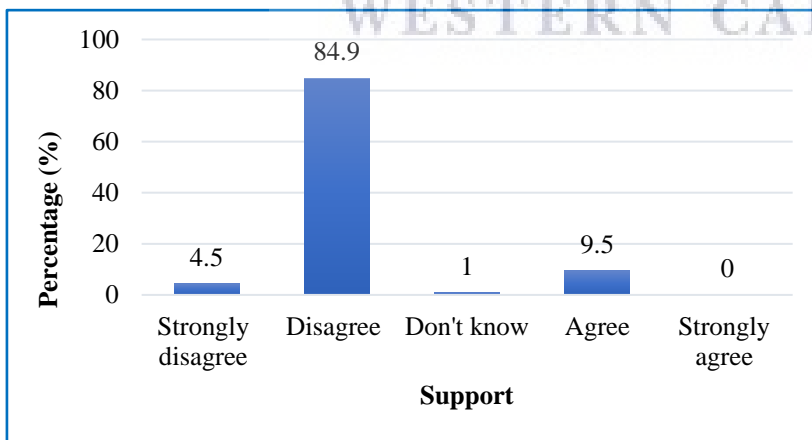


Figure 4.17 Support for innovation and new idea development by LIPs

4.7.7 Quality² of ART care

Out of the 199 respondents, the majority (67.8%) disagreed with the statement about LIPs organisational quality: “This LIP is always looking to achieve the highest quality of ART care standards”. Some respondents (31.7%), however, agreed with the statement (Figure 4.18).

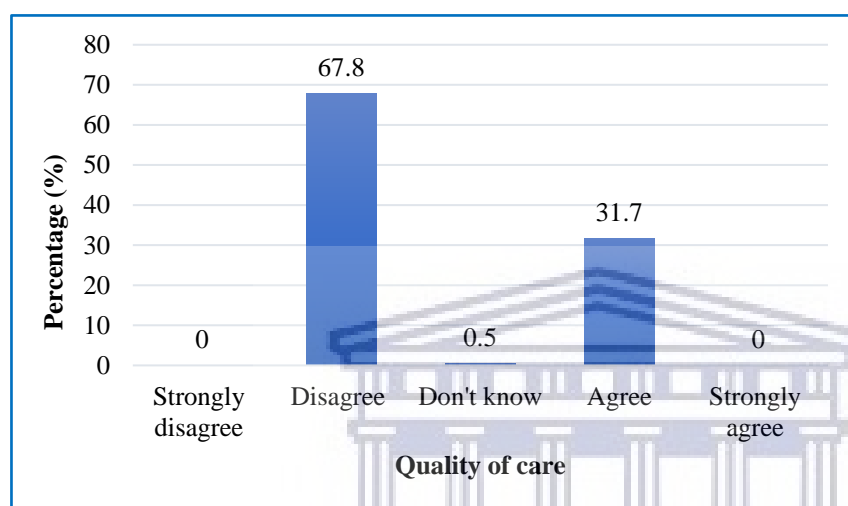


Figure 4.18 LIPs' quality of ART care 4.8 EMPLOYEES' PERSPECTIVE OF LIPs' DEVOLUTION READINESS

4.8.1 Social groupings and attributes of in-depth interview respondents

The characteristics of ART employees that participated in the in-depth interviews revealed their diversity in terms of age, marriage, education, and place of work (Table 4.5).

Table 4.5 Demographic attributes of employees that participated in in-depth interviews

Characteristic	Frequency
Age group	

² Quality = the ongoing efforts to establish an internal framework of standards and processes intended to engage and motivate employees to deliver products and services that fulfil customer requirements within business expectations

30–39	9
40–49	8
≥50	3
TOTAL	20
Marital status	
Single	2
Married	18
TOTAL	20
Education	
Graduate (BA/BSc/HND or similar)	15
Secondary	1
Post-graduate (Master's degree, Doctorate or similar)	4
TOTAL	20
Place of work	
Wudil GH	8
Bichi GH	4
IDH	5
AKTH	3
TOTAL	20

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4.9 ISSUES IDENTIFIED BY ART EMPLOYEES AS AFFECTING ART DEVOLUTION IMPLEMENTATION

This section presents employees' perspectives on issues affecting ART devolution from external to local NGOs in Kano State. It reports issues discussed by ART service providers themselves, and also employees working with LIPs. The issues emerging in this section are presented as themes around which ideas and concepts have clustered. Thus, when employees spoke about training, other themes impacted this. Similarly, when people spoke about supervision, it evoked training, staffing and service delivery challenges. The order in which each theme is presented is guided by how strongly and frequently the participants mentioned it as a strength or a barrier to ART devolution implementation, starting with their strongest concern.

The themes emerging in relation to ART devolution implementation perceived by employees to affect HIV care in health facilities are: government ownership and partnership of the ART programme; decline in human resources capacity; limitations in drug and laboratory commodity supply; concerns around infrastructural upgrade; less staff training; irregular supervision; reduced welfare and support; challenges in ART site expansion and client retention in care; programme transparency and communication.

4.9.1 Government ownership and partnership of the ART programme

The employees in this study stated that they received limited support from government in delivering ART services; all respondents felt that government support for ART programme was not significant. They attributed the support to mainly the US government and the Global Fund. This quote represents one of many which shared the same thoughts.

“As I said the funding basically comes from the US government. In as much as you are performing, they are always ready to bring more funds.”

(Male, 58-year old manager, HF-WF)

Respondents felt that government ownership of ART programmes was suboptimal. They believed that government prioritised other programmes, such as that for polio, not knowing that the polio programme was mainly donor driven. While many of the respondents were of the view that government should completely own the programme during the post-devolution period, they also said that ART programmes weren't yet a priority for government.

“You know before, during GHAIN, the Federal Government or State Government, they put more emphasis on HIV, but now, they refer to other infections like Polio, Malaria. They don't consider HIV as before.”

(Female, 33-year old ART nurse, HF-RV)

The survey section showed that nearly two-thirds (69.3%) of employees disagreed with the statement “Supervisors from Org A/Org B are really good at understanding/solving peoples' problems” during the post-devolution era (Figure 4.7). This perception was reiterated during the qualitative interviews where responses indicated employees' satisfaction with supervision by the NGOs only during the pre-devolution period.

“The supervisory visits are not as frequent as they used to be. It was not as good as during the pre-devolution period, which was very frequent and strict.”

(Male, 54-year-old pharmacist, HF-AZ)

Respondents stressed that during pre-devolution they enjoyed a strong level of partnership from foreign experts.

“This time around none of them is coming, but during Org B period hardly you spend a year without seeing these foreigners coming to monitor the lab, to monitor the equipment and to monitor the personnel’s.”

(Male, 51-year-old laboratory scientist, HF-AZ)

4.9.2 Decline in human resources capacity

The second theme involved respondents’ perception of a decline in human resources capacity. Respondents explained that there was a reduction in human resources during the post-devolution period. They linked this reduction to a weakness of the health system, inadequate human resources and funding cuts from PEPFAR that started following devolution framework implementation. A respondent said:

“If you don’t have enough human resources and enough fund to support these human resources and so it is a two ways things. You have a health system that is already weak and you want to run a HIV programme that needs human personnel more or less and you don’t have fund to support that. The most serious challenges are human personnel resources so this is a big challenge to IHVN programme.”

(Male, 57-year-old administrator, HF-WF)

Employees highlighted how a reduction in human resources capacity affects ART service delivery. They said that the few health workers that were employed were already overwhelmed

with work, as they had to do everything on their own, and then attend to ART patients: In the words of a respondent:

“They (LIPs) don’t actually have enough staff. There was no enough staff to attend to... I mean those that were coming for daily clinic services and the ones that go to the wards to review patients’ needs; admitted patients that need review for commencement of ART.”

(Male, 32-year-old ART doctor, HF-QX)

Staff attrition was cited as a factor that contributed to a decrease in the number of trained human resources available to provide services at ART sites. This led to a decline in the number of trained/experienced staff and wastage of training resources.

“This staff attrition is very challenging. If you trained somebody, I mean a perfect training like 3 – 4 trainings and is doing very well so you will just hear that he has been transferred to another facility where no org A programme is in place. So this is a waste of resources and waste of anything before you now train another person.”

(54 year old Male admin staff –HF-AZ)

Participants in this study also linked personnel attrition from ART programmes to a search for better work conditions since the incentives they enjoyed during pre-devolution were no longer available post-devolution. Staff promotions and benefits were lacking and this precipitated movement of trained and experienced hands from the public to private sector. Respondents felt this was not encouraging post-devolution.

“Recently we have a lot of people really left looking for a greener pasture. Condition of service also matters when you are looking for the transfer benefit. Some look at the money aspect of it and another thing that encourage people is the issue of promotion within the system. This really discourages some staff living to another organisation.”

(Male, 58-year-old manager, HF-WF)

4.9.3 Limitations in drug and laboratory commodity supply

In the context of ART, services commodities include: lab reagents and test kits; laboratory equipment and supplies; drugs for HIV treatment/OI management; and other medical supplies and equipment, such as specimen collection tools. Participants expressed their disappointment related to stockouts of HIV test kits and other essential equipment, such as syringes and needles to draw blood. This hampered provision of services and could require clients to return on another day or go to other clinics. Participants explained that clients may be reluctant to spend time and expend resources traveling to a point of service where they may be turned away, and clients who are turned away do mostly not return.

Participants described deterioration in drug supplies post-devolution in which the supply of drugs for OI management stopped completely with the exception of septrin.

“During the FHI GHAIN (pre-devolution), we hardly experience any stock out both for the OI’s and ARV’s. Now, most of the OI’s with the exception of septrin are not available. They are not provided for a year or two now.”

(Male, 47-year-old pharmacist, HF-AZ)

The continued deterioration of staff working conditions may also be the reason why ART service providers left the public sector in search of greener pastures. They experienced reduced finances and delays in payment of their claims/entitlements post-devolution.

“At first, I mean at the beginning of FHI 360 (post-devolution), things worked well as usual, but as time goes, things took a different dimension. During FHI GHAIN (pre-devolution), they pay you immediately. What I mean by immediately is they pay you on monthly basis but during FHI 360, they reimburse you. So the process was not as effective as it used to be during FHI GHAIN.”

(Male, 32-year-old ART doctor, HF-QX)

A participant stressed the decline in provision of financial resources at the health facility level during post-devolution.

“As far as services... in the first... when I got to this place....., things have gone down because even in the account, I learnt that there is no money in the account now. Before, it has not been like this.”

(Female, 29-year-old pharmacy technician, HF-RV)

Although some respondents perceived that the capacity of laboratory personnel was adequate overall post-devolution, they still highlighted that the functioning of the laboratory had deteriorated after the devolution, especially in conducting viral load assessment for patients.

“So the only lacuna both in Org B is the issue of viral load. This facility is not undertaking the viral load. So viral load will be sent to Aminu Kano. So that is the limitation in the lab”.

(Male, 44-year-old ART coordinator, HF-WF)

One important factor that ensured stable commodity management, was the effort made by the NGOs in the provision of good equipment to run laboratory services during the pre-devolution period. The same equipment was still being used post-devolution. However, participants were of the view that the main challenge associated with laboratory services was to do with reagent supplies. A participant explained as follows:

“The equipment that were provided before devolution are still on ground.....sometimes there will be short fall in provision of reagents.....we are running out of HIV test kits and it was scarce actually. If a patient comes for HIV screening and you are not able to do it, it affects your efficiency.”

(Male, 44-year-old pharmacist, HF-QX)

4.9.4 Concerns around infrastructural upgrades

The study discovered that intensive infrastructural upgrades took place during pre-devolution. However, despite the continued expansion of ART services to newer health facilities, interviewees said that this activity almost ceased post-devolution. A participant described this scenario:

“Now they don’t do anything. They just ask the hospital to give them the site that they will be operating. They don’t renovate anything...”

(Male, 44-year-old pharmacist, HF-QX)

4.9.5 Less staff training

Concerns around staff capacity-building that were described by respondents aligned with findings from the quantitative survey, and all participants in this research frequently and passionately described poor training post-devolution, including the fear of the effect on effective delivery of ART services. This was similarly obtained during the survey where the majority of employees (72.4%) disagreed that there had been human resources capacity improvement during post devolution.

Most employees reported that there was an inadequacy of trained staff. They also described irregularities in the occurrence of training, ranging from little to no training of staff by LIPs post-devolution. This generated concerns and demotivation among respondents' post-devolution. They felt that the training required for the introduction of new guidelines/SOPs and equipment was challenging.

“They are still training but it reduced. For example; throughout last year, I don't think we had any training. They promised training but it was not done. Unlike before... you know; this thing is dynamic. Whenever there are results of new research on the treatment of HIV, it is good you call us immediately and let us know. But because there is inadequate fund, it's no longer like that.”

(Male, 46-year-old pharmacy staff, HF-AZ)

The expansion of ART services to new health facilities and turnover of trained staff continued post-devolution, thereby necessitating the need for new induction training or in-service training.

However, respondents indicated that, generally, training declined post-devolution:

“There was less training especially after the devolution because they believe that some of us who already have training should do Step Down training to new staffs.”

(Female, 39-year-old ART Nurse, HF-AZ)

Participants felt that training is required post-devolution due to the supply of new equipment or due to changes/modifications of SOPs/guidelines. Respondents also became encouraged and motivated when they received regular trainings.

“Basically, we are lacking adequate training, in fact there are none. But during FHI GHAIN usually in every 3-6 months there were evidences of sending personnel for trainings. This is giving us more courage, more determination and motivation.”

(Male, 51-year-old laboratory scientist, HF-AZ)

Another participant described the decline in training post-devolution as follows:

“Actually, during FHI/GHAIN, the ART services have well trained personnel. This is as a result of the efforts of the then FHI/GHAIN because every staffs in this facility is being taken for training, training and retraining to ensure that standard services are rendered to the clients..... But after the devolution during FHI 360, they also work well, but in comparison, when you compare with GHAIN project, you cannot equate it because in terms of training, the GHAIN did more than the FHI 360 does.”

(Male, 43-year-old laboratory employee, HF-QX)

The majority of participants reported that LIPs provided very little or no training during post-devolution as compared to adequate training levels in the pre-devolution period. For some of the employees, this was due to better funding during pre-devolution as compared to the post-devolution era.

“Actually, during FHI/GHAIN, the ART services have well trained personnel. This is as a result of the efforts of the then FHI/GHAIN because every staffs in this facility is being taken for training, training and retraining to ensure that standard services are rendered to the clients..... But after the devolution during FHI 360, they also work well, but in comparison, when you compare with GHAIN project, you cannot equate it because in terms of training, the GHAIN does more than the FHI 360 does.”

(Female, 39-year-old ART nurse, HF-AZ)

ART employees also associated the decline in training during the post-devolution period in their health facilities to reduced funding for the LIPs supporting their sites.

“...frequency also reduced, the frequency of the training. They were still training but it reduced. For example; throughout last year now... last year, I don't think we had any training. They promised training but it was not done. Unlike before... you know; this thing is dynamic. Whenever there are results of new research on the treatment of HIV, it is good you call us immediately and let us know. But because there is inadequate fund, it's no longer like tha.”

(Male, 47-year-old pharmacy staff, HF-QX)

Additionally, during pre-devolution, there were financial incentive and follow up-on the job training.

“During GHAIN. Very excellent because the training... after undergoing training, the financial support given to you after the training is something. Then at the end of it, they follow it with ‘On the job’...”

(Male, 44-year-old ART coordinator, HF-AZ)

Although employees attested to the decline in training post-devolution, some, however, were of the view that the training was relatively adequate as trained personnel were expected to step down training they had during the pre-devolution period to new staff. According to a laboratory employee from Org B:

“The training was continuing. You understand? activities slowed down a little bit especially... sometimes... training was still adequate but not as it was during those times. There was less training especially after the devolution because they believe that some of us who already had training should do Step Down training to new staffs who were coming here at that time. but by and large, activities were still going on smoothly and we are taking care of our patients

(Male, 45-year-old pharmacy staff, HF-QX)

4.9.6 Irregular supervision

A number of factors emerged as primary facilitators of ART employees’ supervision in the current study. The first was an anticipation of regular, physical visits by supervisors and the interaction of supervisors with ART staff. Respondents expressed their displeasure related to supervision by

LIPs. When compared with findings from the employees that participated in the readiness survey, two-thirds (69.3%, $n = 199$) also disagreed that staff were properly supervised by LIPs.

While respondents also expressed their satisfaction with the supervisory styles of the NGOs during pre-devolution, they, however, also expressed their displeasure with the LIPs' style of supervision post-devolution.

“Well... the level of supervision has dropped.It was more pronounced during GHAIN actually. The supervision was more frequent then. Now, it's a bit less occasional. They don't come that often anymore.”

(Male, 31-year-old ART coordinator, HF-WF)

One employee's dissatisfaction with supervision was based on the fact that LIP supervisors did not regularly conduct physical visits; instead they supervised via telephone calls.

“...but now (post-devolution) this organisation we.....said their kind of supervision is by correspondence and somebody will just call me on phone; “Look at this..... before devolution, IHV-Maryland you see them they come... physical supervision, not supervision by correspondence.”

(Male, 34-year-old lab scientist, HF-QX)

Similarly, another respondent re-affirmed that there had been a decline in external supervision by the LIPs during post-devolution:

“... GHAIN come here to supervise (during pre-devolution). Of course you can't supervise over the phone. You can't call it supervision. They provide solution to the challenges and problems the staffs were facing...”

(Female, 27-year-old ART nurse, HF-AZ)

Respondents also felt that the pre-devolution supervisory style was more effective and motivating to staff compared to the supervision post-devolution. This was explained by an employee:

“During FHI GHAIN, the supervision was more effective and this was what made the system more effective than FHI 360. This motivated the staffs to work harder as they know the supervision can come at any time. All the departments we have here were supervised. So, you can’t compare them. During 360, the level of supervision was not much.”

(Female, 39-year-old ART nurse, HF-AZ)

The respondents referred to effectiveness of supervision by the external supervisors in terms of regularity, dedication and direct mentorship: A participant explained:

“In the area of supervision, the IIPs used to come at least every two, two weeks. In fact, they used to come and mentor. Initially, some of us had difficulty you know, writing the report. So, they will come here and sit down with us and ensure that they watch us do it and correct. Sometimes they even see the patients themselves, onsite training.”

(Female, 43-year-old ART nurse, HF-XV)

4.9.7 Reduced support and welfare

In relation to welfare and support provided by NGOs, employees shared that NGOs have supported PLHIV by providing funding through their support groups in building their capacity for entrepreneurship through funding and skill acquisition. Most of these support and welfare services that were effective during the pre-devolution period waned drastically post-devolution.

This view also perfectly aligned with findings from the employees that participated in the readiness survey, two-thirds (74.2%, $n = 199$) disagreed that LIPS were concerned about staff welfare. An employee explained this scenario as follows:

“You know, before IHVN support HIV Support Groups with huge amount of money for their monthly activities, for their income generating activities, for so many things. I know AKTH before was collecting over a Hundred thousand for the Support Group just to run their activity. ... AKTH Support Group is only getting ten thousand. So, ten thousand can’t do anything, because a group of more than fifty or hundred, ten thousand...”

(Male, 57-year-old administrator, HF-WF)

Participants in the study further described the support provided by NGOs through the HIV patients’ support group.

“During GHAIN, they have a Support Group which was very active, honestly. For them, like I told you, in every last Saturday of the month, they do that meeting for them by the Support Group.If there is a patient that is in need, that support group, they will help him, unlike now that the Support Group is weak.”

(Female, 33-year-old ART nurse, HF-RV)

In addition, there were some components of support and welfare for ART employees being provided by the NGOs to boost their motivation. Comparatively, welfare services for employees were excellent during the pre-devolution period. Sponsorship for conferences, i.e. payments of flight tickets, car hire, hotel accommodation, conference fees, and other financial incentives in the form of daily sustenance allowances, were cited as motivating.

“During GHAIN period, they select some laboratory scientist who are partaking in the service delivery and then support them with finance to go and attend conferences or a special training which is not in line with the provision, at least, this is part of the motivation. And at that training, they also support you with what is called per diem.”

(Male, 52-year-old laboratory staff, HF-WF)

A few employees working in a pharmaceutical unit were relatively comfortable with post-devolution support provided to them by the NGOs. One respondent said:

“.....they support the site financially. they provide support for at least communication in tracking patients, diesel and maintenance of our vehicles for tracking patients.”

(Male, 34-year-old laboratory scientist, HF-QX)

The most frequently mentioned category in this study was satisfaction with PEPFAR interventions, irrespective of the intervention period. Generally, participants felt that PEPFAR, unlike government, had been responsible for both significant pre-devolution success and the weak post-devolution performances. People working at the health facilities appreciated the impact of ART programmes in saving the lives of PLHIV.

“Honestly, actually, this ART services has saved a lot of lives really. And of course, it's like... you know before, quite a number of people die innocently because they are living with the virus and they don't know. But now, hardly, hardly, hardly because the mortality has really gone down because of this implementation of the programme.”

(Male, 58-year-old manager, HF-WF)

4.9.8 Challenges with ART site expansion and clients' retention in care

Although employees reported that there were mechanisms to rapidly enrol patients in existing health facilities, expand sites, and support HIV clients' retention in care during pre-devolution, LIPs couldn't sustain these interventions due to funding challenges. Along with this, respondents explained that the LIPs restricted demand-creation activities.

"We have a lot of capacity in supporting other things to enrolled and treat more patients. The challenging is the retaining those enrolled. We have a lot of lost to follow ups, from people who move from place to another because of communal crisis, religious and all that but in terms of our capacity we provide to meet up practically, we don't have any patient waiting to be served. In terms of expansion of a new client, we have been restricted by our funders not to expand ART services in terms of site but no limitation in number, technically but there is a limitation function. We are not allowed to do demand creation for more clients."

(Male, 58-year-old manager, HF-WF)

4.9.9 Programme transparency and communication

Employees' opinions in relation to NGOs pre- and post-devolution programme transparency and communication capacity were varied. While respondents felt that NGOs displayed good transparency procedures in dealing with ART programme activities during both periods, they indicated their concerns in relation to poor communication capacity of the NGOs during the post-devolution period. Poor communication of the LIPs was an important finding from the employees' devolution readiness survey where an overwhelming majority of ART health workers (85.5%, $n = 199$), disagreed with the statement that the NGOs exhibit good communication strategies.

Employees highlighted similar challenges of ineffective managerial capacity and of poor communication in many health facilities during the qualitative session. An interviewee described this concern:

“There is lack of communication If they bring something to the pharmacy, only the pharmacist will know and probably, the pharmacist may not bother to tell the technician, “We are supplied with this”. It’s when sometimes they run short of something that you know this thing has shortened???. But before, it wasn’t like that. If the drugs are supplied, everybody in the programme will know. They changed the system actually. Now, when they bring something to the lab, you won’t know until when you are looking for something, then the lab person may communicate with you; “We don’t have this” or “we don’t need this” unless you bother to find out. But before, it was not like that.”

(Female, 39-year-old ART nurse, HF-AZ)

The study showed that effective communication was a key factor in enhancing inter-departmental communication and inter-facility referrals for HIV patients. Respondents varied in their opinions from one health facility to another. Some respondents were, however, satisfied with communication and they felt that it also helps with patients’ referrals. An ART nurse from HF-QX, however, expressed that the communication was good even during post-devolution:

“There were cases of referrals and when this happens, it is duly communicated with the necessary authorities. Also, there was good communication between the various departments or organs. You know, I see this site as a system and every department has to communicate with others to make the system work. Therefore, there was this... how do I call it... good level of communication. I think it’s still at the same level with FHI GHAIN...”

(Female, 39-year-old ART nurse, HF-AZ)

The study found that NGOs supporting ART facilities during both pre and post-devolution periods observed good transparency in managing resources. A participant said:

“There was transparency whenever they bring the funds during pre-devolution. You will be told how much was given for how long.....and it will be paid openly. Am speaking of what my eye witnessed. Presently, there is transparency as well.”

(Male, 34-year-old laboratory scientist, HF-QX)



4.10 ART READINESS RELATIONSHIPS

This section will examine relationships between employee readiness and the LIPs' organisational performance. It seeks to answer research questions on associations between organisational performance and employees' readiness to ART programme devolution, and also tested for readiness and performance hypotheses.

4.10.1 Relationship between organisational performance (OP) and employees perceived organisational readiness (OR); test for Hypothesis H 1

Null Hypothesis 1: The organisational performance (OP) does not predict employees perceived organisational readiness (OR).

To test for Hypothesis 1, Spearman's rank correlation test was run to test the effect of organisational performance (OP) on organisational readiness (OR). There was significant positive correlation/relationship between OP and employees perceived OR scores; p-value = 0.0286, rho = 0.16 (Spearman's correlation). That means, employees who indicated high organisational performance also indicated high organisational readiness to change; in other words, employees felt that they supported ART devolution if they perceived that the LIP performed well. Hence, the Null Hypothesis 1 was rejected.

This finding supports the direct relationship between frequency distributions for organisational performance and employees' readiness. Whereas employees showed disagreement to all the readiness variables discussed in section 4.4, similar responses were found in four out of the six performance-related variables, except for organisational tradition (82.4% respondents agreed to

the statement on good tradition in LIPs) and reflexivity (where 36.7% agreed and 23.2% strongly agreed, respectively) .

4.10.2 Relationship between gender and employees' perceived organisational readiness (OR); test for Hypothesis H 2

Null Hypothesis 2: There is no significant difference between gender and employees' perceived organisational readiness (OR).

The Mann-Witney U test (Table 4.6) was used to test for differences between gender and employees' perceived organisational readiness to devolution. The result of $P = 0.385$ against the normal score of $P = 0.5$ indicated that there was no significant difference in readiness score across gender. Therefore, the alternative Null Hypothesis 2 was rejected.

Table 4.6 Association between gender and devolution readiness

Gender	ART Employees (N=199)	Readiness Score	P-value
	Frequency n (%)	Mean Rank (Minimum, Maximum)	
Male	108 (54.3)	18.00 (14, 31)	0.385
Female	91 (45.7)	19.00 (11, 30)	

4.10.3 Relationship between age and employees' perceived organisational readiness (OR); test for Hypothesis H 3

Null Hypothesis 3: There is no significant difference between age and employees perceived organisational readiness (OR).

The Mann-Witney U test was used to test for differences between age and employees' perceived organisational readiness to devolution. The result of $P = 0.322$ showed that there was no significant difference in readiness score across employees' age. Hence the Null Hypothesis 3 was accepted.

4.10.4 Relationship between marital status and employees' perceived organisational readiness (OR); test for Hypothesis H 4

Null Hypothesis 4: There is no significant difference between employees' marital status and employees perceived organisational readiness (OR).

The Mann-Witney U test was used to test for differences between marital status and employees' perceived organisational readiness to devolution. The result of $P = 0.47$ showed that there was no significant difference in readiness score across employees' marital status. Hence the Null Hypothesis 4 was accepted.

4.10.5 Relationship between place of work and employees' perceived organisational readiness (OR); test for Hypothesis H 5

Null Hypothesis 5: There is no difference in the employees' perceived organisational readiness to ART devolution across their places of work.

Table 4.7 shows a Kruskal Wallis test used to test for differences between place of work and employees' perceived organisational readiness to devolution. The result of $P = 0.005$ indicated that there was significant difference in readiness score across place of work. Hence the Null Hypothesis 5 was accepted.

Table 4.7 Kruskal-Wallis test for place of work vs organisational readiness

Test Statistics	Readiness
Kruskal-Wallis	16.767
Df	5
Asymp. Sig.	0.005

In the Kruskal-Wallis test, the null hypothesis is that 'all group means are the same' so the resulting p-value concludes that there is a significant difference between the groups ($P = 0.005$). Further 'post hoc' tests have to be carried out to confirm where those differences exist. The post hoc tests are mostly t-tests with an adjustment to account for the multiple testing.

Further Kruskal-Wallis tests indicated readiness scores between different places of work. It shows that employees in some of the places of work significantly showed more devolution readiness than others (Table 4.8).

Table 4.8 Kruskal-Wallis test for place of work vs organisation readiness scores

Place of work	N	Mean rank	P value
IDH	28	20.79	0.049
IHVN	19	28.74	
IDH	28	18.68	0.004
Wudil General Hospital	17	30.12	
AKTH	102	58.73	0.019
FHI 360	10	33.75	
AKTH	102	57.13	0.052
Wudil General Hospital	17	77.21	
FHI 360	10	8.55	0.016
IHVN	19	18.39	
FHI 360	10	7.75	0.006
Wudil General Hospital	17	17.68	
IHVN	19	25.55	0.029
Bichi General Hospital	23	18.15	
Bichi General Hospital	23	17.33	.038
Wudil General Hospital	17	24.79	

Generally, the Kruskal-Wallis test indicates that devolution readiness of ART employees is significantly highest in Wudil General Hospital (mean rank = 129) and least in FHI 360 (mean rank = 63) ($P = 0.005$) (Figure 4.19).

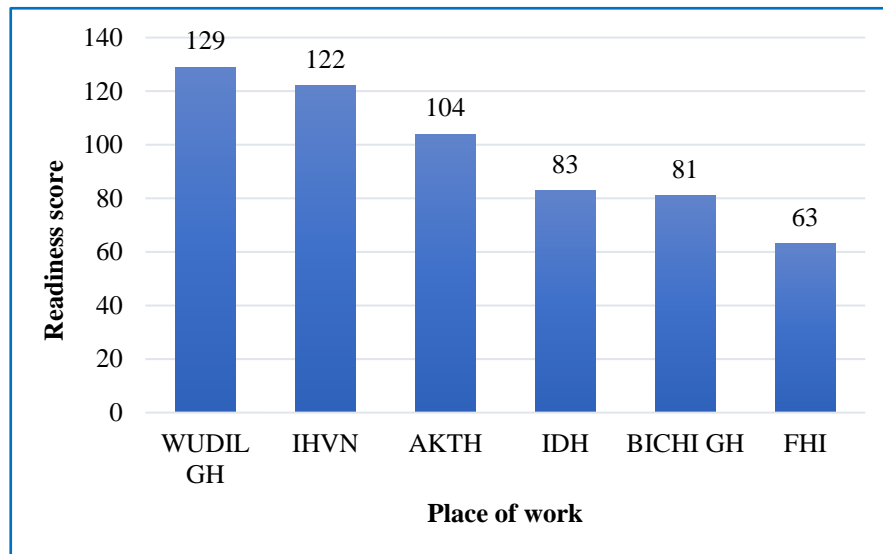


Figure 4.19 Mean rank readiness score by employees' place of work

4.10.6 Relationship between employees' education level and perceived organisational readiness (OR); test for Hypothesis H 6

Null Hypothesis 6: There is no significant difference between employees' education level and their perceived organisational readiness (OR) to ART devolution.

The Kruskal-Wallis test used to test for differences in employees' education level and perceived organisational readiness to devolution showed a result of $P = 0.003$, thereby it indicated that there was significant difference in readiness score across place of work. Hence the Null Hypothesis 6 was rejected.

The Kruskal-Wallis test indicated that the higher the educational level the lower the readiness score; hence readiness scores are least among employees with post graduate education (mean rank = 58) and highest is in those with vocational skills (mean rank = 129) (Figure 4.20).

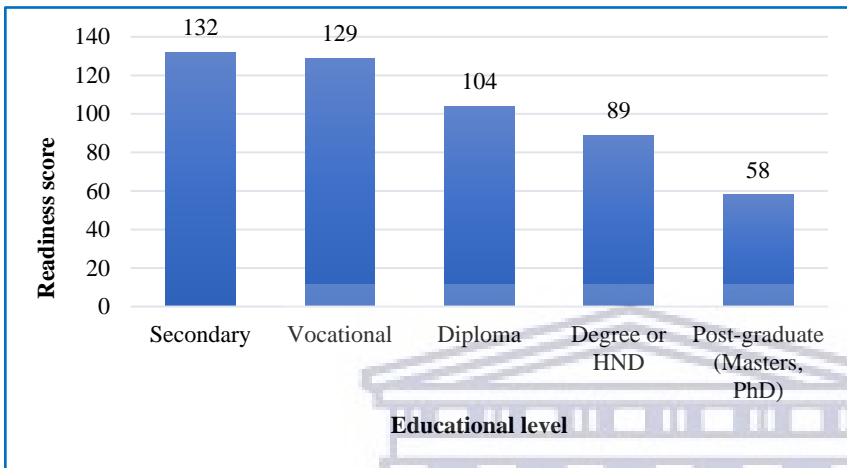


Figure: 4.20 Mean rank readiness score by employees' educational level

4.11 CHAPTER SUMMARY

This chapter presented findings from employees working in ART sites and LIPs, describing their ART devolution experiences, including challenges they faced in providing services to HIV patients on ART care. The findings were obtained through a quantitative survey on employees' readiness and qualitative in-depth interviews that explored their perspective of the LIPs devolution implementation. Quantitative findings have been situated within the employees' readiness and organisational performance frameworks, with each having seven components respectively.

The majority of ART 199 employees that participated in the survey were males, mostly married, and the majority were in the third or fourth decades of life. Most had a university degree/higher

national diploma, and some even had a post-graduate level of education, and were predominantly from the tertiary hospital, Aminu Kano Teaching Hospital.

The survey findings were best aligned in the categories devoted to the components. The employees' readiness frameworks focused attention on components that characterised successful devolution of ART programmes from external to local NGOs, namely: involvement in decision making; positive relationship with supervisors; training; communication; welfare; flexibility; and motivation. Organisational performance predictors of a successful programme devolution included: organisational tradition; reflexivity; efficiency; feedback; performance evaluation; innovation; and quality.

The majority of health workers disagreed with all the devolution readiness statements. They also disagreed with five out of the seven organisational performance-related categories, except those related to organisational tradition and reflexivity, to which participants agreed. Relationship tests showed that employee readiness was significantly and directly related to organisational performance predictors.

The most prominent finding regarding the survey is that the overall assessment is negative in both the employees' readiness and organisational performance predictors. In this chapter, the LIP's organisations were characterised as those with a weak tradition and low level of change experiences, due to overwhelming challenges that affects their stability and that of the ART programme within the state and national health ministries. The respondents expressed a low perception with respect to five out the seven LIP's organisational performance predictors, namely:

efficiency; feedback; performance evaluation; innovation; and quality. However, they perceived tradition and reflexivity as high among the LIP's organisational performance predictors.

At bivariate level, devolution readiness was significantly associated with employees' education and place of work. Further post hoc analysis showed that readiness was least among employees with the highest educational level and, additionally, employees working in Wudil General Hospital showed highest devolution readiness as compared to those in other work places ($P < 0.05$) (Figure 4.4). However, there was no association between employees' devolution readiness and their gender, marital status, age, and sex. There is also a significant association between place of work and organisational performance post-devolution.

The qualitative component of the chapter assessed in depth employees' opinions and experiences for the ongoing devolution implementation. It unpacked their perceptions of the pre- and post-devolution ART service delivery status, including the roles of external/local NGOs and government in supporting ART programme at all levels.

The chapter described how ART employees, who are frontline healthcare workers often providing care in the health facilities which they serve, perceived the ongoing ART devolution implementation. This included their experiences of the previous pre-devolution era and the proceeding post-devolution period. They explained facing numerous barriers to effective provision of ART care during the post-devolution era. Employees reported a progressive decline in service delivery performances due to cuts in PEPFAR funding, thereby affecting most points of care. All

respondents claimed that the ART programmes have been donor driven for both the pre- and post-devolution periods.

When asked about government's role in assuming ownership of the ART programmes, most employees were of the view that they did not see that happening. Nevertheless, few of the respondents said that they noticed a little response by government to safeguard the weak and failing ART programmes. This was noteworthy because full government ownership of the ART programmes has been the foundation of the devolution sustainability agenda.

In addition, employees in this research reported that there has been a gross decline in ART programme performance in health facilities in the following areas: staff training; supervision; availability/management of resources; infrastructural upgrade; HIV clients' enrolment and retention in care; scale-up of sites; and partnerships. Generally, they felt that most of the problems were linked to the cuts in PEPFAR funding and poor government ownership post devolution. Although most participants described that service delivery had been hampered as a result of the deteriorating state of the ART programmes, many believed that HIV clients already enrolled in care were still accessing the ART services.

CHAPTER FIVE

FINDINGS: UNDERSTANDING PRE- AND POST-DEVOLUTION ART PERFORMANCES

5.1 INTRODUCTION

This chapter focuses on data from both the quantitative survey and the qualitative interviews in order to assess ART performances for the pre- and post-devolution periods and explore factors associated with the performance levels. Hospital records along the HIV continuum of care were compared before and after ART devolution, followed by interviews with programme managers to explore their perspectives of factors associated with performance levels for the two eras.

The chapter answers the following research questions:

- How has the devolution of funding for and oversight of Nigeria's ART programme from international to local PEPFAR implementing partners affected ART programme performance at health facility level in Kano State?
- What are the factors associated with ART performance levels for the pre- and post-devolution periods?

5.2 HIV-RELATED CLINICAL PARAMETERS FOR THE PRE- AND POST-DEVOLUTION PERIODS

5.2.1 HIV diagnosis

The entry point to HIV treatment is through testing and diagnosis (Ahonkhai et al., 2012). It consists of HIV counselling and testing services which are carried out at both health facility and community (mobile HCT) levels.

5.2.1.1 Health facility HIV counselling and test

Overall, the median reported that the frequency of HIV counselling and testing in the health facilities during pre-devolution is higher (median = 3 250.5) than those tested post-devolution (median = 3 106.0) (Table 5.1). However, in the total number of clients that received counselling and testing for HIV, there was no association between the pre- and post-devolution periods (Pearson's chi square test, $P > 0.05$).

Table 5.1 Comparison of clients tested for HIV pre- and post-devolution

HIV testing	Period	Statistic	
Number of clients tested for HIV	2005–2010 (pre-devolution)	Median	3 250.5
		Minimum	0.0
		Maximum	20 835.0
	2011–2016 (post-devolution)	Median	3 106.0
		Minimum	122.0
		Maximum	110 684.0

5.2.1.2 Mobile HIV counselling and testing

The proportion of availability of mobile HIV counselling and testing services was significantly higher (25%) during pre-devolution compared to the post-devolution (7.3%) period (Figure 5.1), (Pearson's chi square test, $P < 0.05$).

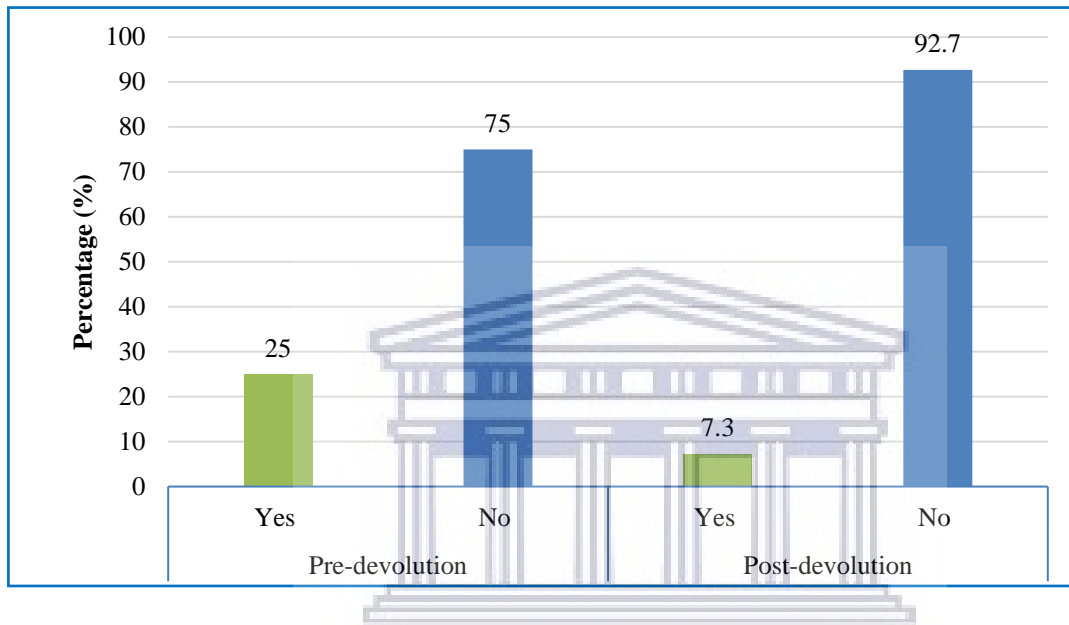


Figure 5.1 Availability of mobile HCT between pre and post-devolution periods

5.2.2 Average duration between diagnosis and initiation of other ART services

5.2.2.1 Average duration between diagnosis and enrolment on pre-ART care

There was no difference statistically between the average number of days between HIV diagnosis and enrolment on pre-ART care ($P > 0.05$). The duration for both periods was similar (median = 7.0).

5.2.2.2 Average duration between enrolment on pre-ART and ART eligibility assessment

Overall, the median reported that the average number of days between enrolment on pre-ART care and ART eligibility assessment was statistically higher during the pre-devolution (median= 14.0) compared to that of the post devolution period (median = 5.0); (Mann-Whitney test P = 0.003), (Table 5.2).

Table 5.2 Days between enrolment in care and treatment eligibility assessment

Days	Period	Statistic	
Average number of days from pre-ART enrolment to ART eligibility assessment	2005–2010 (pre-devolution)	Median	14.5
		Minimum	2.0
		Maximum	144.0
	2011–2016 (post-devolution)	Median	5.0
		Minimum	1.0
		Maximum	30.0

5.2.3 Outcomes of first CD4 count investigation for HIV patients in care

Although there was no statistically significant difference for HIV patients presenting with severe immune deficiency (CD4 count = <200 cells/mm³) for both periods (Mann-Whitney U test P = 0.659), there were statistically significant differences (Table 5.3) between the number of HIV clients presenting with moderate immune status (200-350 cells/mm³) (P = 0.026), and those with high levels of immunological status (>350 cells/mm³) (P = 0.013). The number of HIV patients with moderate CD4 counts (200-350 cells/mm³) was less during pre-devolution (median 17.0) compared to that during the post-devolution period (median = 69.0) (Table 5.3). However, the number of HIV patients with strong immune status (>350 cells/mm³) was higher during post-devolution.

Table 5.3 Distribution of first CD4 count investigation for HIV patients in care

First CD4 count	Period	Statistic	
Number of patients with CD4 count between 200cells/uL and 350cells/uL	2005–2010 (pre-devolution)	Median	17.0
		Minimum	0.0
		Maximum	799.0
	2011–2016 (post-devolution)	Median	69.0
		Minimum	0.0
		Maximum	520.0
Number of patients with CD4 count > 350cells/uL	2005–2010 (pre-devolution)	Median	18.0
		Minimum	0.0
		Maximum	680.0
	2011–2016 (post-devolution)	Median	103.0
		Minimum	0.0
		Maximum	1 356.0

5.2.4 Comparing enrolment of HIV patients on treatment between the pre- and post-devolution periods

The number of HIV-positive patients enrolled on ART was significantly higher ($P = 0.010$) during pre-devolution (median = 521.0) compared to that of the post-devolution period (median = 157.0).

Table 5.4 Distribution of HIV patients' enrolment pre- and post-devolution

ART enrolment	Period	Statistic	
Number of patients on ART	2005–2010 (pre-devolution)	Median	521.0
		Minimum	0.0
		Maximum	1 336.0
	2011–2016 (post- devolution)	Median	157.0
		Minimum	0.0
		Maximum	837.0

5.2.5 Retention in care and patients' tracking outcomes

The study findings showed that there was a statistically significant difference in the number of HIV clients retained within six months of enrolment in ART care ($P = 0.002$) and those retained within 12 months of enrolment ($P = 0.035$). It indicates that the number of HIV clients retained in care within six months of enrolment in ART care was higher during pre-devolution (median = 230.0) than during the post-devolution period (median = 50.0) (Table 5.5). Similarly, the number of HIV clients retained in care within 12 months of enrolment in ART care was higher during pre-devolution (median = 113.0) than during the post-devolution period (median = 30.0). However, results showed that there was no statistically significant difference for HIV patients transferred in ($P = 0.066$), transferred out ($P = 0.067$), or lost to follow up ($P = 0.483$).

Table 5.5 Distribution of HIV patients retained in care pre- and post-devolution

Retention duration	Period	Statistic	
Number of patients retained in care at six months from enrolment	2005–2010 (pre-devolution)	Median	230.0
		Minimum	0.0
		Maximum	2 181.0
	2011–2016 (post-devolution)	Median	50.0
	Minimum	0.0	
	Maximum	627.0	
Number of patients retained in care at 12 months after enrolment	2005–2010 (pre-devolution)	Median	113.0
		Minimum	0.0
		Maximum	2 181.0
	2011–2016 (post-devolution)	Median	30.0
	Minimum	0.0	
	Maximum	529.0	

5.2.6 Tuberculosis screening and nutritional support services for HIV clients

While findings showed a statistically significant difference for HIV patients that received nutritional supplementation ($P = 0.011$) (Table 5.6), between the pre- and post-devolution periods, there was no statistically significant difference for HIV clients screened for tuberculosis (TB) ($P = 0.258$) between both periods. Results showed that provision of nutritional supplementation was more during post-devolution (maximum = 480.0) than pre-devolution (maximum = 5.0) (Table 5.6).

Table 5.6 Nutritional support for HIV patients in care

ART enrolment	Period	Statistic	
Number of eligible patients provided with nutritional supplementation	2005–2010 (pre-devolution)	Median	0
		Minimum	0
		Maximum	5.0
	2011–2016 (post-devolution)	Median	0
		Minimum	0
		Maximum	480.0

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5.2.7 Clinical outcomes of HIV patients in care

There were no statistically significant differences in the number of patients on ART for 12 months with undetectable viral load ($P = 1.000$) (Table 5.7); the number of patients requiring second-line drugs due to treatment failure at 12 months ($P = 0.154$); the number of patients requiring second line drugs due to treatment failure at 24 months ($P = 0.497$); and patients that died ($P = 0.758$) between pre and post devolution periods.

Table 5.7 Clinical outcomes of HIV patients enrolled in care

Statistical test	Number of patients on ART with undetectable viral load at 12 months	Number of patients on ART requiring switch to second line therapy for treatment failure at 12 months	Number of patients on ART requiring switch to second line therapy for treatment failure at 24 months	Number of patients on ART who died 12 months after enrolment
Mann-Whitney U	574	494.5	551.5	553.5
Wilcoxon W	1435	900.5	957.5	1414.5
Z	0	-1.424	-0.679	-0.308
Asymp. Sig. (2-tailed)	1	0.154	0.497	0.758

5.3 FACTORS ASSOCIATED WITH ART PERFORMANCES FOR PRE- AND POST-DEVOLUTION PERIODS

The overarching goal of ART programme devolution is to facilitate the strategies and objectives of the National Strategic Framework (NSF) and the National Strategic Health Development Plan (NSHDP) as they impact on the sustainability of HIV/AIDS response in Nigeria. It includes the Government of Nigeria's (GoN) capacity to plan, oversee, manage, implement, and ultimately finance its ART programmes. Using managers from the ART programmes to lead and coordinate the devolution process at the Ministry of Health, NGO, health facility and community levels is an important strategy taken by both PEPFAR and government. In conversations with programme managers during this study, it was evident that they saw themselves as key custodians of the ART programmes, and their roles, experiences and viewpoints are important in ensuring effectiveness of the devolution implementation.

The issues emerging in this section are presented as themes around which ideas and concepts have been clustered. Hence, when managers spoke about HCT, other themes had an impact. Similarly, when they spoke about funding, it raised human resources challenges, communication, amongst others. The order in which each theme has been presented is guided by how strongly and frequently the managers mentioned it either as a strength or a barrier, starting with their strongest concern. The following themes emerged in relation to ART performance factors perceived by managers to either negatively or positively affect devolution of ART programme to local NGOs: capacity building for ART staff; government ownership of the ART programmes: policy concerns; staffing and resource limitations; decline in infrastructure; poor accountability; and partnership challenges.

5.3.1 HIV programme managers in Kano State

At the time of this study, all the HIV programme managers were employed in Kano State and were either working with State Action Committee on AIDS, Family Health International or Institute of Human Virology for both pre and post-implementation periods. To protect confidentiality, the three institutions are referred to as Org A, Org B and Org C.

Org A's managers stated that they were responsible for ensuring strong ownership, providing leadership, and fulfilling coordination roles. The managers are responsible for all HIV programme policies, government staff working in health facilities, and the management of infrastructure. The managers who participated in the study were highly experienced and qualified, both with a post-graduate degree in public health. They were both married, above 50 years of age, and worked as managers within the organisation during both the pre- and post-devolution periods. The institution

was established in 1989 and its source of funding was mainly government. It also received some support from PEPFAR and the Global Fund.

Org B is a non-profit organisation that started supporting ART programmes in Kano State and it is stated on the organisation's website that it has been actively involved in working during the pre- and post-devolution periods (2004 to 2016). It was designed to support the Government of Nigeria and Kano State in particular in reducing the impact of HIV/AIDS by strengthening and expanding HIV/AIDS services. Org B supported HIV testing and counselling, prevention of mother-to-child transmission, ART, TB services, and treatment of opportunistic infections. The manager who participated in the study was highly experienced and qualified with a post-graduate degree in public health. He was married, above 50 years of age and worked as a manager within the organisation during both the pre- and post-devolution periods. The organisation mainly works in primary and secondary healthcare facilities and in communities. The main source of funding for the organisation was from the US government PEPFAR programme. During the post-devolution period, there was also funding from the Global Fund.

Org C is a non-profit organisation that supports ART programme in Kano State and worked during the pre- and post-devolution periods (2005 to 2016). The organisation's website states that their programme was designed to support the Government of Nigeria and Kano State in particular to reduce the impact of HIV/AIDS by strengthening and expanding HIV/AIDS services. Org C supported HIV testing and counselling, prevention of mother-to-child transmission, ART, TB services, and treatment of opportunistic infections. The organisation works in primary, secondary and tertiary healthcare facilities and communities. The manager who participated in the study was

highly experienced and qualified with a post-graduate degree in public health. He was married, above 50 years of age and worked as manager within the organisation during both the pre- and post-devolution periods. The main source of funding for the organisation was from the US government PEPFAR programme. During the post-devolution period, there was also funding from the Global Fund.

Org D's manager stated that the organisation he works for has been supporting PLHIV in Nigeria and worked during the pre- and post-devolution periods (1989 to 2016). Org D's website states that the organisation was formed by people that are HIV positive with an aim of improving life and reducing stigma and discrimination for persons infected with HIV. It operates through health facilities and community-based support groups. The manager who participated in the study was highly experienced and qualified with a university degree. He was married, above 40 years of age and worked as deputy president of the Network of People living with AIDS in Nigeria (NEPWAN) during both the pre- and post-devolution periods. The organisation mainly supports entrepreneurship, palliative, community and home-based care for PLHIV. The main source of funding for the organisation was from the US government PEPFAR programme. During the post-devolution period, there was also funding from the Global Fund.

For ease of reference to the interview, interviewee and the respective change organisations, the following notations in Table 5.8 will be used:

Table 5.8 Background of interviewees

Interview	Interviewee	Organisation	Management role
Interview 1	Interviewee 1	Org A	Programme manager
Interview 2	Interviewee 2	Org A	Programme director
Interview 3	Interviewee 3	Org B	Manager in the Zonal programme
Interview 4	Interviewee 4	Org C	Programme manager
Interview 5	Interviewee 5	Org D	A Manager working in the national PLHIV support group

5.3.2 Characteristics of in-depth interview respondents

The characteristics of interviewees that participated in the in-depth interviews revealed their diversity in terms of age, gender, education and place of work (Table 5.9).

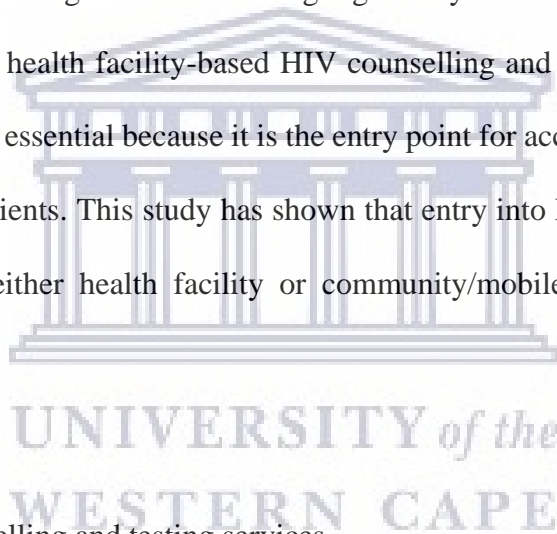
Table 5.9 Demographic attributes of HIP programme managers

Characteristic	Frequency
Age group	
40–49	2
≥50	3
TOTAL	5
Gender	
Male	4
Married	1
TOTAL	5
Education	
Graduate (BA/BSc/HND or similar)	1
Post graduate (Master’s degree, Doctorate or similar)	4
TOTAL	5

Characteristic	Frequency
Place of work	
Organisation A	2
Organisation B	1
Organisation C	1
Organisation D	1
TOTAL	5

5.3.3 Issues identified as affecting HIV diagnosis and entry into ART care

This section will present challenges which were highlighted by the interviewees with respect to HIV diagnosis (mobile and health facility-based HIV counselling and testing) and enrolment in ART care. HIV diagnosis is essential because it is the entry point for accessing care and treatment services for HIV positive clients. This study has shown that entry into HIV care and treatment is mainly achieved through either health facility or community/mobile-based HCT services as described by interviewees.



5.3.3.1 Mobile HIV counselling and testing services

When asked if the ongoing devolution had affected the performance of community/mobile HCT services, all the interviewees responded positively, saying they witnessed differences in mobile HCT services performance between the pre- and post-devolution periods. Interviewees mentioned several factors that affected mobile HCT performance: mobile HCT was PEPFAR's intervention and government was not interested (Interview 4); a decline in funding (Interview 3); and mobile HCT was introduced by PEPFAR as a strategy for meeting HCT targets, especially for hard to reach populations (Interview 4).

The interviewees' responses with regard to the impact of devolution on mobile HCT services' performance were that, before the devolution, the activity was effective, but it was stopped and was limited to health facilities after the devolution. This finding is in keeping with the quantitative finding of ART performance assessment. The survey data below shows how mobile HCT was affected by the devolution implementation.

“Unlike before when FHI and GHAIN that were in the community and they used the town criers to let people know that they were coming for free HIV test, but now, if you look at it, the only places that are doing the HIV test and counselling are the facilities.” (Interviewee 5)

Interviewees also associated discontinuation of mobile services after the devolution as one of the sustainability challenges being faced. They felt that the funding demand of such services was high and because of the decline in financial support from PEPFAR, mobile HIV testing wasn't forthcoming post-devolution. An interviewee said:

“There were no more mobile services by 2011 and ... they couldn't sustain; since you know it is a costly service that demand the hiring a team (human resources), you need to have mobility resources (vehicles) that can take you to remote areas, so you need to look at those issues, and as the name implies, you have to make proper and adequate provisions with regards to the population.” (Interviewee 3)

The interviewee also highlighted that mobile HCT has always been driven by NGOs and never a priority for government.

“The health system at the state is not interested at mobile HCT because it was never part of their intervention. It was something brought by the programme to reach a target and satisfy the PEPFAR requirements.” (Interviewee 4)

The interviewees also said that the human resources used by the NGOs were short-term contract staff and not government personnel, making the intervention unsustainable post-devolution.

“There were advocacies for the government to reach the target (the pre-devolution target for enrolment), but looking at the health system in the state when it comes to human resources and funding - the state doesn't have the capacity to continue with that. Most of the staff engaged on the mobile services were on ad-hoc basis and they were being paid by the programme manager. They were not the staff of the ministry that used to conduct the services.”(Interviewee 4)

5.3.3.2 Health facility-based HIV counselling and testing services

Health facility-based HCT has been identified as an important step in accessing ART care by HIV-positive clients. Interviewees described the services as part of routine services fast-tracked by the government for both the pre- and post-devolution periods. They explained that although there was a decline in health facility HCT performance, the services persisted post-devolution. An interviewee said:

“But if you look at the services that are primarily the responsibility of the government at the health centres, they have continued with the counselling and testing services even though it is not at the magnitude it used to be when funded by the FHI/GHAIN.”
(Interviewee 5)

The interviewees described the paediatrics enrolment process indicating that HIV diagnosis and enrolment for children was better during pre-devolution as compared to post-devolution.

“They used to test about 200 children with the consent of their caregivers in a day, just to enrol them in terms of care and treatment, and that led to a lot of enrolment. But now, the government doesn’t take that as priority and a lot of people are dying silently, they are not even aware if it is HIV because there is no more focus in that area.” (Interviewee 2)

5.3.4 The effect of political environment and funding on ART devolution

The notion of political environment and funding as important elements of devolution implementation, and its effect on ART programme performance, was mentioned in the interviews from different perspectives. The interviewees discussed political environment and funding in the light of ownership, systems strengthening and programme alignment.

5.3.4.1 HIV interviewees’ views of government roles and ART devolution

HIV interviewees lamented their frustrations in advocating for the Ministry of Health to bridge the gaps in ART service provision caused by the devolution implementation. They felt that the government ownership strategy negatively affects ART devolution.

“Actually, NGOs during pre-devolution were very supportive. They provided us with almost all the needed support; forms, lab forms, and they supported us with M&E officers who were very good at capturing the data, and even the drugs were available, laboratory services were all available. Their leadership style was encouraging; it was very good that whenever we reported a problem, they addressed it promptly. Now following the devolution, they have challenges for we are getting stock outs. The stock out cut across all

aspects. The government is not being responsive. But FHI-GHAIN have ... done their best to build the government capacity.” (Interviewee 2)

However, opinions among interviewees were divided about whether government performed its post-devolution responsibilities or not. Some interviewees felt that although there had been a decline in enrolment of HIV clients on ART after the devolution, that has been the normal expectation since, unlike PEPFAR, government does not attach targets to HIV enrolment.

“While comparing the two, era (pre and post-devolution), ...the government is more interested in implementing its routine services, like when someone comes with a disorder to the health facility, they would manage and discharge the person without setting a target to be met. But pre-devolution programme had a target, and whenever you are given a target, you have to create demand and make sure that you have reached the target.”(Interviewee 4)

In addition, interviewees described over-reliance on donors in sustaining the ART programmes implemented by NGOs during the pre-devolution period.

“In the state, there is an agency that is responsible for HIV, and they are still getting money from the donors; World Bank and other partners coming to sustain what the former NGO had put. Government has the institution and the human resources, even though, not as adequate as needed, they have the facilities, but they don’t have a budget and a system to ensure what the former NGOs established is running.” (Interviewee 3)

Government’s over-reliance on donor agencies was further negatively perceived by the interviewees. They felt that poor ownership was similar in both the pre- and post-devolution periods. The quote below expressed that perception:

“In the past, the government was not taking responsibility of the HIV patients, it was the FHI/GHAIN project that was doing that. The government was looking at them as if they are not its patients; they believed that they were NGOs’ patients. Even now, the difference isn’t that much; it is still the same thing.” (Interviewee 5)

However, some interviewees viewed the introduction of a centralised system of commodity management by the federal government as a good ownership step that helped in improving better coordination and resources management.

“Government ownership resulted in making sure that commodities were not left to expire. You know that before devolution, all partners had the authority to procure their own commodities. But shortly after devolution, there were changes at the national level, National policy says that all partners will bring their money into one basket and there was a central procurement unit for ARVs and RTKs. So, because of that, the partners, don’t have control of what is going on at the procurement level in some facilities while other facilities need them, so they could be moved to anywhere they are needed.

Unlike in the days of FHI/GHAIN (pre-devolution) where movement of commodities from FHI site to a non-FHI site was forbidden; supplies are now made based on facility demand. But even when SACA believes that it is a progress and a better approach, it noted that there is need for much emphasis on improving quantity and timely supply.” (Interviewee 1)

5.3.4.2 Funding challenges and ART devolution implementation

PEPFAR funding was one of the main contributions to HIV programmes. However, ART programme funding poses a major challenge to the continuation of ART services as a result of the cuts in PEPFAR funding post-devolution.

“Funding affected the extent, the level at which work is done to improve on the health of this people living with HIV, both on the quality and quantity basis; quantity in the sense that the number reached due to demand creation is no longer reached after devolution. The new services established are no longer there, there is no establishment of new services anymore, and even when there are no new services, you are no longer taking new anymore. The other factor is the issue of service quality. PEPFAR had brought accountability through its programme, which was not there under the government.” (Interviewee 4)

Some interviewees also associated cuts in funding during post-devolution with the cessation of mobile HCT outreaches.

“But in terms of number, there was fund for outreaches and the NGOs were able to visit markets, using mobile system, but because of the cut in the funding, that aspect has stopped.” (Interviewee 1)

The funding cuts were deemed to have affected devolution extensively in staff training and transfers of trained personnel. The transfers were both within and between facilities.

“PEPFAR funding has affected everywhere post-devolution. If you go to IDH, you may find more than 1000 patients lost to follow up. Even in the training of the health workers; in the past there were health workers that were there for the purpose of training the health workers, but later, the government removed these persons from the HIV units to other

places like the Antenatal or other units, and some were transferred from one health centre to another.” (Interviewee 4)

Most interviewees felt that government basically left the responsibility of ART programme funding to donors with little attempt to assume ownership. The cuts in PEPFAR funding have further exposed government weakness, leading to a decline in ART enrolment.

“Nigeria is totally relying on the foreign donors funding. If you look at the government, logically, they don’t want new enrollee because they don’t have money.” (Interviewee 3)

Interviewees described two major funding challenges that pose a threat to government ownership. They explained that although budgets are being appropriated for HIV programmes, funds are never released. In addition, while funding requests for planned activities are usually approved by government agencies that are responsible for AIDS control, the funds are not released.

“But where the problem lies is not in the budgetary allocation. The budget would be there, like for last year, the budget was more than 100 million Naira, but not a single kobo (penny) was released. The second issue is, when you raise a memo for a request of the money from government that is another thing even when you get the approval. There was a year we got four approvals but nothing was released.” (Interviewee 1)

5.3.4.3 Inadequate devolution capacity

Devolution was introduced when there were global economic challenges and a recession in Nigeria and, as such, government capacity was lacking to effectively roll out ART programmes. An interviewee was of the opinion that poor government ownership of the ART programmes is associated with the unfavourable economic recession.

“Well, I would want to say that the greater threat for government support for HIV and other services is the economic situation which is a global problem, which even maybe led to the devolution of PEPFAR.” (Interviewee 1)

5.3.4.4 Partnership challenges associated with programme ownership

The interviewees felt that programme partnership was strong and effective during the pre-devolution period, but it either became weak or absent after the devolution.

“The partnership between the government and the PEPFAR programme was effective before devolution. After the devolution, when the support is no longer effective, there is no partnership again.” (Interviewee 4)

Interviewees cited some partnerships that still exist between the state and other agencies and the availability of a coordinating body, pharmaceutical/drug logistics management, health information management systems, and the existing health facilities and workforce as indicators of ownership of the HIV programme.

“In the state, there is an agency that is responsible for HIV, and they are still getting money from the donors; World Bank and other partners coming to sustain what the initial programme had. Most of the budget line is for maintaining few staff on board. They have the institution and the human resources, even though, not as adequate as needed, they have the facilities, but they don't have a budget and a system to ensure what the programme is set for.” (Interviewee 3)

5.3.5 Interviewees' opinion on HIV prevention performances

The interviewees highlighted the scope of preventive services supported by the external NGOs during the pre-devolution era.

“The GHAIN project created awareness and supplied preventive tools like condoms, lubricants to the most active groups like men having sex with men, took the services to the door steps of people, and to markets places, NYSC camps, important places, hotels and other relevant places. So, with many of the jingles, incentives and other things, FHI/GHAIN created a lot of awareness and they gave out behavioural change materials, and people became fully aware of what is HIV/AIDS and the preventive measures.” (Interviewee 3)

The position of interviewees on the performance of HIV prevention services was varied. Many were of the view that prevention services were robust and adequately funded during pre-devolution.

“Before the devolution, FHI/GHAIN...started well in terms of prevention and creating awareness, so they created demand for the services; people became aware of HIV and know how to prevent themselves. So, they invested a lot of the fund in the aspect of prevention.” (Interviewee 3)

However, a few interviewees said that government is trying to meet up with some preventive interventions, particularly children services.

“For paediatric preventive measure, the government is trying; looking at current antenatal screening and counselling for mothers, though the services were more efficient at pre-devolution.” (Interviewee 5)

Most of the interviewees perceived that the effect of the post-devolution deterioration of HCT services for children may imply increase in childhood mortality due to HIV disease.

“We used to test 200 children for HIV with the consent of their caregivers, just to enrol them in terms of care, treatment; and it promotes a lot of prevention awareness. But now, I am sorry to say that the government don’t take that as priority and a lot of people are dying silently, they are not even aware of the cause.” (Interviewee 3)

Access to condoms and other preventive services were adversely affected because as a result of funding cuts, most of the products/services were no longer funded by the programme or government.

“You know preventive services are costly in terms of sensitisation as you have to meet people at market places, meet them at work, and meet them at strategic places and also the places that they are rendering their services. So, we worked hard religiously and socially to make sure that they accepted condoms ... The products were available then but now, it is really costly and looking at the economy, no matter how beneficial a product is, people may not afford it.” (Interviewee 3)

Interviewees said that facility-based preventive services, particularly for children, were effective even after the devolution.

“These are still okay. They are trying. They do the antenatal screening for the mothers and then they are counselled, and for those that don’t know their status are informed, then as soon as they deliver, the babies are given post-exposure prophylaxis using neverapin. Then the PCR is done at 6 weeks for all babies of HIV mothers.” (Interviewee 3)

5.3.6 Capacity and appropriateness of staff within ART care continuum

Interviewees perceived that health workers' technical abilities, including the training they received from the programmes, could make or break a successful ART performance. A good training programme attracted health workers to the programme during the pre-devolution era, and helped them develop creative, appealing, and innovative activities for enhanced ART care. But the interviewees were of the view that LIP management was not always mindful of the characteristics and skills needed to effectively lead post-devolution activities, and instead, relied on personnel who they found working at the facility. Management did not equip staff with the requisite training, and just assumed they would manage. An interviewee spoke about deterioration of capacity building post-devolution.

“During the initial phase of the project, capacity building was part of the programme on a regular routine. But now, you can't evidently see any capacity building programme going on. During the project, capacity building was part of the programme on a regular routine. But now, you can't evidently see any capacity building programme going on.” (Interviewee 4)

Another interviewee explained the massive attrition of trained and productive personnel from the programme was due to poor training and or funding.

“Their numbers have drastically reduced. Let me say by far; 8 out of 10 of those who were providing the ART services are no longer providing the services. They left and, even the remaining two, I can say, they are less productive because there is no funding for the services. Besides the funding, there is no capacity building, no seminars, no motivation.” (Interviewee 3)

Interviewees also lamented that there was comparatively low-quality staff that provided services during post-devolution. This was said to have contributed to the incidence of stigma and discrimination of HIV-positive clients receiving care at service points.

“Like I said, there was training for service providers before the devolution. They were more organised, more qualified than now. Now, most of the people that are working in the HIV unit are not really trained. If I could remember, in 2003-2006, both the HIV patients and the doctors used to sit and dine on one table, and in one plate unlike now that if they wanted to give you something, they would drop it and instruct you to go and pick it. Up till now, there are some facilities that are stigmatising patients.” (Interviewee 5)

5.3.7 Interviewees’ perspectives on ART enrolment and access to ARV drugs

The findings of this research revealed dysfunctionality after the devolution in the ART enrolment system, access to ARVs, and demand-creation activities at both the clinic and community levels. This has added to the complexity of the situation. As there are not enough ARVs for the burden of HIV patients, it has been difficult for health workers to attend to newly-diagnosed clients expected to be placed on ART. The health facilities were not asked to stop enrolling patients on ART, but since ARVs were not adequate they do not enrol patients except to create a slot for the patient (e.g. if there is death of a patient or loss to follow up).

“When there are additional clients that require the services, in some cases, they would wait for some to default from the care, some die, some relocate to other areas, for them (health workers) to place new patients on treatment. And it is not that ART services are officially closed, but there is no drive to bring in more patients.” (Interviewee 3)

The inadequacy of ART drugs post-devolution has been stated (by interviewees) to be a significant deterrent to access for reasons beyond just stockouts. Interviewees reported frustration over the fact that they are using the same type of drugs for long periods, thereby getting high rates of resistance, particularly among children. The quote below highlights their sentiments:

“As I mentioned earlier, now we have challenge with the supply, especially the paediatrics, specifically the abacavir/lamivudine combination, we have had some stock out. The first line has been available. And you know that some children have been on that for more than 10 years and a lot of them have developed resistance, and you know because of PMTC, if a child has gone through PMTC, that is if he had niverapine and he has failed, then if he developed HIV, you have to start him straight away on the second line because he has developed resistance.” (Interviewee 2)

The supply of first-line ARV drugs has been relatively inadequate for enrolled patients. This was the opinion of most of the interviewees.

“And as I mentioned earlier, even in the supply of drugs, it is not as much as it used to be. For example, if you request, you may end up getting not more than 50-60% of what you requested which is not adequate for the patient, especially now that we have really been facing shortage of the abacavir formulation for children.” (Interviewee 2)

Many interviewees expressed concerns about inadequacy and lack of second-line ARV drugs for patients that failed first-line drugs.

“Once they convert them to second line drugs, patients would start looking for some of the facilities that have them because they are not as available as before. They used to bring the second line more before the devolution.” (Interviewee 5)

Challenges associated with enrolling patients on second-line ARVs became widespread post-devolution because the drugs were not available in many health facilities. Interviewees vividly recall unpleasant ordeals experienced by patients at the time of diagnosis of resistance to first-line regimens. An interviewee described the dilemma:

“Many people just zero their minds that since they have been coming for sometimes without the drugs, they would just be frustrated because they have been spending money for transport. In December or earlier this year, I know of clients who were on second line drug, and the drugs were not available then, they been going and coming back for more than three times and the issue was that they later person died.” (Interviewee 5)

5.3.8 Logistics management and laboratory services performances

Interviewees mentioned that the logistics chain of the pre-devolution era was better than that of post-devolution in the sense that the management staff was very supportive and necessary requirements were provided.

“Actually, before the devolution, programme was very supportive. They provided us with almost all the needed support. In terms of the provisions of all the things we needed; forms, lab forms, and they supported us with M&E officers who were very good at capturing the data, and even the drugs were available, laboratory services were all available.”
(Interviewee 2)

The perceptions varied of the effects of reduced laboratory investigations for patients on ART. Some interviewees were of the view that clinicians' placed clients on treatment without knowing their body chemistry and haematology statuses.

“Before, if you are found to be positive, you must pass through other tests like Haematology and other tests before they start giving you the drugs, but now, immediately you are found to be positive, they would just put you on drugs.” (Interviewee 5)

Interviewees were concerned about potential dangers of placing HIV patients on ARVs without proper laboratory monitoring.

“Those who did not pass through the hematology and chemistry tests may have side effects or other underline conditions that would be difficult for them to recover while on some anti-retroviral drugs. Some may even lose their lives. Patients that have hepatitis or kidney problem; you see the drugs may worsen these diseases.” (Interviewee 5)

Interviewees explained further that a major negative effect of the post-devolution period that led to the cessation of the free laboratory services provided for HIV clients was associated with the cut in PEPFAR funding.

“There was a total stoppage of funding for some laboratory consumables and reagents including liver function test, kidney function test, hematology and all that. This support has been withdrawn, and patients only do viral load, CD4 count and the PCR, unlike before where they used to have full blood count, hematology, chemistry and the rest of it.” (Interviewee 2)

Furthermore, interviewees added that the post-devolution constraints also affected client access to HIV testing services. They explained that the number tested before the devolution was higher than those post-devolution. This was because the test kits became inadequate post-devolution, thereby limiting the number to be tested over time.

“Now, they have minimised the number of people that you can conduct HIV test for. They insist that you shouldn’t pass 40 people per day; you can’t pass that number. In the past, one health worker may test more than 100 people in a day, but now, there is a maximum number of people that you can test because of the low quantity of test kits. The number of people who were having access to testing and counselling in the past are higher than those that are having the test now.” (Interviewee 3)

Interviewees described the impact of reduced HIV counselling and testing services on disease prevalence and mortality. They did share instances where actual HIV disease statistics may be obscured. These were the frustrations of the staff members, especially those that worked before devolution when they had all the resources they needed; having to cope with the post-devolution period HCT challenges.

“No one can accurately tell the figures of people dying of HIV now because many have not even access the HCT services. But before devolution, due to the presence of many entry points and a lot of counselling and testing services, you can easily tell of HIV prevalence even by mere looking at the data but now there are less active entry points. There is no statistics, even if there is, the statistics would not be enough to accurately quantify.” (Interviewee 4)

The decline in the supply of HIV rapid test kits after the devolution also affected the number of sites providing HCT services. Interviewees explained that many of the sites manned by external donors were later closed down.

“HCT services reduced drastically. I could remember around 2010, HCT and TB screening were integrated. A client must be screened for HIV and TB at the same time; but I could remember, I was working in Murtala Muhammad General Hospital HIV section, we used to get a lot of clients but we were not having test kits, we used to do the screening for the TB, the test kits for HIV were not there. Even now, you know then, there were a lot of heart to heart HCT centres that we thought the government could sustain. When a woman comes for ANC, the test kits were free, but now I can assure you that out of the 600 centres that I know, it would be very hard to get 20 functional ones now.” (Interviewee 3)

In general, interviewees described inefficiencies and unsteady logistics management systems associated with poor government performance during the post-devolution period.

“Yes. We have periods where we supply laboratory consumables and reagents in a routine manner, but it has not been continuous, it is very erratic. So, we can say that most of the time, the client pays, the client pay even when the government do stock sometimes; it is difficult to maintain constant supply because of the government bureaucracy.”
(Interviewee 1)

Despite perceiving better performances in most of the programme areas before the devolution, the interviewees lamented on poor PCR services for paediatrics clients during the pre-devolution era.

“The only problem experienced before the devolution was getting PCR results for the babies where the turn-around time was very long, and sometimes it might take 3-4 months

before they could get results of PCR. And when we wrote to the concerned body, the response was that there was only one machine at AKTH that was taking care of most of the North-western states, and that they usually have a back-log of a lot of samples.”

(Interviewee 2)

5.3.9 Impact of devolution on HIV care and support services

In the study setting, HIV care related to clients’ retention, adherence counselling, management of opportunistic infections and TB screening, indicated that HIV disease required robust continuum of care. However, under the ART devolution implementation framework, care and support performances are explicitly required to be monitored. These were perceived by interviewees in various dimensions.

5.3.9.1 Perception of HIV clients’ retention in care

Interviewees explained that in Kano State and other north-western parts of Nigeria, HIV clients’ retention in care is referred to as the process of documenting how the patient visits the facility and receives treatment and support. Interviewees said that that process was lacking after the devolution.

“Normally in the programme, there used to be good tracking system for HIV patients in care to enhance retention in care. But after devolution, there was no one to track the patients, and the tracking system has evaporated; nobody now tracks to check who and who is on care. So there is no such documentation.”

(Interviewee 2)

Interviewees explained further that it was a custom in the programmes, during the pre-devolution period, for HIV support groups to be designated to managing a patient tracking mechanism. The role of HIV support groups in tracking was underscored by interviewees. But after devolution, interviewees were distressed that there was no one to track the patients.

“If you look at it during the FHI/GHAIN project (pre-devolution), whatever new information or whatever they are going to do, they always involve the HIV support groups. They believe that these groups must be involved to support their own people, but now, they don’t. if a new patient came to facility for enrolment, the first thing they do immediately after enrolment was to attach the client with the support group. So every month or day, the support group track patients and periodically compare their register with the facility enrolment register. You know that persons living with HIV takes themselves as one family, they share their true addresses, secrets over issues that they can’t share with their relatives or health workers. So the support group really help in ensuring retention. That services have stopped now since there is no funding for sustaining the support group.” (Interviewee 5)

5.3.9.2 Perception of HIV treatment adherence counselling

Interviewees also shared negative experiences of managing adherence counselling services that became deficient in both quality and quantity post-devolution. What are considered to be basic services requirements were sorely lacking. The quote below describes an interviewee’s experience of the two periods:

“What differentiates the two periods is the external quality assurance that was present in the past, and was done by the programme. Now, we don’t have the system of quality

assurance for adherence counselling as it used to be before the devolution. And therefore, those that received ART adherence counselling at pre-devolution have received better services than those receiving now or after the devolution.” (Interviewee 4)

Interviewees described the decline in the quality of ART adherence counselling services in relation to the low quality of personnel and poor training post-devolution.

“When you go for adherence counselling, you will see them doing it in 2 or 1-minute time, and that is very poor. It is very poor in terms of the time dedicated and of course the capacity of the health workers. But if they can train those people now, may be they may pick up. It seriously affects issues around administration of HIV drugs. You can give somebody drugs to take only in the morning or night, but the person might take it three times a day, while some people who are supposed to be taking the drugs at a specific time in a day, they would be taking it wrongly because of the poor quality of the adherence counselling. Many people in that case were coming up with treatment failure due to improper adherence counselling.” (Interviewee 5)

5.3.9.3 Impact of devolution on access to palliative and community care

Palliative and community-based care was also highlighted as factors impacting the lives of PLHIV. All interviewees replied that HIV patients did not have access to most of this care after the devolution. Interviewees also shared their particular concerns, both on palliative care through management of OIs, and home-based care services, as they considered challenges surrounding the provision of complete HIV care packages. When asked about the availability of nutritional/OI

services for the periods, an interviewee said a wide range of OI drugs were available during pre-devolution but supply ceased post-devolution.

“Before, all those services were available at all levels because even for the treatment of the opportunistic infection, we used to have fluconazole available free for patients with oral thrush and the rest of it. But now, honestly, especially in terms of the nutritional support, they used to give us the soyaplus which we give our malnourished patients. But now even the fluconazole is no longer being supplied.” (Interviewee 2)

“In the past, we used to have many opportunistic infections drugs but now, we only have septrin.” (Interviewee 5)

Interviewees described the key roles played by HIV support groups in the provision of palliative and home-based care. Those support group activities were anchored via funding sources supported by PEPFAR before the devolution. However, it stopped after the devolution.

“And for the support group, they also have their own funding, they do the client tracking, provide palliative care as a form of home based care. They have allowances for that. But all these have stopped because there is no more facility funding from PEPFAR.”
(Interviewee 1)

The support groups particularly provided home-based care and referral services during such visits.

“The support groups provide a lot of home-based palliative care cares and referral services as part of integrated services. This had yielded much positive results. But now, there is no funding for all these services and the outcome could be devastating.”
(Interviewee 3)

5.3.10 Proposed design for a successful implementation of ART programme devolution

Interviewees from the state and LIPs were asked what they considered most crucial in designing a successful devolution process for the ART programme. Answers varied among interviewees.

5.3.10.1 Institutionalisation of PEPFAR supported programme

Some interviewees felt that government should consider institutionalisation of the HIV programme strengthened by PEPFAR through sustained investment.

“This programme, through the PEPFAR funding has helped the country to build the capacity and has addressed the complex emergency brought by HIV. All we need to do is to build on that to ensure we sustain the investment and ensure that this disease care is institutionalised and system is established to keep on the care provision.” (Interviewee 4)

5.3.10.2 Socio-political context and ART performance

The degree to which the socio-political environment marginalised HIV/AIDS control programmes in Nigeria was another issue that was perceived to have affected ART performance for both periods. Interviewees explained how different actors can interact within the policy environment and implementation processes to contribute to policy outcomes that can lead to a successful ART post-devolution future. By nature, it is interdisciplinary, a blend of economics, sociology, legislation, public health and epidemiology that together draw a comprehensive framework of how post-devolution responses adapt to health policies, and how health policies can shape post-devolution ART performance.

“Then another thing, if I may add, you know there is the national health council periodic meeting in Nigeria, and there are a lot of people, the technical people that need to present a paper to the council about the current situation. They draw the attention of policy makers to the fact that Nigeria is totally relying on the foreign donors for funding of ART programme. An example is the findings of this your thesis; if you could present it to the government so that during the national health council meeting or conference, or whatever they call it, they can create an act or law through the legislative arm of the government so that the government can make its strong commitment.” (Interviewee 3)

An interviewee further stressed the need to establish a legislation process that ensures regular and adequate funding of the ART programme.

“First and foremost is the continuous advocacy to government and the legislature, in fact the legislative arm here is more important because they can put money were the government did not put if they feel is necessary. So, the legislature, we would have to carry them along every budgetary circle.” (Interviewee 1)

5.3.10.3 Advocacy perceived as a tool for devolution success

An important theme that emerged was advocacy to government which is seen as an important cornerstone that can enhance political will and commitment towards effective ART devolution implementation. It was proposed by interviewees that it is more efficient and effective when programme management advocates to government. An interviewee stressed the need for involvement of civil societies while fast-tracking advocacy to government.

“The first is that there is need for the commitment of the civil societies to advocate for the government to remember that HIV is real, and without sensitisation and mobilisation, there are lot of challenges.” (Interviewee 3)

Other interviewees said that for advocacy to be effective, it should assume a multi-sectoral and broad stakeholder mode. An interviewee elaborated on what is perceived as a good advocacy style.

“The advocacy should be multi-sectoral, civil societies, health and professional bodies, then people living with HIV should also stand up and advocate through their representatives to ensure that the government has sit up to its responsibilities.”

(Interviewee 4)

5.3.10.4 Allocation of a proportion of state resources for the programme

The interviewees described unsteady budgetary allocation and non-release of approved funds as major barriers to programme implementation. Interviewees were of the view that a system of direct, assured release of allocated financial resources from government would be a major breakthrough in the effective management of HIV control programme.

“The first barrier stemmed from AIDS programme being a multilevel, multicomponent, community-wide programme and therefore complex, requiring significant staff time and effort. Many CBOs were underfunded, which resulted in insufficient staff to accomplish MP’s activities. Honestly, the new thinking now with the help of NACA, National Agency for the Control of AIDS, they have been able to convince the National health committee which meet twice in a year, to allow each state to release 1% of the total allocation to HIV/AIDS. So, every month, as they are allocating money to the states, 1% would be going

for AIDS control. We think if well implemented, all agencies concerned with HIV services, both at the state, national and even the local government level would have funding to continue providing services from the budgetary allocation.” (Interviewee 1)

5.4 CHAPTER SUMMARY

This chapter assessed ART performance for both pre- and post-devolution periods and also explored programme managers’ perspectives of factors associated with the level of performance for the periods. The ART performance assessment findings deduced from four ART sites were presented as tables and bar charts, while interviews with managers were presented as themes. The substantial proportion of ART performance outcomes in this study showed that, relatively speaking, there were better overall ART performances during pre-devolution era as compared to the post-devolution era.

The reported frequency of HIV-counselled and tested clients were more during pre-devolution than post-devolution for health facilities (pre-devolution median = 3 250.5; post-devolution median = 3 106.0). In addition, the proportion of availability of mobile HIV counselling and testing services was significantly higher during pre-devolution compared to post-devolution (25% versus 7.3%) (Pearson’s chi square test, $P < 0.05$). Specifically, the number of HIV-positive patients enrolled on ARV treatment was also significantly higher ($P = 0.010$) during pre-devolution (median = 521.0) compared to that of the post-devolution period (median = 157.0).

The study also indicates that the number of HIV clients retained in care within six months and 12 months of enrolment in ART care, were both significantly higher during pre-devolution (median

= 230.0 and median = 113.0) than during the post-devolution period (median = 50.0 and median = 30.0) respectively ($P < 0.05$). However, there were no statistically significant differences in relation to patients' clinical outcomes (undetectable viral load, patients with treatment failure for first-line drugs, and those that died) between the pre- and post-devolution periods.

Results also showed that, statistically, the difference between the number of HIV-positive patients enrolled on ARV treatment was significantly higher ($P = 0.010$) during pre-devolution (median = 521.0) compared to that of the post-devolution period (median = 157.0).

The interviews documented findings identified by interviewees as factors affecting ART performances for the pre- and post-devolution periods. Along with this, the experiences of interviewees showed that most were dissatisfied with the post-devolution ART care performance in particular. While all the interviewees attributed the pre-devolution good performance with respect to mobile and facility-based HCT services, they felt that the poor performances witnessed post-devolution were due to cuts in PEPFAR funding. In addition, there was unwillingness by government to own the mobile HCT services during the post-devolution period. Despite view that pre-devolution HCT services were good, a few of the interviewees felt that the achievement was because PEPFAR was target driven and disregarded strategies that would have fostered ownership.

Interviewees felt that another setback in ART performance that was witnessed post-devolution was government's over-reliance on donor agencies for the management of the programmes. A major factor that was mentioned by all interviewees was the cuts in PEPFAR funding led to poor performance in all aspects of ART treatment, care and support. A few interviewees however, put

the blame on the economic recession as a factor responsible for low political will that eventually led to the poor performance of ART services after the devolution.

The inadequate technical capacity of staff working within the ART care continuum, and failure of the LIPs and government to train personnel, was seen as another important factor responsible for the decline in ART performance. Enrolment of HIV patients on treatment is said to have deteriorated after the devolution, and lack of awareness-raising activities, and restriction of further enrolment of clients were cited by interviewees as factors responsible for poor ART performance. Hence, many interviewees felt that as a result of capping of clients' enrolment on treatment and poor HCT services, patients are dying silently in the community.

Through the interviews, this study learnt that laboratory, drugs, and other logistics management and supply of the pre-devolution era were better than that of post-devolution. Many laboratory services that were key to the monitoring of patients, ceased. Many drugs, such as those for treatment of first-line failure and management of OIs were no longer supplied and cuts in funding and lack of ownership were associated. Poor laboratory and pharmaceutical services post-devolution were said to be responsible for the poor monitoring of patients and increased mortality for patients requiring second-line treatment. Poor adherence to counselling, retention in care, and cessation of home-based/community care were highlighted by interviewees as a result of poor quality staff at service points and withdrawal of funding for HIV support group.

Interviewees proposed a design for future ART programme devolution implementation. They felt that the institutionalising of PEPFAR programmes into existing health systems and wider

stakeholders involvement that focuses on an interdisciplinary approach, would ensure the effectiveness of future ART programmes. They cited the coming together of economists, sociologists, legislatures, public health and epidemiology experts to draw a comprehensive strategic framework for strengthening HIV response. Strong and robust advocacy was underscored by interviewees as a tool for achieving this end result.



CHAPTER SIX

DISCUSSION, INTERPRETATION, POLICY IMPLICATIONS AND FUTURE RESEARCH

6.1 INTRODUCTION

This final chapter recapitulates the research questions, summarises the key findings, discusses the key findings, identifies the contribution of the study to the existing body of knowledge, and compares the findings with available literature. This is followed by an interpretation, a discussion of strengths and limitations, and implications for future research, policy and practice.

The purpose of this study was to deepen understanding of the readiness for organisational change of employees providing services, and to use the information to improve and strengthen ART programmes and the necessary response required to control the HIV/AIDS epidemic.

6.2 SUMMARY OF THE KEY FINDINGS

While it was found that questions of programme devolution and country ownership were of growing concern for major development partners, there were limited studies that assessed its effects on ART performance in Nigeria. This study was structured around four questions. This chapter summarises the conclusions concerning the first three questions, based on the evidence presented in Chapters 4 and 5. The fourth question is then addressed under the discussion in chapter 6: “What are the elements necessary for the effective devolution of ART programmes from external to local NGOs?” The discussion is followed by the limitations of the study.

In this section, the research questions are revisited and answered by means of a consideration of the main research findings. The research questions were as follows:

1. How has the devolution of funding for and oversight of Nigeria's ART programme from international to local PEPFAR implementing partners affected ART programme performance at health facility level in Kano State?
2. To what extent are the employees in LIP-supported ART sites ready for devolution implementation? This is broken down to 3 sub-questions:
 - 2.1 How has devolution readiness been perceived by ART employees?
 - 2.2 How has the LIPs' organisational performance been perceived by ART employees?
 - 2.3 Are there relationships and/or correlations between: a) demographic variables and employee devolution readiness? b) employees' devolution readiness and perceived LIPs' organisational performance?
3. What are the factors associated with ART performance levels for pre and post devolution periods?
4. What are the elements necessary for the effective devolution of ART programmes from external to local NGOs?

Table 6.1 Key findings: summary Research question 1: How has the devolution of funding for and oversight of Nigeria’s ART programme from international to local PEPFAR implementing partners affected ART programme performance at health facility level in Kano State?

Questionnaire findings	Interview findings
<p>Results of the ART performance assessment across the HIV care continuum for pre- and post-devolution show that pre-devolution performances were higher than those for the post-devolution period:</p> <p>number of clients that received health facility HIV testing and counselling (median: 3 250.5 vs median: 3 106.0); availability of mobile/outreach HIV testing and counselling (freq: 25% vs 7.3%) ($P < 0.05$); number of clients enrolled on ART (median: 521.0 vs median: 157.0) ($P < 0.05$); number of clients on nutritional support (maximum: 480.0 vs maximum: 5.0); retention in care (median: 230.0 vs median: 50.0) ($P < 0.05$).</p> <p>The average number of days between enrolment on pre-ART care and ART eligibility assessment was shorter during post-devolution compared to pre-devolution period (median: 5 days vs median: 14 days) ($P < 0.05$).</p> <p>There was no significant relationship between the pre- and post-devolution period for the number of clients lost to follow up and those that died.</p>	<p>Interviewees associated many factors with the decline and deterioration of ART services performance across the HIV care continuum during the post-devolution period: weak ownership; low political will; programme dependency on PEPFAR; progressive cuts in PEPFAR funding over the years; economic recession within Nigeria; reduced human resources capacity (in number and quality); halting of mobile HCT and preventive/awareness creation services; reduction in the number of sites offering HCT services due to reduced availability of HIV test kits; inadequacy of HIV treatment drugs; restriction of additional client enrolment on treatment; cessation of certain laboratory services/supply of second-line ARVs/paediatric formulation and poor supply of OIs; stopping of HIV support group palliative/home-based care services; and reduced frequency/quality of adherence counselling.</p>

Research question 2.1: How has devolution readiness been perceived by ART employees?

Questionnaire findings	Interview findings
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In general, ART employees had negative feelings regarding the devolution readiness predictors. Results showed the following disagreement proportions with the following readiness Statements: involvement: 66.8%; good relationship with supervisors: 69.3%; training: 72.4%; welfare: 70.4%; flexibility: 75.4%; innovation: 84.9%; and motivation: 66.8%. Employees showed positive feelings towards the Statement that the LIPs keep to traditional ways of doing things: 82.4%.

Overall, interviewees felt that ART devolution implementation has been a failure. Reasons for their perceptions differed: concerns about poor funding/ownership; poor staff training/supervision; being left behind; lack of commodities such as test kits/OIs, second-line drugs, laboratory equipment and reagents; dislike of local NGOs' communication style; and dissatisfaction with human resources capacity to match ART service provision needs. Challenges identified: loss of funding for HIV support groups; restriction of HIV patients enrolment on treatment; and cessation of preventive/home-based palliative care services.

Research question 2.2: How has the LIPs' organisational performance been perceived by ART employees?

Results ART employees had negative feelings about the LIPs' organisational performance variables. Results showed the following disagreement proportions associated with LIPs' organisational performance variable statements, with the majority disagreeing with statements on: communication: 85.4%; efficiency: 92.5%; feedback: 84.9%; performance measurement: 95.0%; and quality: 67.8%. Most employees agreed (36.7%) or strongly agreed (23.6%) that the LIPs have good organisational reflexivity.

Research question 2.3: Are there relationships and/or correlations between: a) demographic variables and employee devolution readiness? b) employees' devolution readiness and perceived LIPs' organisational performance?

1) **Results indicated that there was a significant difference in readiness score across place of work and educational status ($P < 0.05$). Employees from QX-HF displayed the highest readiness score (mean rank: 21; those from Bichi GH had the least scores (mean rank: 16). Employees with post-graduate education exhibit least readiness (median: 15.0); those with secondary school**

education had the highest readiness scores (median: 21.0). There was no significant difference between age, gender, marital status and employees' perceived organisational readiness.

- 2) There was significant positive correlation between employees' organisational readiness scores and organisational performance ($P < 0.05$). Employees who indicated high organisational performance also indicated high organisational readiness to change.

Research question 3: What are the factors associated with the health facility ART performance levels for the pre and post-devolution periods?

Programme managers generally displayed distrust about the perceived success of the overall implementation process. The following was proposed for the operationalisation of a successful ART programme devolution: interaction of different actors within the policy environment and implementation processes to contribute to ART outcomes; advocacy to government (seen as an important cornerstone that can enhance political will and commitment towards effective ART devolution); institutionalisation of the HIV programme, strengthened by PEPFAR through sustained government investment and budgetary provision/release of government funds for HIV/AIDS control programmes.

6.3 DETERMINANTS OF READINESS FOR ART DEVOLUTION AND ORGANISATIONAL PERFORMANCE

6.3.1 RQ1: How has the devolution readiness been perceived by ART employees?

According to the quantitative and qualitative findings, perceptions of the devolution readiness among ART employees were generally negative. The evaluation of employee devolution readiness in this study revealed that devolution readiness processes are complex and multidimensional, encompassing numerous domains. This section will look at the different predictors of devolution readiness and resistance and relate the lessons learned from the transition process. Organisational readiness experiences from literature will be included in the discussion. Such comparisons help to

identify potential solutions that have worked in other parts of the world and could be instrumental for Nigeria, going forward.

6.3.1.1 Employee participation and involvement

The research showed that 66.8% of respondents disagreed with the statement on employee involvement in decisions that affect them (median = 2.64, SD = 0.926). The results are in line with those of Nielsen et al. (2007), who found that involvement was linked to an uptake in change activities. The interviews also supported most of these statistical findings, as most interviewees emphasised the negative perceptions of the devolution implementation in relation to involvement, communication, and good relationships with supervisors. Employee participation is emphasised in both prescriptive models and micro-level change research. Research highlights the role participation plays in sharing information and obtaining feedback (Ancona & Caldwell, 2015). Participation is enhanced by structures in which employees are invited and supported to express concerns and make decisions.

The results of the study also indicated the mechanism identified by Hurrell & Murphy (1996), i.e. that involvement would be directly linked to change readiness in existing work procedures. The finding in this study supports the notion that involving employees in change processes is important to ensure their readiness to change, thus bringing about a transition from adopted theory to theory-in-use. If employees are involved in decision-making and their inputs are consistently and genuinely enlisted, it is expected to increase readiness and performance, reduce resistance to change, and sometimes even enhance the acceptance of relatively unfavourable decisions (De Meuse et al., 2011). The research also indicates that poor staff involvement and poor supervision

were linked to employees' perceived challenges, such as increasing inefficiency and ineffectiveness affecting ART services in their health facilities.

Jones et al. (2005) examine the relationship of organisational support for employees (such as professional development support, employee involvement, and performance management) and readiness for change on change success (computer system usage and user satisfaction). Their results show that readiness for change was greater among individuals who perceived higher levels of organisational support for employees, and that greater readiness for change was in turn predictive of greater change success (Jones et al., 2005).

Research has shown that participation by involved, knowledgeable, and motivated members of the organisation does enhance a change project, and that participation by uninvolved, uninformed, and unmotivated members of the workforce does not (Beer, 2009). In other words, organisational members must be involved, knowledgeable, capable, and motivated to make a genuine contribution in order for their involvement and participation in the change process to have successful outcomes. The results of this research, however, indicates that employees' involvement was suboptimal thereby threatening the overall devolution successes.

6.3.1.2 Relationship with supervisors

The 199 employees who participated in this study reported having low-quality relationships with their supervisors. This is borne out by the finding that a large proportion of employees (69%) disagreed with the statement "Supervisors from LIPs are really good at understanding/solving peoples' problems"; and the average score was 2.53 (SD = 0.925) on a scale from 1 to 5. The

finding is also similar to the results found by Hogan, Raskin, & Fazini (1990) who found that organisational climate studies from the mid-1950s onward revealed that 60-75% of organisational respondents reported that their immediate supervisors were the worst or the most stressful aspect of their jobs. However, this research finding contradicts claims made by Neal et al. (2005) that extension organisational leaders rely on old management philosophies and practices (Taylor, 2003), which would lead to low quality employee-supervisor relationships. The low perception of post-devolution supervision of staff among interviewees in this study is particularly worrisome as most respondents also expressed their dissatisfaction with supervision in terms of its irregularity and low quality. This was demonstrated by the fact that supervisors tend not to visit the health facilities, but depend on a telephonic style of supervision for ART service providers.

According to Leader-Member Exchange (LMX) theory (Dansereau et al., 1975), high quality employee-supervisor relationships are characterised by mutual reciprocity (i.e. exchanges), respect, and trust that resemble peer-to-peer equity rather than a superior-subordinate hierarchy. The low quality employee-supervisor relationships reported by the ART employees in this study suggest there are low degrees of mutual attention, trust, liking, latitude, loyalty, and support. This study's findings showed a contrary supervisory approach where the quality employee-supervisor relationships were generally suboptimal.

In low quality relationships, employees are unwilling to, and usually do not, exert extra effort because they feel disabled and demotivated to take personal initiative. Low quality employee-supervisor relationships are contractual in nature, meaning employees comply with directives out of formal obligation and motivation to act in their own self-interests due to the economic rewards

that are controlled by the supervisor. Employees who reported good relationships with their supervisor also tended to report high readiness scores. This finding is consistent with the research literature suggesting supervisors play a significant role in impacting the extent to which employees feel ready and self-directed towards organisational change (Graves & Luciano, 2013).

6.3.1.3 Flexibility

Flexibility toward organisational changes increases by a higher level of readiness for strategic changes (Armenakis et al., 2002; Samarawickrema, 2005); the empirical investigation in this study showed a strong support for this relationship. Two-thirds (75.4%) of ART health workers in this study disagreed (median = 2.41, SD = 1.101) with the statement “LIPs are very flexible; they can quickly change procedures to meet new conditions and solve problems as they arise”. The positive relationship between flexibility and readiness originate from shared responsibility, since everyone contributes with their specific skills and makes the employees more comfortable during changing circumstances (M. S. Feldman & Pentland, 2003). This research finding on flexibility is in conflict with the work of Bennett et al., (2015) in which many of the changes that took place in a large-scale HIV/AIDS prevention programme to local stakeholders in India, were perceived to be positive despite less flexibility in the transition. Unlike these devolution findings, the factors that may explain the successful outcomes achieved by Avahan India HIV/AIDS Initiative transition, may be due to the fact that both the 2011 and 2012 transition rounds were carried out through effective preparations/planning and without significant disruptions to services. Ogbo and Ukpere (2014) emphasised that flexibility is an important approach to achieving employee readiness.

With this study's findings indicating limited preparations of the ART devolution implementation in Kano, Nigeria, once donors pulled out rapidly as a result of a global policy shift, the transition can have serious negative consequences, as was the case in Romania (Shaw, 2016).

6.3.1.4 Devolution impact on human resources management

Interviewees perceived a decline in human resources management. Respondents explained that there was significant reduction in the staffing responsible for provision of ART services during the post-devolution period. They linked this reduction to funding cuts from PEPFAR, following the devolution framework implementation. In addition, all interviewees in this research frequently and sincerely expressed fear and concerns of poor training during the post-devolution period, including its impact on effective delivery of ART services. Interviewees explained that appropriate education activities appear to have been extremely low or even stopped for ART staff. Interviewees consistently stated that it was imperative to train staff in order to expand their knowledge and develop their skills to implement and institutionalise the best practices learned from the external NGOs. Another key challenge was the staff mobility in which more skilled and experienced staff left, and some of the new staff did not get the proper training. . This might have compromised their capacity to manage devolved tasks and responsibilities.

Post-devolution training for ART staff was also rated very low, similar to other readiness predictors in this study during the survey. Results show that a significant majority (72.4%) of respondents disagreed with the statement "People in ART health facilities receive proper training from the local NGOs when there are new guidelines/SOP, equipment or as the need arises" (median = 2.53, SD = 1.063).

According to the literature, studies show that effective management of people can produce substantially enhanced organisational performance (Musgrove et al., 2014) Organisational productivity is determined by employees' efforts and engagement. Therefore, the major reasons for the failure of organisational change is the human resources aspect (Vasilaki & O'Regan, 2008). The uncertainty brought out by this study also concurs with other findings which reported that poorly-managed human resources in organisational change have been a major reason for failure (Williams et al., 1990). Staffing is broadly defined as the process of attracting, selecting, and retaining competent individuals to achieve organisational goals. A staff shortage is when the company employs too few people and this situation is likely to result in a business failing to meet its objectives.(Engetou, 2017)

The human resources departments in organisations have a pivotal role to play in guiding all of its employees through the difficult process that begins with the announcement and ends with the implementation of integration. Alagaraja et al., (2015) state that human resources development practices in an organisation play a key role in improving employees' competencies that enhance organisational performance. In addition, Jacobs (2002) argues that cascade training can be an effective strategy for change interventions, because it provides the necessary competences for employees. To fulfil employees' training needs is one way to improve their understanding and awareness of the change, their involvement in it, and their motivation to see it succeed (Anderson et al., 2012).

6.3.2 RQ2: How has the LIPs' organisational performance been perceived by ART employees ?

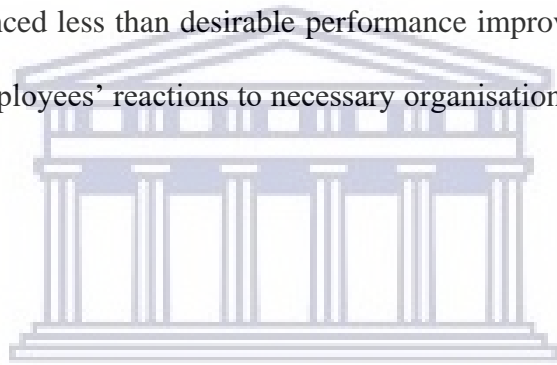
6.3.2.1 Leadership and management support

The majority of interviewees in this study stated that they received limited support from government in delivering ART services. All respondents felt that government support for ART programme was not significant. They attributed the main ART programme support for both the pre- and post-devolution periods to come from the US government and the Global Fund. Findings from this study showed a disparity between the strategies highlighted in the USG-GoN partnership framework and devolution implementation realities. Where political interest and support for the devolution are weak, corresponding government budgeting for ART programmes tends to be very low, often less than 10% of total public funding for HIV/AIDS. Before donors depart, both parties need to meet their commitments; they need to encourage the government to expand ART service delivery efforts. Management support for change efforts is an essential factor in creating change readiness. Armenakis, et al. (1993) and Elby et al. (2000) reveal that the degree to which organisational policies and practices are supportive of change may also be important in understanding how an employee perceives the organisation's readiness for change.

One of the most important determinants of managerial effectiveness is success in influencing people. The concept of 'power' has been very useful for understanding how people are able to influence each other in organisations (Mintzberg, 1983). Power is usually defined as the capacity to influence people and events (Yukl, 2013). Researchers have also found that the level of trust in management may foster perceptions that the organisation can withstand rapid organisational change (McManus et al., 2008). Supports for change should be reflected in an effective change

leadership. An effective leadership involves monitoring change, making the necessary mid-course corrections, and knowing when to initiate a new vision.

The failure of organisational and individual change readiness, as seen in this study, resulted in managers of many LIPs spending significant time and energy dealing with resistance to change exhibited by employees. Positive energy goes into creating preparedness for the changes and, in turn, there can be a significant reduction in the need for management of resistance once organisational revival is under way (Smith, 2005). It has also been found that numerous organisations have experienced less than desirable performance improvement (Gilmore & Shea, 1997) and unfavourable employees' reactions to necessary organisational changes (Armenakis & Harris, 2002).



6.3.2.2 Reflexivity and organisational vision

Overall, ART employees expressed varied opinions with respect to the statement on organisational reflexivity; many responded positively (agreed = 36.7%; strongly agreed = 23.6%), while many answered negatively (38.7%). As shown in some studies, higher team reflexivity does foster more organisational openness to change implementation (Farnese & Livi, 2016). However, in this study, it might be concluded that the mood regarding change is somewhere between positive and negative agreement. This research finding is perhaps due to the fact that there was little or no organisational support of reflexivity. Moreover, though these employees are unversed in reflexivity, they were able to understand its basic principles (the definition was provided) but do not or are unable to prioritise it in their work, thereby making them display mixed responses to reflexivity. Reflexivity

refers to the extent to which group members overtly reflect on, and communicate about the group's objectives, strategies (decision-making) and adapt these to current or anticipated circumstances (West, 2000).

The study results show that, in accordance with previous literature, reflexivity appeared to be a lever to foster the willingness to accept change and the actual adoption of readiness outputs. Reflexivity, in this sense, is a dynamic resource helping to preserve awareness, to question habits and routines, to generate several options, and to reactivate the coping mechanisms necessary to respond to environmental challenges (Morgan & Berthon, 2008). It is a process of sense-making and a construction of new shared meanings that question the consolidated ways in which individuals give meaning to their realities (Hoegl & Parboteeah, 2006) consistent with the organisational vision (Schippers et al., 2008). Reflexivity enhances an organisation's ability to engage in the decision-making process through critical evaluation of alternative ideas or viewpoints, and to avoid the risks of activating group-think mechanisms and of operating only on consolidated procedures and routines (Ellis & Davidi, 2005).

6.3.2.3 Communication

The results of this study also indicate that employees' perceptions of communication, welfare and motivation as important predictors of organisational performance were found to be low. The study found that an overwhelming majority of ART employees (85.5%), disagreed with the statement on communication that "The LIPs clearly exchange information with health workers regarding the work and organisational future direction" (median = 1.87; SD = 0.361). This finding is in line with Banjongprasert (2017), which showed that poorly-managed change communication results in

rumours and resistance to change, exaggerating the negative aspects of the organisational performance. Poor communication can be explained within a context of lack or absence of success and effectiveness of the communication process (Olanrewaju et al., 2017). Poor communication is one of the main causes of disputes amongst organisational shareholders. Effective communication is a main pillar that leads a project to produce a successful outcome (Cheng et al., 2005). Recognising the causes of organisational performance is important, especially in the perspective of the current global crises because it helps an organisation to identify those factors that should be given priority attention in order to improve organisational performance (Adegbuyi et al., 2015).

6.3.2.4 Welfare for employees and HIV clients

Provision of welfare services by LIPs was rated extremely low by employees with 70.4% disagreeing that the local NGOs look after employees' and HIV clients' welfare (median = 2.39; SD = 1.018); a few strongly disagreed (8.5%). These results are consistent with previous findings in which employees perceived that low organisational support was associated with high absenteeism (Eisenberger et al., 1986). The research finding of this research also indicates that out of the 199 ART health workers, the majority of 66.8% ($m = 2.54$; $SD = 1.332$), had a low perception of the statement on motivation (people are enthusiastic/motivated about their work). The study finding is consistent with equity theory, i.e. participants who perceive the workplace as being fair are more motivated than those who do not (Adebayo, 2005). This pattern of results is congruent with previous findings that perceived employee motivation to impact significantly on organisational outcomes (Elovainio et al., 2001).

Understanding employees' motivation process is therefore necessary if a leader is to harness the resources of his or her employees to meet organisational goals. The effect of workers' motivation and job satisfaction on organisational performance is well documented (Payne et al., 2005).

6.3.3 RQ3: Are there relationships/correlations between employees' devolution readiness and perceived LIPs' organisational performance?

The third research question was answered quantitatively. There was significant positive correlation between employees' organisational readiness scores and organisational performance ($P < 0.05$). That means that employees who indicate high organisational performance also indicate high organisational readiness to change. The research findings on employee change readiness were consistent with prior theory and research conducted on a competing values framework that the readiness strength of all or most climate dimensions inter-correlate significantly as predictors of organisational performance, such as communication and welfare (Stone et al., 2004; Lawler et al., 1974).

The findings also reveal that, in relative terms, supervisory support and flexibility influence organisational outcomes positively. Hence, the research question has been answered, in that there is a significant positive relationship between the dimensions of employee readiness and those of organisational performance. Hence, the dimensions of employee readiness that include involvement, supervisory support, training, and welfare should be used to promote human resources development. Finally, LIPs should work on interventions that improve flexibility innovation and reflexivity, as they are proved to be good predictors of organisational performance.

6.3.4 RQ4: Are there relationships/correlations between demographic variables and employee devolution readiness?

The results indicate that there was no significant association between demographic variables of age, gender, marital status and employees' perceived organisational readiness. The research findings on correlations between employee readiness and demographic variables of gender was consistent with a previous Nigerian study which found that males and females do not differ in their readiness perception of organisational change (Idogho, 2006). Findings from this study were also consistent with that conducted on academic staff of Nigerian universities (ibid) in which no differences exist in change readiness perceptions among young and older academic staff. Hence, the research question has been answered, in that there is no significant difference between employees' perception of readiness in terms of employees' gender and age. Cunningham, (2002), Madsen et al. (2005) and Shah and Shah (2010) also discovered that there were no significant relationships between change readiness and demographic variables such as gender, age, marital status, number of years in present job and the number of years with a present employer.

However, the results indicate that there were significant differences in readiness scores across employees' place of work and across employees' educational levels ($P < 0.05$). While employees from QX-HF displayed the highest readiness score (mean rank = 129), those from FHI 360 had the lowest scores (mean rank = 58). This is possibly due to the fact that the health facility had relatively low numbers of enrolled ART clients, and a less complex management structure that encourage employees' participation in decision-making. In addition, employees with post-graduate education exhibit the least readiness (mean rank = 58), while those with secondary education had the highest readiness scores (mean rank = 132). This inverse relationship between respondents' level of education and organisational readiness may be an explanation for why

readiness is highest in Org A and lowest in Org B since participants from the latter NGO had lower educational levels compared to those in the former.

In line with this study's findings, many studies have also shown that often employees' education is not aligned with industry needs (Axley & McMahon, 2006; Azevedo et al., 2012; Astleitner, 2002). There has long been concern that schools have not been preparing employees to deal with the ever-changing and increasingly complex business environments (Aram & Noble, 1999). However, this study contrasts with the findings by other researchers which indicate that more educated employees showed a higher level of faith in their co-workers and management compared to the employees who had a lower level of education (Ehie & Madsen, 2005; Hanpachern et al., 1998a). Takele & Kiltu (2015), on the other hand, show that employees' educational qualifications have nothing to do with their perception towards change readiness.

6.4 IMPLICATIONS OF DEVOLUTION ON ART SERVICE DELIVERY PERFORMANCE

6.4.1 RQ5: How has the devolution of funding for, and oversight of, Nigeria's ART programmes from international to local PEPFAR implementing partners' affected ART programme performance at health facility level in Kano State?

This section offers a discussion of both qualitative and quantitative findings regarding the critical factors influencing the devolution of the ART programmes, divided into the two categories identified by the literature review: health facility ART performances for the pre- and post-devolution periods; and managers' perspectives of the levels of ART performance for the periods.

6.4.1.1 Effects of devolution on ART care continuum

This analysis sheds light on the impact of HIV programme devolution from external to local NGOs on ART performance in a Kano State. Specifically, the data provides insight regarding the factors associated with ART service delivery performance across the HIV care continuum for the pre- and post-devolution periods.

Overall, the results show that most pre-devolution performance parameters were higher compared to those for the post-devolution period. There are several defining elements of high quality ART performance, but the central components are: access to HCT services (Bateganya et al., 2007; Helleringer et al., 2009); appropriate and timely provision of ART (Ahonkhai et al., 2012; Geng et al., 2010); and retention in care (Bassett et al., 2007; Brinkhof et al., 2009). Access to HCT, prompt ART initiation and retention in care can prevent excess mortality among infected patients and prevent HIV transmission to uninfected individuals.

This study showed that care continuum indices were adversely affected by devolution implementation. In Nigeria, there was not enough time to prepare the government to take over the ART programmes. The handover was guided by a Partnership Framework Implementation Plan (PFIP), which is regarded as a robust transition strategy and held up as a best practice (Piot et al., 2015). PEPFAR instituted a reduction of about US\$83 million in yearly programme support between 2011 and 2015 (PEPFAR, 2017a). The major areas affected by the change in funding policy were: human resources for health; laboratory services; HIV clinic operations; and logistics support (personal communication, PEPFAR Nigeria coordinator's office). These restrictions on

fund utilisation have raised concerns among stakeholder groups about the sustainability of service delivery (ibid).

HIV testing and diagnosis

The number of clients that received health facility HIV testing and counselling (median = 3 250.5 vs median = 3 106.0) and availability of mobile/community HIV testing and counselling was significantly higher (freq. = 25% vs 7.3%) ($P < 0.05$) than that of post-devolution.

Interviewees explained that HTC services for both health facility and community-based mobile HCT services declined during post-devolution compared to the pre-devolution period. The majority of the ART programme managers noted changes in key management practices. In general, these changes in management practices were viewed negatively. For example, managers noted that most mobile HCT services were stopped after the devolution because it was basically a PEPFAR strategy of meeting up with HCT target/reach, and it was not institutionalised since there was no government interest. Halting mobile HCT services may have jeopardised its numerous advantages to individuals and community. These included reaching individuals who were learning their HIV status for the first time (Grabbe et al., 2010) by improved access to HCT (Morin et al., 2006), increased knowledge of HIV status in underserved communities (Morin et al., 2006), and in identifying new HIV-positive individuals so that they may be referred for treatment and care services (Matovu & Makumbi, 2007).

Other factors found to be associated with poor post-devolution HCT performance include cessation of mobile HCT services funded by PEPFAR; volunteers were used to roll out mobile HCT services

making sustainability of the intervention challenging post-devolution. HCT services are the entry points to treatment, support and preventive services (UNAIDS, 2008), however, its uptake has remained low in Nigeria and at regional levels (NPC, 2014; NARHS, 2014). This is due to fear of the unknown, stigma and discrimination, among others (Muoghalu & Jegede, 2011; Odimegwu et al., 2013).

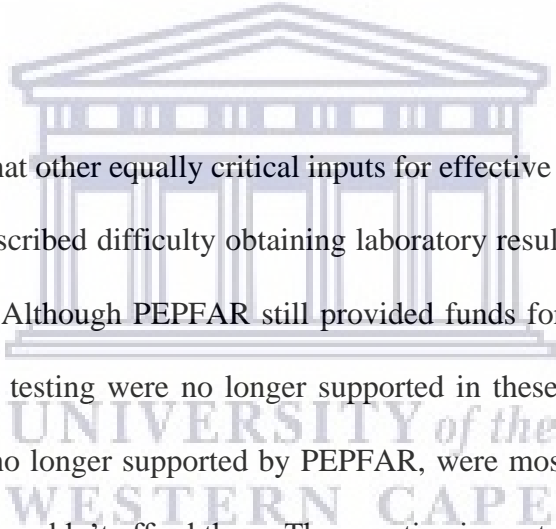
Community-based HIV testing is recommended by the World Health Organisation (WHO) as a very effective approach that enhances HCT uptake. However, an assessment in 2014 showed that it is neither well developed nor funded by the government of Nigeria (UNAIDS, 2014b). Findings from this study concur with an assessment conducted in the Central African Republic (CAR), in which voluntary and community testing activities were reduced after the Global Fund suspended its funding in 2009 (ibid). HIV mobile services are an important link between facilities and communities. A study in Uganda also showed similar results where health facilities that transitioned from PEPFAR to government experienced a significant decline in mobile HCT services (Wilhem et al., 2019). Similarly, while the Caribbean HIV/AIDS Alliance (CHAA) was the leading provider of mobile outreach services for key populations on most of the Eastern Caribbean islands, its successes were attributed to donors, since it was more than 95% reliant on PEPFAR funding (USAID), 2014). Lack of proactive testing campaigns, including in communities, make it likely that PLHIV will not be diagnosed until they are at an advanced stage of the disease. This, in turn, increases the health and social costs of morbidity and mortality associated with secondary infections, complications and hospitalisation.

However, managers explained that HCT services performance were also better during the pre-devolution compared to the post-devolution period. They added that the decline in HCT performance during the post-devolution period was associated with closure of many HCT sites due to reduced funding and the cessation of demand-creation activities. However, the qualitative finding does not align with ART performance assessment outcomes during pre-devolution (median = 3 250.5) which was almost similar to that for post-devolution (median = 3 106.0) (Table 5.1). HCT uptake from the Uganda study findings only concurred with the qualitative findings of this study for which their respondents reported concerns about declines in patient access of HIV testing and counselling after PEPFAR transition. The HCT uptake trends derived from Uganda DHIS2, however, is in line with the survey results; it does not show an immediate impact of the transition (Ibid).

Enrolment of HIV patients on antiretroviral treatment

This study showed that the number of HIV-positive patients enrolled on ART was significantly higher during pre-devolution (median = 521.0) compared to that of the post-devolution period (median = 157.0) ($P = 0.010$). After the PEPFAR programme devolution, availability (Jacobs, 2002) of first-line ART remained for the health facilities. Managers reported frequent stockouts and, more importantly, overall shortages that limited the smooth and prompt enrolment of new HIV clients for treatment. In some extreme situations, health workers had to wait for clients to default from care, die or relocate to other treatment centres, before they could place new patients on treatment. The challenges were more devastating with regards to second-line regimens among adult and paediatric patients. These drugs are found in a few, mostly tertiary centres, and even in those facilities, they are not adequate. Managers lamented that many patients placed on second-line ART drugs who are referred to tertiary centres, usually die without accessing them.

Supporting the research findings, a UN report indicates that while new HIV infections in Nigeria have decreased 21% since 2010, only 30% of the estimated 3.2 million PLWH in Nigeria have access to ART, and AIDS-related deaths have decreased only by 6% (UNAIDS, 2018). Another study conducted among HIV patients receiving care in the AIDS Prevention Initiative in Nigeria (APIN) supported sites, shows that availability of first- and second-line ARV drugs was regular post-devolution (Banigbe et al., 2019). This finding could be attributed to the fact the work was conducted in tertiary hospitals where supply of ART drugs is relatively regular compared to secondary health facilities.



Similarly, the study found that other equally critical inputs for effective ART administration were compromised. Managers described difficulty obtaining laboratory results to determine eligibility for, and response to, ART. Although PEPFAR still provided funds for CD4 testing, chemistry, haematology and viral load testing were no longer supported in these facilities. These patient-monitoring tests that were no longer supported by PEPFAR, were mostly not ordered by health workers since most patients couldn't afford them. The negative impact of these changes included delays in ART initiation, delays in identifying treatment related toxicities, and reliance on clinical criteria for HIV treatment failures. All these downstream effects have major potential for worsening clinical outcomes (Mee et al., 2008; Rawizza et al., 2011).

Another study in Nigeria has shown that user fees were instituted by all but one of the surveyed ART centres in order to address charges for laboratory monitoring tests (Banigbe et al., 2019). One study showed that 56% of annual household income for homes with an HIV infected family

member on ART was taken up by healthcare expenses and lost income (Mahal et al., 2008). The decline and withdrawal of PEPFAR funding for certain services such as chemistry and some haematology tests in Nigeria, makes it imperative now more than ever before for countries to own and fund their HIV response, including supply chain management (SCM) of HIV/AIDS products in order to prevent loss of the health gains that have accrued over the years (Ibegbunam & McGill, 2012; I. Katz et al., 2014).

HIV clients' retention in care

The study findings show that the number of HIV clients retained in care for both six months and 12 months of enrolment on treatment were significantly higher during the pre-devolution compared to the post-devolution period ($P < 0.05$). However, results show that there was no statistically significant difference for HIV patients transferred in ($P = 0.066$), transferred out ($P = 0.067$), or those lost to follow up, for both periods.

The interview findings not only concur with the facility assessment results with respect to the decline in clients' retention in care, but they further highlight the fact that documentation of patients' retention in care outcomes also became jeopardised after the devolution. HIV clients' retention in care, referred to by managers as the process of documenting how the patient visits the health facility and receives treatment and support, was said to be absent in most of the sites due to lack of funding for tracking activities after the devolution.

This study is supported by a study finding from a multi-centre evaluation conducted across many PEPFAR supported health facilities. It shows that approximately one in three and one in five HIV-

positive patients in Nigeria who participated in the test-and-treat pilot were lost to follow up (LTFU) by 12 months and six months after treatment initiation respectively (Stafford et al., 2019). Other evaluations of retention in HIV care in sub-Saharan Africa found that around a third of patients who were eligible for ART were lost before starting treatment (Kranzer et al., 2012; Rosen & Fox, 2011b).

6.4.1.2 Factors associated with ART service delivery performance levels for pre- and post-devolution periods

Overall, respondents had a good understanding of devolution and its effects on service delivery performance, programme ownership and sustainability. The qualitative findings indicate a consensus that senior managers perceived health facility ART service delivery as strong and successful when it was managed by external PEPFAR NGOs. However, following the devolution framework implementation, ART performance became weak and continuously deteriorated post-devolution. This finding was validated statistically by the poor performance outcomes found for most of variables across ART care continuum. Managers described poor government ownership due to over-reliance on donor agencies, the economic recession, cuts in PEPFAR funding, weak partnerships and teamwork, human resources constraints, and reduced HIV treatment/OI drugs and many laboratory commodity supplies.

Managers hailed PEPFAR for enhancing availability of and access to HIV services, improved quality of services, and strengthened health information systems and the role of HIV support groups in health care during the pre-devolution era. On the negative end however, they were worried that PEPFAR had increased dependency on foreign aid, widened disparities in access to HIV services, and done little to address the sustainability of the services that led to the development

of a parallel supply management system. Managers mentioned the challenges faced, post-devolution, with the supply of certain ART commodities, specifically abacavir/lamivudine combination. They also explained that since children had been on first line drugs for more than 10 years, many had developed resistance and had to be switched over to second-line drugs. However, these drugs were not readily available post-devolution.

Managers also felt that the programme had not invested significantly in the production of new health workers and had not addressed mal-distribution problems, but had rather contributed to internal brain drain by attracting health workers from the public sector to NGOs, thereby increasing the workload for existing health workers. Staff were overstretched, experiencing burnout due to an overload of clients. In Nigeria, attrition of trained staff due to a quest for greener pastures is said to have resulted in the maldistribution of healthcare workers, with the rural areas most affected (Chima & Homedes, 2015). Respondents complained of poor policy direction, strategic planning and coordination, and regulation of externally-financed HIV programmes by the government. These posed a great limitation on the ART programme devolution optimisation.

It is commonly acknowledged that, on the whole, PEPFAR has been a highly effective programme (Bendavid & Bhattacharya, 2009; Sepulveda et al., 2007). The 2013 Institute of Medicine evaluation noted that PEPFAR has been globally transformative. As early as 2007, a commissioned evaluation noted PEPFAR's success in forging partnerships and establishing the procurement and supply chains needed to scale up the delivery of ART (Ibid). PEPFAR was effective in rapidly placing hundreds of thousands on ART (Koenig et al., 2004). Large-scale evaluations isolating

outcomes in PEPFAR's focus countries have consistently linked PEPFAR's implementation with population-level changes in HIV and all-cause mortality (Bendavid et al., 2012).

A major limitation to the optimal use of HIV donor funding in Nigeria is the fact that the government is not leading. Nigeria is an example of how poor coordination at the national level limits the ability of GHIs to strengthen ART programmes post-devolution (Chima & Homedes, 2015). Again, the poor service delivery performance reported by respondents in this study was partly associated with poor leadership displayed by the local NGOs during post-devolution. This aspect of poor leadership, resulting in poor health facility service delivery, was reported in other studies (Mathole et al., 2018).

A practical implication of the efforts to devolve ownership to host countries is the reduction of support to countries with greater domestic resources support (Katz et al., 2013). The managers in this study criticised PEPFAR as a vertical structure, with a singular focus, and rapidly-declining funding. This view is in line with a study finding that between 2004 and 2009, PEPFAR funding increased by approximately 20% annually but between 2009 and 2015, funding remained essentially flat at about US\$6.7 billion annually (Moss, 2012).

Moreover, during the period of flattened funding, PEPFAR was called upon to broadly expand its activities and set higher goals, making sustainability of ART service delivery post-devolution highly challenging. Collins and Beyrer (2013) and Shen et al. (2015) are of the view that governments must identify ways to replace donor funding. This is difficult with even the strongest government commitment because governments must balance competing priorities (Cromer et al.,

2004). Economic instability and increasing healthcare costs often drive health budgets below desired levels.

Managers in this study indicated inadequate drugs and laboratory supplies and also described programme partnerships between local NGOs, donors and government as worrisome. This is perhaps not surprising since driving the scale-up through US-based organisations was associated with several features that may not have been realised had PEPFAR partnered directly with local NGOs. These so-called Track 1.0 implementers had enormous capacity to expand and scale rapidly. This capacity included the creation of an extensive supply chain management system that enabled the procurement and delivery of a large portion of all required ARV drugs and laboratory equipment and reagents in PEPFAR-supported programmes (El-Sadr et al., 2012; Holmes et al., 2010).

The elements that contributed to strong pharmaceutical and laboratory capacity of PEPFAR-supported sites during the pre-devolution period were many. The goodwill on the part of many pharmaceutical and laboratory companies, the expansion of generic options, effective advocacy, streamlining of regimens, and large-scale purchasing power from PEPFAR all combined to yield a dramatic reduction in the per-patient annual cost of providing ART during pre-devolution period (Bendavid et al., 2010; Holmes et al., 2010).

Donor funding has enabled the scale-up of high quality services at minimal cost to the system and at almost zero cost to the end users in an environment where access to basic health services remains a big challenge. These short-term gains risk not sustainability if donor funding winds down.

Ensuring that donors and partner countries harmonise their strategies and coordinate their programme interventions, is a challenge. For example, the PEPFAR goal to greatly reduce new paediatric HIV infections assumes a shared commitment among donors, partner countries, and the private sector to reach all HIV-infected pregnant women in all PEPFAR countries before they give birth and initiate breastfeeding. This is particularly difficult in low-income countries, where prenatal care services are deficient and antiretroviral programmes fail to serve facilities that attend to pregnant women (Merson et al., 2012). This is worrisome considering that, globally, the growth rate of donor funding for health has slowed dramatically in the recent past (Murray et al., 2011). Hence, in this study, the sustainability issue was a major concern for managers in most of the interviews.

The study participants lamented the attrition of human resources for ART service delivery due to poor remuneration and therefore a move to out to other opportunities. Other studies show similar findings where the serious medical brain drain problem resulted in a critical shortage of health workers managing ART services (Tankwanchi et al., 2013; Uneke et al., 2012). Human resources shortages have been a persistent challenge during the rapid scale-up of ART post-devolution (Cailhol et al., 2013).

In the absence of receiving additional stipends, former full time clinical staff were unwilling to take on what they considered to be additional work, causing delays in clinic wait times (Banigbe et al., 2019). Managers reported that the drastic staffing shortages led to increased workloads placed on the few remaining staff. The combination of an under-resourced working environment

along with frustrated and unhappy patients lead to high turnover among retained staff (Banigbe et al., 2019).

Low quality and quantity of human resources for ART services described in this study are known to mitigate against the achievement of the objectives of a good ART programme (Mullan et al., 2012), and there is concern that GHIs place significant burden on healthcare workforce (Biesma et al., 2009; Cahill et al., 2005). Respondents explained that human resources shortages have been a persistent challenge even during the pre-devolution period. It has been described by other researchers during PEPFAR phase 1 rapid scale-up of ART in Nigeria (Cailhol et al., 2013). The situation has completely deteriorated as indicated by the respondents because, after devolution, many of the trained staff have either retired, been promoted to higher levels where service provision is not their responsibility, and many have left the public service to join NGOs.

This research highlighted many other effects caused by the gap left between PEPFAR funding and national support when alternative funding is not sourced successfully. These effects have deleteriously impacted on the HIV patients and their support groups, human resources shortages, and compromised ART service delivery performance. As a result, many sites that were transferred to government as part of the transition agreement have been closed down and, for those operating under the utilisation of clinical services, worsening of clinical outcomes were reported. Other factors deduced from this study as impeding against successful devolution implementation are that allocated funds are either partially or never released and there were also concerns around non-timeliness of releases. These Nigerian bureaucratic bottlenecks have been reported by other researchers (Itiola & Agu, 2018).

The gap in demand for services, and the availability, quality and coverage of healthcare services in the country, is due largely to inadequate healthcare financing at all levels. The Nigerian government passed the National Health Insurance Scheme (NHIS) under Act 35 of 1999 with the aim of improving access to health care and reducing the financial burden of out-of-pocket payment for healthcare services. The National Health Act of 2014 (National Health Act, 2014) provides for the allocation of 1% of the consolidated revenue fund (CRF) to fund selected priority health services under the Basic Health Care Provision Fund. In 2017, the federal government approved a new National Health Care Financing and Equity Policy and developed guidelines for its implementation. However, implementation of the policy has been poor. While the WHO recommends out-of-pocket expenditure (OOPE) on health of no more than 30- 40%, in Nigeria OOPE ranged from 78% in 2010 to 73% in 2016 (Federal Ministry of Health-Nigeria, 2018).

6.5 DESIGN OF AN ART PROGRAMME DEVOLUTION PROCESS

The sixth research question aimed to find out the programme managers' perceptions of key issues and success factors in implementing effective ART devolution from external to local NGOs. To illicit an understanding of ART devolution and the aspects that are considered important to successfully design the process, respondents were asked how they would design a devolution process if it was their responsibility. Managers highlighted the critical role of government leadership in stimulating country ownership of devolution roll-out, as well as the need for comprehensive stakeholder participation as indicated in the UNAIDS document. This finding is consistent with the report that strong political will was crucial to the successes made by Botswana in fighting the HIV/AIDS pandemic (Ndoh, 2013).

To implement devolution successfully, respondents were of the opinion that the Nigerian government needs to develop a framework and guiding policies for ART devolution. This could best happen through effective partnerships, and the collaboration and integration of external donor support into the existing health structure to avoid the current negative effects of the verticalisation of the ART programme. Nigeria can learn from the Ghanaian strategy which provides a good case to explore how rapid inflows of large external financing by international agencies, specifically the Global Fund, have influenced the organisation of service delivery for HIV, the NACP, and its interaction with health system functions (Atun et al., 2011).

Rwanda is another country that was among the first countries to dissolve its national AIDS control commission in favour of a more integrated approach. By 2012, 97% of all health facilities offered voluntary counselling and testing services, 97% of all health facilities offered PMTCT services, and 89% of all health facilities offered ART (Nsanzimana et al., 2015). This has translated into impressive health outcomes for people living with HIV in Rwanda, including increased life expectancy and high rates of retention in care (Franke et al., 2013; Rich et al., 2012). Since the HIV-specific strategic plan (National HIV and AIDS Strategic Plan, 2018) has been developed, findings from this study underscore the need for an in-depth review of these stakeholders' contributions.

Respondents also suggested that strong/high-level advocacies should be fast-tracked to commit government to dedicating budgetary allocations for HIV response. This research finding indicates that for a successful devolution, the government must institutionalise PEPFAR, Global Fund and

other key donor agencies' strategies and best practices through the design and development of an operationalised framework/model. Some of the best practices and innovative strategies should include, but not limited to, several innovative funding mechanisms that should be identified to support domestic HIV programmes in Nigeria. Innovative funding for HIV programmes, such as tax/levy programmes, debt buy-downs, and community-based insurance have been operationalised in resources-limited settings (Atun et al., 2016). Zimbabwe's levy programme which taxed formal sector income to raise US\$85 million in revenue for its national HIV programme between 2008 and 2012 was notably successful (ibid).

A major view among respondents was for government to directly fund NGOs since their capacity had been strengthened due to PEPFAR transitioning all Track 1 grants to these local NGOs (GHI, 2012). A similar strategy was successfully implemented in Lesotho and Guyana (Katz et al., 2014). The coordination of a centralised and integrated Nigerian HIV/AIDS supply chain management system is a major achievement, specifically recognised and proposed by stakeholders for it to be sustained. During both the pre- and post-devolution periods, the country utilised existing government structures for warehousing. Moreover, the study proposed that the strategies to address human resources limitations should attempt managing staff motivational dispositions. Since human resources for health is influenced by incentives, it can be seen as an interrelated system involving staff with a complex mix of skills and motivations (Uneke et al., 2012). Hence, policy makers need to know if specific incentives will reinforce health system goals or upset a delicate balance; this situation would create an excellent opportunity for findings to be used in making appropriate decisions (Dovlo, 2005).

The stakeholders in this research described poor accountability and transparency as distinct elements that must be explored in the proposed devolution strategic model to tackle corruption in Nigeria's ART programme. Corruption in health systems is a significant problem, with one WHO multi-country study finding that, in 42 out of 109 countries surveyed, more than half of citizens believed that the public health sector was corrupt or very corrupt (Mackey et al., 2018).

Overall, devolution plans found to be central to sustainability have included key elements: strategic prioritisation of critical programme areas; financial investments; and a clear timeline and phases for graduation, with associated benchmarks and indicators to assess progress (Oberth & Whiteside, 2016; Shen et al., 2015). However, this cannot be achieved unless the ART programme stakeholders, and especially government and donor agencies, fully recognise the complexities of the devolution process and demonstrate readiness to take the bold steps necessary to revise rollout policy and procedures. Political commitment should not only be financial; it also has to include an obligation to enact legislative and regulatory changes to address the barriers.

Although in this study participants raised concerns about the inadequate ownership of the ART programmes, they explained that government has taken important steps to address the gap. Some respondents were of the view that government has made significant progress by introducing a national policy where all ART commodities (ARVs and RTKs) procurement became centralised and managed under a common basket funding structure. All HIV/AIDS donor agencies are required to channel their funding through it.

Finally, monitoring programme devolution is essential; the best approach is to start monitoring before the devolution begins and it should follow the entire process (Banigbe et al., 2019). Studies by Bao et al. (2015), Health and Regional (2016) and Vogus and Graff (2015), suggest various approaches and tools for monitoring the programme devolution process, but all agree that the system and tools cannot be one size fits all; they must be adjusted to the purpose and the context. The monitoring system must include quantitative indicators and qualitative investigation as complementary approaches (John W. Creswell & Miller, 2000).

6.6 STUDY LIMITATIONS

The present study had several limitations which need to be considered when attempting to generalise the findings. Given that stakeholders had busy schedules, it was difficult to schedule a central meeting; therefore focus group discussions were not conducted. The scope of this research should also be considered, since it focused exclusively on the devolution of ART programmes from external to local NGOs and the critical factors that affect its processes and ART performance, whereas it is imperative not to neglect the earlier stages of devolution planning, including employees' readiness, which may have a significant impact on its overall outcomes. HIV patients were not included directly as respondents in this study; it was only the manager of their support group that participated. Hence, the results presented did not capture their perception.

Due to interviews being liable to bias on the part of both researcher and interviewees (Yin, 2003), this was minimised by conducting semi-structured interviews with a neutral introduction and clear guidance, along with careful analysis by cautiously comparing the results with those of the quantitative survey. Although efforts were made to make written notes of all relevant comments

and explanations, it is likely that data was missed from the interview proceedings during transcription. Another limitation is the cross-sectional study design which restricts the drawing of any causal inferences.

This study was also limited to programme management and service delivery components of the HIV/AIDS programme. However, it is anticipated that findings will also apply to other components of HIV/AIDS programmes. Lastly, all results presented were based on the prevailing situation at the time the interviews were conducted, and there may have been changes since then. Although the study is largely explorative, to the best of the researcher's knowledge, no other publication in Nigeria has presented an ART programme devolution-specific review. In addition, managers were not asked on their perspective about readiness to change, organisational climate or labour relations. Another limitation was that managers did not comment on trust within their own organisations. There is also a limitation with the theoretical model used in this study since the development of a devolution model through wide stakeholder participation could not be achieved. This is deferred for future research.

6.7 CONTRIBUTIONS TO KNOWLEDGE

To date there have been few studies published or reported on the transition of external donor programmes to the host government of Nigeria (Banigbe et al., 2019; Vogus & Graff, 2015), and very little on this crucial public health issue elsewhere (Bennett et al., 2015; Fox & Rosen, 2015; Vogus & Graff, 2015). In addition, published research assessing the impact of global health initiatives has focused on critical appraisal and aimed at informing and supporting local policy (Biesma et al., 2009; Cavalli et al., 2010; Samb et al., 2009). This study is innovative in its dual

focus of analysing and supporting local policy, and in its application to this analysis of organisational readiness for change models together with programme performance evaluation. In the present study, an integrative model was developed that combines factors associated with employee readiness and ART service delivery performance factors.

After reviewing existing literature in the domains of readiness to change and ART service delivery performance, a conceptual framework was developed on the basis of employee beliefs, and behaviours, performances of the ART care continuum and managers' perceptions for the pre- and post-devolution periods. Under the readiness for change section of the framework, the direct influence of employee career and social relationships in the workplace, factors on employee readiness for organisational change were investigated. The understanding of readiness to change was conceptualised on the basis of prior studies (Gaertner & Nollen, 1989; Hartnell et al., 2011) and for ART service delivery performance (Ahonkhai et al., 2012).

This study examined the relationships between readiness variables of involvement in decision-making, positive relationships with supervisors, training, communication, welfare, flexibility and motivation, with the organisational performance variables of tradition, reflexivity, efficiency, feedback, performance evaluation, innovation, and quality, together with demographic variables. The study also assessed ART service delivery performance along the continuum of care. In-depth interviews were used to deduce devolution perspectives of employees and managers.

The strength of this research is based the comprehensive theoretical framework that examines the effects of the devolution of ART programmes from external to local NGOs in Kano State, Nigeria.

Previous studies that have been conducted in the area of change management did not focus on psychological and economic factors to examine the employee response for programme devolution. Hence, it can be claimed that this is the first time that this theoretical framework has been tested empirically and theoretically.

Several theoretical contributions emerge from this research. Under the theory of organisational culture, the framework simplifies the interactions among different stakeholders, thereby it helps external donors and governments gain from each other by optimising resources from different areas for improved efficiency. This is seen as beneficial for the ART programmes as it promotes innovations and sharing of knowledge. Although a few studies about employee readiness for organisational change have been conducted in Nigeria (Adebayo, 2005; Omotowo et al., 2016), they tend to focus only on specific factors such as psychological, cultural, environmental, and social factors but ignore organisational and service delivery performance. This study suggests an integrative model that combines employee devolution readiness, career factors, and social relationships in the workplace in response to employee psychological and welfare needs.

A further contribution to knowledge is that it is one of the first studies of its kind to explore the interplay of ART devolution readiness and service delivery performance from the angle of external donor perspectives, government policy, and programme and health systems in Nigeria. In addition, the study contributes to the limited knowledge of how employees of local organisations and ART health facilities become open to increasing challenges of ineffective devolution implementation and, in return, display low readiness and ultimately jeopardising ART performance. Added to this, this research was more holistic in its assessment of post-devolution service delivery performance

along the entire ART care continuum in Nigeria. Researchers have tended to limit their study scopes to areas such as ART data quality (Aliyu et al., 2015), human resources challenges (Uneke et al., 2012) and quality of care (Banigbe et al., 2019).

6.8 RECOMMENDATIONS

In this section, a summary of recommendations and research policy implications is presented, based on the study findings and literature review. The recommendations are intended for all stakeholders involved in the planning, design, implementation, monitoring, and evaluation of ART devolution, including community and health facility-based HIV support groups, health workers, policy makers, researchers, civil society organisations, and government and external donor agencies.

6.8.1 Supporting employees for effective devolution implementation

Employees upset by change are generally less productive and, as such, leaders and managers can help employees through the process of change, encouraging them to support the change by first understanding the emotions they may be experiencing at each phase (Gartner, 2018). Leaders need to be clear about what they hope to achieve through change or about how they are supposed to help implement the change. Studies suggest that this is where most leaders fall short in communicating change (Johnson, 2017). It also means making decisions that support the change - keeping a focus on the new strategy instead of letting old habits and issues feel like they are the urgent priorities (Bravo, 2019).

Resistance to change is the employees' natural reaction to the devolution process (Nicolescu et al., 2016). Resistance to change represents an obstacle to any change initiatives.

Studies also indicate that change can only succeed if it is based solidly on an understanding of how people behave, what motivates them, and how positive attitudes can be improved and developed (Zeffane, 1996). In organisational change, good communication between managers and employees should be developed, and it is preferable for everyone who is affected by change to be involved in planning and implementing change. This study showed that employee's involvement and participation in the change process leads to the promotion of the ART devolution, a promotion made by organisations' employees. Resistance is unlikely to come from employees that take part in the change process and they provide useful information to improve the implementation of desired change.

6.8.2 Strengthening the role of leadership in policy formulation and strategic framework development

The Nigerian government needs to develop clear sector strategies and policies, identifying and managing the roles of donor agencies and their implementing partners, and seeking avenues to increase domestic allocations for health and ART programmes. The policies and strategic framework implementation will only be effective in yielding desired goals if they follow the principles of ethical integrity, PLWHIV and other citizen's rights, participation and involvement of ART programme users in policy development, planning and accountability, and respect of confidentiality and dignity in service provision (Mackintosh & Koivusalo, 2005).

National research priority-setting processes are, therefore, an important means of ensuring dialogue and engagement between researchers, health policy-makers and managers (Gilson, 2012). Such engagements will be used to turn health system and policy problems into researchable questions, identify priorities, and, ultimately, support the uptake of research findings. Greater

national funding for health policies and research may be a further consequence (Green & Thorogood, 2004). As Nigeria and other PEPFAR-supported countries continue to navigate donor transitions, stakeholders must remain focused on implementing affordable and successful models for sustainable service delivery (Banigbe et al., 2019).

6.8.3 Future research

This final section of the study offers some suggestions for areas of future research. It is obvious from the analysis that there was no effective devolution planning that included active involvement and participation and preparing stakeholders, especially employees, for ART programme devolution. Therefore, there is the need for research on the style of employee change induction to achieve their readiness. Again, leadership styles differ at the stage of devolution from those at the earlier stages of initiating and implementing change. For example, while charismatic leadership is critical to drive radical change such as the complex ART devolution, it may be less desirable during institutionalisation (Graetz & Smith, 2010). Future research could also further develop a theoretical model concerning employee readiness for different types of change. In addition, while authors generally propose that change attitudes, such as readiness, mediate the relationship between change implementation and outcomes, this has not been the subject of extensive research.

There is a need to conduct an impact evaluation of the centralised laboratory and pharmaceutical procurement and supply management systems currently being used in Nigeria to ensure coordination and effectiveness of the ART programmes. The few research efforts of GHIs have focused heavily on such capacity-building programmes, yet there is a glaring absence of efforts to ascertain ownership and sustainability of the HIV supply management system (Banigbe et al.,

2019). Thus, national procurement and management of drugs, laboratory reagents and other commodities require specialised market knowledge (Kallenberg et al., 2016), and skills still need to be built or enhanced in Nigeria if the quality of supplied drugs, laboratory reagents and other commodities are to be secured during and after the devolution (Saxenian et al., 2015). Periodic evaluations should also be conducted across the entire ART care continuum. This would inform policies that will be tailored towards addressing service delivery gaps/challenges and subsequent training programmes. Finally, a study to unpack the effects of devolution on HIV prevention services is needed.

6.9 CONCLUSION

The ART devolution from external to local NGOs creates challenges for managers and employees and therefore has a big impact on the organisation and ART programme performance. This study provides evidence that during the last decade, ART programmes increased substantially and fostered progress toward global health goals under PEPFAR-supported external NGOs. Increased programme investments and capacity have helped Nigeria to scale up preventive, diagnostic, and treatment services, including supportive interventions. Generally, the study indicates low employee readiness to ART devolution in five out of the seven readiness variables except for reflexivity and tradition. The results also show an inverse significant relationship between employees' education level and devolution readiness, which confirms the need for educational institutions to consider readiness for change in their curriculum in order to support employees develop their attitudes and behaviours toward change management. However, from the other demographic characteristics such as sex, age and marital status, no interesting results were found.

This study considers that for effective management of ART devolution, it should be based on a clear communication and understanding of employees' behaviour in the organisation. Transitioning the responsibility for all or parts of the donor-funded programme to local stakeholders is usually considered to be a sustainability strategy. However, the devolution of the ART programme reveals that the processes are complex and multi-dimensional, encompassing numerous domains, as well as actors at all levels within and outside the health system. Inadequate planning and implementation impacts negatively on the programme and ART care performance in particular. After the PEPFAR policy change, funding for critical HIV continuum of care services were compromised. Healthcare workers and managers indicated difficulties obtaining the required programme support from local stakeholders, including undermined infrastructure and low readiness for the devolution implementation.

In view of the complexities of ART devolution management and multiplicity of risks illustrated in this study, there is the need for strong political will to ensure success. The Nigerian government needs to re-strategise its interventions to ensure successful implementation, programme sustainability and ownership. Key steps will require a review of the 2017-2021 HIV National Strategic Plan and guiding policies for ART devolution through effective partnerships, and collaboration and integration/streamlining of external donor support into the existing health structure. Interventions to be addressed through strategic plans and policy modifications should do the following: target advocacies that ensure government commitment in dedicating budgetary allocations for HIV response in general; strengthen leadership and coordination; strengthen drugs, laboratory and other commodity procurement and supply systems; ensure the provision of

adequate human resources required for effective ART programming; increase service delivery; and monitor progress using strong health information management system.

It is critical that the plan also focuses on capacity-building processes for both managers and employees to enhance their commitment and devolution readiness. Stakeholders could leverage upon the rich outcomes of this study for implementation of affordable and successful models for sustainable ART programming in Nigeria. These can be achieved by building the capacity of stakeholders at state and country levels through technical oversight, training workshops and/or tools development.



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APPENDICES

Appendix 1: Ethical approval by the Kano State Government



KANO STATE OF NIGERIA
MINISTRY OF HEALTH

Ref: MOH/Off/797/T.I./55
Date: 3rd February, 2016

Dr. Habib Bala Yahaya
School of Public Health,
University of the Western Cape.
Bellville, South Africa.


RE: REQUEST FOR ETHICAL APPROVAL TO CONDUCT RESEARCH IN KANO STATE

Reference to your letter dated 28th January 2016 on the above request addressed to the Chairman ORAC ethic subcommittee through Ministry of Health to conduct a research on the effects of devolution of HIV treatment program from external to local NGOs in Kano State, Nigeria. The study will cover two selected NGOs and their four supported ART sites (FHI360 supported IDH and Bichi General Hospitals and IHVN supported AKTH and Wudil General Hospital).

2. The research is for the award of Doctoral Degree (PhD Public Health) at the above mentioned University.

3. In view of the foregoing, I wish to convey the Ministry's approval for you to conduct the research at the above named ART sites in Kano State.

4. Best Regards.


Hamza Ahmad
DPRS
Secretary (ORAC)
For: Honourable Commissioner

2nd & 3rd Floor, Post Office Road, P.M.B. 3066, Kano.
Tel: 064-634233, 634426, 635640, 633482, 632535, 647922, 634983, 635616.

INFORMATION SHEET

Project Title: The effects of devolution of funding for and oversight of Nigeria's ART program from international to local PEPFAR implementing partners on health facilities' ART performance in Kano state Nigeria

What is this study about?

This is a research project being conducted by Dr Habibu Bala Yahaya at the University of the Western Cape. We are inviting you to participate in this research project because you are an employee of this institution

The purpose of this research project

HIV/AIDS patients are receiving free treatment services in health facilities supported by your local organization (FHI 360⁰/IHVN). United States Government-PEPFAR under former international implementing partners (FHI/IHV) was the main donor responsible for supporting HIV treatment services in the health facilities. Currently support for these services is being devolved to the local implementing partners and Government of Nigeria. We want to find ways to learn how devolution of the HIV treatment program is affecting ART performance in the supported health facilities. We believe that you can help us by telling us what you know both about the on-going devolution process and your preparedness to support it in general. We want to find out what people who work here know about the change and how it affects the ART services. We want to learn about the different ways policies and implementations are affected including staff attitudes towards this change process. We also want to know more about existing successes, difficulties and threats to ART service provision in the health facilities because this knowledge might help us to learn and inform government, PEPFAR the present implementing partner and other stakeholders how to better manage devolution process.

What will I be asked to do if I agree to participate?

You will be asked to participate in an interview. The interview will take 1 hour. In summary questions will be asked about leadership, funding and financial management, organizational structure, infrastructure, human resources, process management, program growth/expansion, linkages and networking of your organization.

During the interview, I will sit down with you in a comfortable place. If you do not wish to answer any of the questions during the interview, you may say so and I will move on to the next question. No one else but I and my assistant that helps me in note taking will be present unless you would like someone else to be there. The information recorded is confidential, and no one else will have access to the information documented during your interview. The entire interview will be tape-recorded, but no-one will be identified by name on the tape. The tape will be kept in a secured locked cabinet in my house. The information recorded is confidential, and no one else except me will have access to the tapes. The tapes will be destroyed after 6 weeks.

Would my participation in this study be kept confidential?

The researchers undertake to protect your identity and the nature of your contribution.

To ensure your anonymity, your name will not be included on the collected interview data; (2) a code will be placed on the collected data; (3) through the use of an identification key, the researcher will be able to link your survey to your identity; and (4) only the researcher will have access to the identification key.

To ensure your confidentiality, At all times, I will keep the source of the information confidential **having locked filing cabinets and storage areas, using identification codes only on data forms, and using password-protected computer files.** If we write a report or article about this research project, your identity will be protected.

What are the risks of this research?

All human interactions and talking about self or others carry some amount of risks. We will nevertheless minimise such risks and act promptly to assist you if you experience any discomfort, psychological or otherwise during the process of your participation in this study. Where necessary, an appropriate referral will be made to a suitable professional for further assistance or intervention.

What are the benefits of this research?

This research is not designed to help you personally, but the results may help the investigator learn more about the effects of program devolution from international to local implementing partners on ART performance. We hope that, in the future, other people might benefit from this study through improved understanding of ways to better manage implementation of the devolution process. Government of Nigeria, United States government and perhaps the local implementing partners and other relevant stakeholders might benefit from information obtained from the study as well. The research will also help bring additional scientific knowledge to public health programming.

Do I have to be in this research and may I stop participating at any time?

Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify

What if I have questions?

This research is being conducted by **[Dr Habibu Bala Yahaya, School of public health, University of the Western Cape]**. If you have any questions about the research study itself, please contact **Dr Habibu Bala Yahaya** at: Plot 373 Rijiyar Zaki, Kano Nigeria, **telephone number +2347088182541, and e-mail address: habibuyahaya@yahoo.co.uk**

Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:

Head of Department:

Dean of the Faculty of Community and Health Sciences:

Prof José Frantz

University of the Western Cape

Private Bag X17

Bellville 7535

chs-deansoffice@uwc.ac.za



This research has been approved by the University of the Western Cape's Senate Research Committee.

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Appendix 3: UWC research project registration and ethics clearance application form



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DEPARTMENT OF RESEARCH DEVELOPMENT

SR1

UNIVERSITY *of the* WESTERN CAPE
UWC RESEARCH PROJECT REGISTRATION AND ETHICS CLEARANCE APPLICATION FORM

This application will be considered by UWC Faculty Board and Research Committees, then by the UWC Senate Research Committee [SR]. SR may also consult outsiders on ethics questions, or consult the UWC ethics subcommittees, before registration of the project and clearance of the ethics. No project should proceed before project registration and ethical clearance has been granted.

A. PARTICULARS OF INDIVIDUAL APPLICANT

NAME: HABIBU BALA YAHAYA

TITLE: DR

DEPARTMENT: School of Public Health FACULTY: Faculty of Community and Health Sciences

FIELD OF STUDY: Public Health

ARE YOU:

A member of UWC academic staff?

Yes

No

A member of UWC support staff?

Yes

No

A registered UWC student?

Yes

No

From outside UWC, wishing to research at or with
UWC?

Yes

No

PARTICULARS OF PROJECT

PROJECT NUMBER: TO BE ALLOCATED BY SENATE RESEARCH COMMITTEE:

EXPECTED COMPLETION DATE: December, 2017

PROJECT TITLE: The effects of devolution of funding for and oversight of Nigeria's ART program from international to local PEPFAR implementing partners on health facilities' ART performance in Kano state Nigeria

THREE KEY WORDS DESCRIBING PROJECT: Devolution, organizational readiness for change, ART performance

PURPOSE OF THE PROJECT: D-DEGREE:

M-DEGREE:

D-DEGREE:

POST GRADUATE RESEARCH:

C. PARTICULARS REGARDING PARTICULAR RESEARCHERS



FFAMILY NAME:

INITIALS:

TITLE:

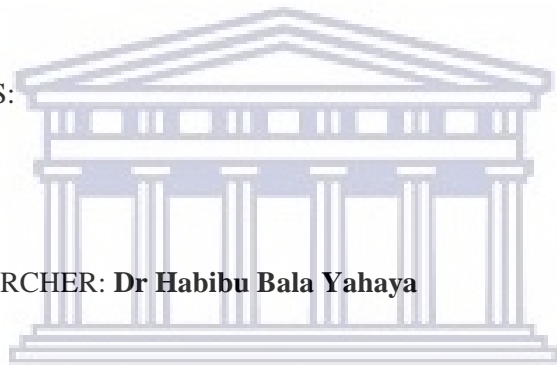
PRINCIPAL RESEARCHER:

OTHER RESEARCH PROJECT LEADERS:

OTHER CO-RESEARCHERS:

THESIS: STUDENT RESEARCHER: **Dr Habibu Bala Yahaya**

THESIS: SUPERVISOR: **Dr Thubelihle Mathole**



UNIVERSITY of the
WESTERN CAPE

GENERAL INFORMATION

STUDY LEAVE TO BE TAKEN DURING PROECT (days): 16 days

IS IT INTENDED THAT THE OUTCOME WILL BE SUBMITTED FOR PEER REVIEWED PUBLICATION?

YES NO

COMMENTS: DEPARTMENTAL CHAIRPERSON:

SIGNATURE OF THESIS STUDENT RESEARCHER – WHERE APPROPRIATE:

Y. J. L.

DATE 26 March, 2015

SIGNATURE OF THESIS SUPERVISOR – WHERE APPROPRIATE:

DATE

SIGNATURE OF PRINCIPAL RESEARCHER – WHERE APPROPRIATE:

DATE:

SIGNATURE OF DEPARTMENTAL CHAIRPERSON:

DATE:

NOTE: THESE SIGNATURES IMPLY AN UNDERTAKING *BY THE RESEARCHERS*, TO CONDUCT THE RESEARCH ETHICALLY, AND AN UNDERTAKING BY THE THESIS SUPERVISOR (WHERE APPROPRIATE), AND THE DEPARTMENTAL CHAIRPERSON, TO MAINTAIN A RESPONSIBLE OVERSIGHT OVER THE ETHICAL CONDUCT OF THE RESEARCH.



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WESTERN CAPE

ABSTRACT

PEPFAR phase 1 in Nigeria supported the country's response to antiretroviral treatment (ART) programmes from 2005 to 2010. The programme led to rapid expansion of ART sites and HIV positive clients' enrolment in treatment. Significant impact achieved by PEPFAR was accomplished through sustained United States Government funding of ART programmes via strong international mostly American PEPFAR implementing partners. A policy change jointly introduced by the Governments of Nigeria (GoN) and the US in 2010, agreed on a multiyear shift of funding and oversight responsibilities of ART programmes from PEPFAR to GoN, gradually decreasing the US government role. The devolution of ART programmes by PEPFAR from numerous international to fewer local implementing partners with comparatively less experience and technical capacity poses potential challenges of funding, ART performance and sustainability in Nigeria.

The objective of this study is to examine the effect of the devolution of funding and/or oversight of Nigeria's ART program to local implementing partners on ART performance. Concurrent mixed methods study design will be used. ART performance for pre and post devolution periods will be assessed. The results will be compared quantitatively to identify levels of performance for the two eras. Further investigations will be carried out to determine quantitative and qualitative effects of devolution on organizational readiness for change (ORC) of the local implementing partners (LIPs). Quantitative and qualitative outcomes will be triangulated to determine factors responsible for the levels of performance during the 2 periods.

Thematic analysis as described by Thorne et al (2004) will be used to analyse qualitative data, while descriptive bivariate and multivariate quantitative data analysis will be carried out using Statistical Package for Social Sciences (SPSS) software for the quantitative data.

Purpose of the Study

The purpose of this concurrent mixed methods study will be to examine the effects of devolution of funding for and oversight of Nigeria's ART program from international PEPFAR implementing partners to local NGOs on health facilities' ART performance in Kano state, Nigeria.

Specifically, history and baseline performance of Nigeria's ART program before devolution of funding and oversight to local implementation partners will be explored using desk review while survey questionnaire will be used to assess the relationship between local NGO employees and service providers' readiness for the devolution implementation. At the same time in the study, semi structured interviews with key informants (managers and other staff) at both local NGO and health facility levels will be conducted to further investigate organizational capacity for devolution policy roll out. Complementary quantitative and qualitative results will be synthesized to develop a more complete understanding of factors responsible for levels of performances for the pre and post devolution periods. The goal of the quantitative component will be to identify perspective of the LIPs employees' change readiness and to allow for measurements of ART performances for the two periods. Qualitative approach will be used to collect text data through desk review, individual semi-structured interviews to help document history; also explain local implementing partners' organizational capacity and quantitative results obtained by exploring participants' views in more depth.

The justification for mixing is that neither quantitative nor qualitative methods are sufficient by themselves to capture the trends and details of the situation, such as a complex issue of devolution of funding for and oversight of Nigeria's ART program from international PEPFAR implementing partners to local NGOs and its effects on health facilities' ART performance. When used in combination, quantitative and qualitative methods complement each other and allow for more complete analysis.

Ethics Statement:

Ethical issues will be addressed at each phase in the study. Ethical clearance will be sought from the Senate Research Committee, University of the Western Cape. Permission will also be obtained from Kano State Ministry of Health AIDS Control unit, FHI 360⁰, IHVN and the ART health facilities.

Application for research permission will contain the description of the study methods and procedures, participants, research status and its positive contribution to the welfare of ART clients.

Participants' information sheet and informed consent (appendices 1 and 2) forms will be provided to all participants. The participant information sheet will state that the participants are guaranteed certain rights; their agreement to be involved in the study, and acknowledgement that their rights are protected. It contains sufficient details on the research to allow them make an informed decision to participate or otherwise. Participants have the right also to decide on which information to provide as part of the research and to withdraw from the research at any time. The informed consent form provides for certification by both interviewer and participant.

Anonymity of participants will be protected by numerically coding each returned questionnaire and keeping the responses confidential. While conducting the individual interviews with the selected respondents, names and personally identifiable information will not be recorded with the raw data. Respondents will be assigned ID numbers and document will be mapped to link names with ID for description and reporting of results. All study data, including the survey electronic files, interview tapes, and transcripts, will be kept in secured place and destroyed after a reasonable period of time. Participants will be told information provided is treated as confidential and used for research purposes only and that the results of the research will be put into the public domain including the university (always on an anonymised basis) with a view to transparency, scrutiny and peer review.. The researcher will ensure that study does not cause harm to any sectors of society and, in particular to the participants. Breaches of the ethical principles set out in this document will be investigated

following the procedure for investigating allegations of scientific misconduct and may be subject to disciplinary procedures

Note: Detail of the research process is highlighted on the proposal document.



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Appendix 4: UWC ethical approval



DEPARTMENT OF RESEARCH DEVELOPMENT

10 December 2015

To Whom It May Concern

I hereby certify that the Senate Research Committee of the University of the Western Cape approved the methodology and ethics of the following research project by:
Dr HB Yahaya (School of Public Health)

Research Project: The effects of devolution of HIV treatment program from external to local NGOs in Kano State, Nigeria.

Registration no: 15/7/6

Any amendments, extension or other modifications to the protocol must be submitted to the Ethics Committee for approval.

The Committee must be informed of any serious adverse event and/or termination of the study.

Ms Patricia Josias
Research Ethics Committee Officer
University of the Western Cape

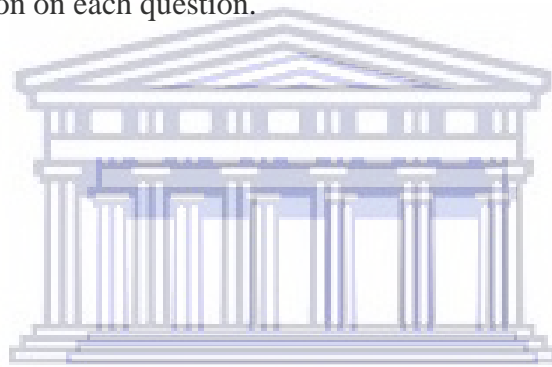
A large, faint watermark of the University of the Western Cape logo, featuring a classical building with columns and the text 'UNIVERSITY of the WESTERN CAPE'.

Q4. What is your highest education? Primary education Secondary school Vocational training Further education (special diploma or similar) graduate (BA/BSc/HND or similar)

Post graduate (master's degree, doctorate or similar) none of the above

In the following segment you are asked to respond to statement concerning your work environment. Answers are given on a scale of 1 to 5, corresponding respectively to Strong agreement (1) and strong disagreement (5). Please draw a circle around the number best describing your position on each question.

Strongly agree



Strongly disagree

Involvement

Strongly agree Agree Don't know Disagree Strongly disagree

Q6. Management of IHVN/FHI 360⁰ 1 2 3 4 5
involve people when decisions are made
that affect them

Q7. People don't have any say in 1 2 3 4 5
decisions which affect their work (R)

Supervisory Support

Q8. Supervisors here are really good at understanding peoples' problems 1 2 3 4 5

Q9. Our work is not being properly supervised (R) 1 2 3 4 5

Training

Q10. People here are properly trained when there is a new guidelines/SOP or equipment 1 2 3 4 5

Q11. People receive poor training when it comes to using new SOP or equipment (R) 1 2 3 4 5

Welfare

Q12. IHVN/FHI 360⁰ tries to look after employees in this health facility 1 2 3 4 5

Q13. IHVN/FHI 360⁰ pays little attention to the interests of employees 1 2 3 4 5

Tradition



Q14. IHVN/FHI 360⁰ Senior 1 2 3 4 5

management like to keep to established,

traditional ways of doing things

Q15. Changes in the way things are 1 2 3 4 5

done here happen very slowly

Innovation

Q16. IHVN/FHI 360⁰ is very flexible; it 1 2 3 4 5

can quickly change procedures to meet

new conditions and solve problems as

they arise

Q17. Assistance in developing new 1 2 3 4 5

ideas is readily available

Flexibility

Q18. This organization is continually 1 2 3 4 5

looking for new opportunities to

respond to need of PLHIV in care

Q19. This company is slow to respond 1 2 3 4 5

to the needs of patients in care (R)

Reflexivity

Q20. In IHVN/FHI 360⁰, objectives are modified in light of changing circumstances

1 2 3 4 5

Q21. In IHVN/FHI 360⁰, time is taken to review organizational objectives

1 2 3 4 5

Clarity of Organizational Goals

Q22. The future direction of IHVN/FHI 360⁰ is clearly communicated to me

1 2 3 4 5

Q23. I am not clear about the aims of IHVN/FHI 360⁰ (R)

1 2 3 4 5

Efficiency

Q24. I feel good result in targets are being met due as a result of proper planning and scheduling in this health facility

1 2 3 4 5

Q25. I feel poor scheduling and planning often result in targets not being met in this health facility (R)

1 2 3 4 5

Effort

Q26. People in this health facility are 1 2 3 4 5
enthusiastic about their work

Q27. People in this health facility get by 1 2 3 4 5
with doing as little as possible (R)

Performance Feedback

Q28. People here usually receive 1 2 3 4 5
feedback on the quality of work they
have done

Q29. People don't have any idea how 1 2 3 4 5
well they are doing their job (R)

Q30. People's performance is measured 1 2 3 4 5
on a regular basis

Q31. The way people do their jobs is 1 2 3 4 5
rarely assessed (R)

Pressure to Produce

Q32. People here are under pressure to 1 2 3 4 5
meet targets

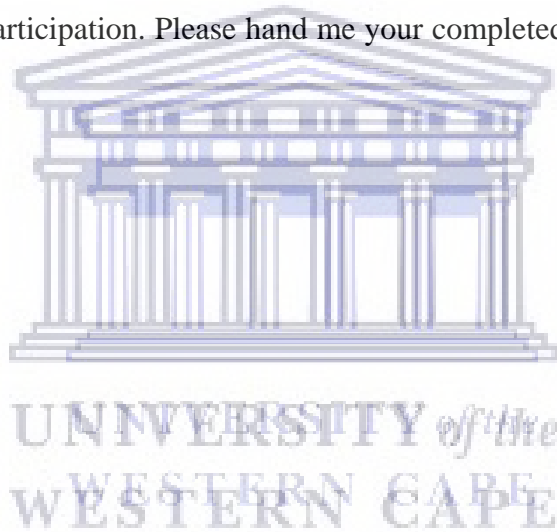
Q33. The pace of work here is pretty 1 2 3 4 5
relaxed (R)

Quality

Q34. This organization is always 1 2 3 4 5
looking to achieve the highest quality of
ART care standards

Q35. This organization does not have 1 2 3 4 5
much of a reputation for top-quality
ART care standards (R)

Thank you for your participation. Please hand me your completed survey before the end of
the workday



Appendix 7: ART Performance Assessment Checklist for pre devolution period (2005-2011)

Step Along Continuum	Measures	Yes (Y)	No (N)
HIV Testing and Diagnosis	1. If Q 1 Check from the records from June 2004 January 2005 to December 2010 and write how many clients were tested?		Number _____
	2. Mobile HIV testing services available?		
	3. How many of HIV couples whose partners have been HIV tested and are aware of results		Number _____
Linkage to care	4. Average number of days from HIV diagnosis to enrolment on ART or pre-ART care -check records		Number _____
	5. Average number of days from clinic enrolment to ART eligibility assessment -check records		Number _____

	6. Number of patients ART ineligible at baseline who receive a follow-up CD4 count in 6 months-check records	Number_____
	10. Number of patients who are enrolled in HIV clinic, received CD4 count & results within 3 months of HIV diagnosis	Number_____
	11. Number of patients with CD4 count <200 cells/uL at presentation	≤ 200 cells/uL _____
	Number of patients with CD4 count ≤ 200 cells/uL, & ≤ 350 cells/uL at presentation	200 - ≤ 350 cells/uL Number_____
	Number of patients with CD4 count > 350 cells/uL at presentation	350 cells/uL Number_____
ART Eligibility: Clinical, Laboratory & Psychosocial Assessment	12. Number of patients screened for tuberculosis	Number_____
	13. Number of eligible patients provided with nutritional supplementation	
	14. Number of ART-eligible patients who died before ART initiation	Number_____

4. ART Preparation: Literacy Training, OI Prophylaxis, and Adherence Assessment	15. Average number of days from enrolment to ART initiation for eligible patients	Number_____
	16. Average number of days from enrolment to completion of ART literacy training for eligible patients	Number_____
5. ART Initiation	17. Number of drug stock outs in last quarter for first-line ART drugs or cotrimoxazole	Number_____
	18. Guideline available (e.g. CD4 testing, adherence monitoring, assessment for drug toxicity, OI screening & prophylaxis)?	
6. Retention in Care	19. Number of patients retained in care 6 and 12 months from enrolment (ART eligible and ART ineligible)	Number_____
	20. Number of patients who transferred care to other clinics 6 and 12 months from enrolment	Number_____

	21. Number of patients deemed lost to follow-up who have been contacted by clinic staff and other home based care or support group members to determine outcome	Number_____
7. Clinical Outcomes	22. Number of patients on ART with undetectable viral load at 12 months.	Number_____
	23. Number of patients on ART requiring switch to second-line therapy for treatment failure at 12 and 24 months	Number_____
	24. Number of patients (ART-eligible on and off ART) who died 12 months after enrolment	Number_____

Strategic Leadership

1. Describe how FHI 360⁰/IHVN sets Program direction, supports resource development, ensure tasks are done, develop and implements strategic plans to enhance its expertise and attain its objectives, goal and mission
2. Describe the degree to which PEPFAR and government support FHI 360⁰/IHVN activities and how this support is conveyed to ART facilities.
3. Does FHI 360⁰/IHVN has ability or is aware of possibilities for influencing policy-making; was it ever called in on substantive policy discussions e.g budget allocation for ART services by government?
4. Describe policies, guidelines and SOPs developed by FHI 360⁰/IHVN in response to ART Program needs

Funding/financial management

5. Describe FHI 360⁰/IHVN sources of funding (e.g., PEPFAR, other donor agencies, government, foundations or private individuals)
6. Describe whether FHI 360⁰/IHVN is highly dependent on a few funders, largely of same type (e.g., PEPFAR) or that funding is highly diversified across multiple source types
7. Describe the success of FHI 360⁰/IHVN at finding and obtaining additional resources (e.g., list grants awarded from 2011 to 2014; describe grants that you plan to apply for; describe organizational capacity for writing grants).

8. Describe FHI 360⁰/IHVN financial plans (e.g. operation expenses, forecast for future monetary needs and requirements, financial accountability)

Organization Structure

Governance structure

9. Describe FHI 360⁰/IHVN legal framework, decision making process, external links and partnerships

Operational structure

10. Is there a coordinating body in FHI 360⁰/IHVN; roles and responsibilities clearly developed and ART sites coordination established?

ART Infrastructure

11. Describe how 360⁰/IHVN support management of ART health facilities (e.g. information, pharmacy, lab units, other supplies and logistics sanitation and infection control logistics/infrastructure)

Human resources

12. Describe FHI 360⁰/IHVN process of recruitment and volunteering; staff strength
13. Describe Staff and volunteers development plan (e.g. training, career development, health/safety, quality of working life, gender issues)
14. What is the organizational personnel turnover?

Process management

15. Describe FHI 360⁰/IHVN problem solving process deciding solutions and creating alternatives

16. How does FHI 360⁰/IHVN communicate, exchange vital information and achieve shared understanding among organizational members and service providers?
17. Describe FHI 360⁰/IHVN health management information system (e.g. generating data, tracking progress, utilize information in changing and improving the organization)

Linkages & networking

18. Describe FHI 360⁰/IHVN network types, partnerships and their sustainability
19. What are FHI 360⁰/IHVN electronic linkages (e.g. communication networks, information equipment, information resources, people of all skills and background)?

Program growth and expansion

20. Describe whether FHI 360⁰/IHVN Program is able to meet the needs of PLHIV clients enrolled in care in supported ART facilities;
21. Describe how FHI 360⁰/IHVN Program expand to reach more clients/new ART sites in response to rising number of HIV clients requiring treatment?

Finally

22. For you personally, what has been the most valuable lesson regarding the ART Program devolution?
23. What do you see as the most problematic or positive aspect of FHI 360⁰/IHVN ART Program?

Appendix 9: Semi-structured interview guide (employee perspective of factors associated with the levels of ART performance during PEPFAR 1 and PEPFAR 2 periods)

1. Human Resources

1.1 Describe to what extent does this ART site had adequate levels of trained staff to deliver quality ART services before devolution?

1.2 Describe to what extent does this ART site had adequate levels of trained staff to deliver quality ART services after devolution?

1.3 Does IHV/FHI-GHAIN ensured that staff in this ART site were adequately trained and supervised to deliver effective HIV care and treatment before devolution?

1.4 Does IHVN/FHI 360⁰ ensured that staff in this ART site are adequately trained and supervised to deliver effective HIV care and treatment after devolution?

2. Leadership

2.1 Explain the role of FMoH or Kano SMoH in ART service provision in this facility before devolution

2.2 Explain the role of FMoH or Kano SMoH in ART service provision in this facility after devolution

3. Policy

3.1 Describe effectiveness of policy and decision-making process of IHV/FHI-GHAIN in supporting ART service delivery of this facility before devolution

3.2 Describe effectiveness of policy and decision-making process of IHVN/FHI 360⁰ in supporting ART service delivery of this facility after devolution

4. Operating Systems

4.1 What was the laboratory capacity and management in this ART facility before devolution?

4.2 What is the laboratory capacity and management in this ART facility after devolution?

4.3 What was the drug management and procurement procedure in the ART facility before devolution?

4.4 What is the drug management and procurement procedure in the ART facility after devolution?

4.5 What was the capacity of communications and information systems in the ART facility before devolution?

4.6 What was the capacity of communications and information systems in the ART facility after devolution?

5. Infrastructure and Resources

5.1 What was IHV/FHI-GHAIN approach to ART site infrastructural development and maintenance before devolution?

- 5.2 What was IHV/FHI-GHAIN approach to ART site infrastructural development and maintenance after devolution?
- 5.3 Describe the level of financial support and methods of resource mobilization implemented for the ART facility by IHV/FHI-GHAIN before devolution
- 5.4 Describe the level of financial resources and methods of resource mobilization implemented for the ART facility by IHVN/FHI360⁰ after devolution

6. Transparency & accountability

- 6.1 Explain IHV/FHI-GHAIN approach to transparency and accountability in managing ART finances in this health facility before devolution
- 6.2 Explain IHVN/FHI360⁰ approach to transparency and accountability in managing ART finances in this health facility after devolution

7. Partnerships and Alliances

- 7.1 What was the scope of IHV/FHI-GHAIN national partnerships before devolution?
- 7.2 What was the scope of IHVN/FHI360⁰ national partnerships before devolution?
- 7.3 What was the scope of IHV/FHI-GHAIN international partnerships before devolution?
- 7.4 What was the scope of IHVN/FHI360⁰ international partnerships before devolution?

Source: *Adapted from AIDSTAR 1 Capacity Assessment Tool For Country Ownership of HIV Care And Treatment Part II—Rating Scales July 2013*



Appendix 9: List of documents for Desk Review

Context

National development strategy or plan

Health sector policies, strategies and plans

National HIV policies, strategies and plans

United Nations global or country reports

National HIV workplace policy,

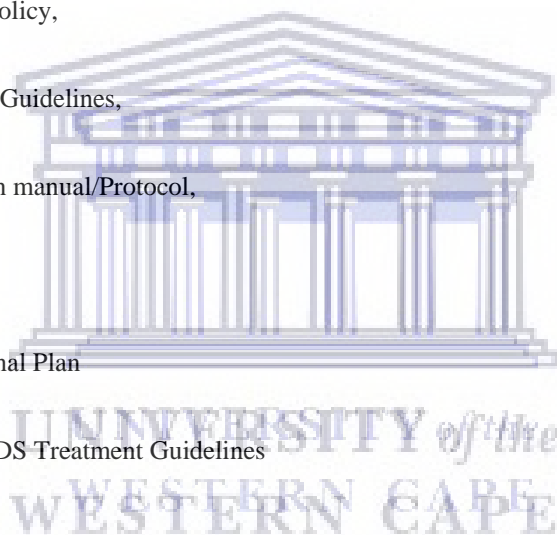
National HIV Operational Guidelines,

Nation HIV/TB Integration manual/Protocol,

State HIV Strategic Plan,

State HIV annual operational Plan

Updated National HIV/AIDS Treatment Guidelines



Inputs

IIP's Operational and intervention plans

IIP's Service delivery guidelines and protocols

IIP's Estimates of resources needed

IIP's Administrative records

IIP's Program budgets

IIP's National AIDS spending assessments

IIP's Logistics Management Information System

Process

IIP's Progress reports

IIP's Review and assessment reports

IIP's Operational research

Output

ART Facility records and reports

ART Implementation progress reports

Outcome

IIP's Monitoring and evaluation reports

ART Facility records and reports

Population surveys (National HIV prevalence survey)

Research and study papers



4.3.3 Descriptive statistics

Use of standard deviation is important as it indicates the dispersion of the data (De Veaux et al. 2008). Skewness and kurtosis are also essential to know whether the distribution is normal where a positive skewness value indicates too many low scores in the distribution and negative values indicate a build-up of high scores. Positive values of kurtosis indicate a pointy and heavy-tailed distribution, whereas negative values indicate a flat and light tailed distribution (Field 2009). Skewness and kurtosis are converted to z -scores using the following formulas $Z = Z =$ An absolute value of z -scores greater than 1.96 is significant at $p < .05$, above 2.58 is significant at $p < .01$ and absolute values above 3.29 are significant at $p < .001$. Large samples will give rise to small standard errors and when sample sizes are big, the 1.96 criterion should be increased to the 2.58 (Field 2009: 139). Therefore, through Case wise diagnostics for the sample size of 199, it was verified that there is no case that falls outside the limit of ± 2.58 indicating that the sample is normally distributed at 1% significance level.



Appendix 10: Table showing Descriptive Statistics of normality

Descriptive Statistics of Normality

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis			
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	z-score	Std. Error	z-score	Std. Error
Involvement	199	1	4	3.27	0.04	0.566	-0.72	0.172	3.294	0.343
Supervision	199	1	4	3.24	0.036	0.515	0.048	0.172	1.098	0.343
Training	199	2	5	3.26	0.048	0.674	1.242	0.172	1.555	0.343
Welfare	199	2	5	3.18	0.046	0.647	0.946	0.172	1.656	0.343
Tradition	199	1	5	3.92	0.04	0.568	-	0.172	10.83	0.343
Flexibility	199	1	5	3.22	0.054	0.76	1.211	0.172	1.611	0.343
Innovations	199	1	4	2.16	0.046	0.644	2.02	0.172	4.117	0.343

Reflexivity	199	1	5	3.82	0.059	0.827	-	0.172	-0.239	0.343
									0.084	
Communication	199	1	3	2.84	0.028	0.39	-	0.172	5.239	0.343
									2.414	
Result oriented	199	1	4	3.02	0.026	0.369	-	0.172	18.388	0.343
									2.257	
Motivation	199	1	5	3.31	0.067	0.95	0.839	0.172	-0.205	0.343
Feedback	199	1	4	3.09	0.032	0.452	-	0.172	8.749	0.343
									0.948	
Performance	199	1	4	3.06	0.021	0.295	0.56	0.172	16.741	0.343
Quality	199	1	4	3.31	0.035	0.494	0.205	0.172	0.809	0.343
Valid N (list wise)	199									

Source: Field Survey, 2016

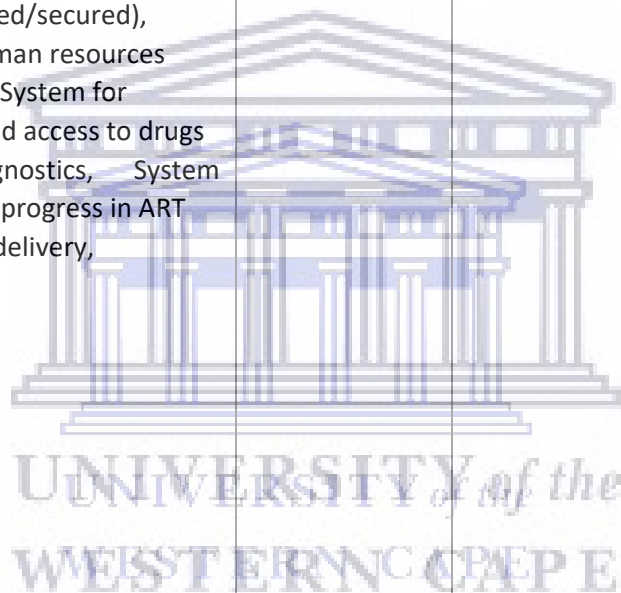
Computed using SPSS, version 22

Appendix 11: Table of methods

Objective	Sub objective	Research domain	Method	Data Collection	Source of data	Tool
Objective1: Analyse baseline performance of ART Program before devolution of funding and oversight to local implementing partners in Kano state	Sub objective 1 a: Assess IIPs ART performance for pre devolution period	ART care continuum: HIV Testing and Diagnosis, Linkage to care ART Eligibility (Clinical, Laboratory & Psychosocial Assessment), ART Initiation, Retention in Care, Clinical Outcomes	Records Audit	Retrospective records audit to collect IIPs data across ART care continuum:	Records (for period before devolution): HIV counselling and testing (HCT) registers, ART referral registers at HCT, ART enrolment registers, ART adherence counselling register at ART clinic, ART medication registers, ART patients follow up registers at ART clinic, Chemistry, haematology registers in ART lab	ART Performance Assessment Checklist (appendix 5)



	<p>Sub objective 1b: <i>Document IIPs policies for pre devolution period</i></p>	<p>IIPs (PEPFAR 1) program review with focus on: Populations reached by IIPs, Guidelines and SOPs developed. Funding (budgeted/secured), ART Human resources used, System for improved access to drugs and diagnostics, System to track progress in ART service delivery,</p>	<p>Desk Review</p>	<p>Desk review</p>	<p>International implementing partners (IIP) program and administrative records from: Memorandum of understanding (MOU) at Kano state MoH, MOU at ART facilities, IIP's financial records available with MoH and local IP, IIP's program reports and country operational plans, IIP's human resources registers</p>	<p>Desk Review Checklist (appendix 2)</p>
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<p>Objective 2: Assess readiness to change and ART performance of local implementing partners over the devolution period 2011-2015</p>	<p>Sub objective 2 a: Assess LIPs ART performance for post devolution period</p>	<p>Same as that of objective 1a but for post devolution period</p>	<p>Record Audits</p>	<p>Same as that of objective 1a for post devolution period</p>	<p>Data sources same as that of objective 1a for post devolution period</p>	<p>ART Performance Assessment Checklist (appendix 5)</p>
	<p>Objective 2 b: Examine local IPs employees' readiness for ART program devolution</p>	<p>Employees involvement in decision making, Supervisory Support for employees, Training, Welfare, Tradition, Innovation & Flexibility, Outward Focus, Reflexivity, Clarity of Organizational Goals, Efficiency, Effort, Performance Feedback, Pressure to Produce, Quality</p>	<p>Survey</p>	<p>Cross sectional survey</p>	<p>Data source from survey questionnaire administration adopted from previous surveys</p>	<p>Survey questionnaire (appendix 4)</p>
	<p>Sub objective 2c: Identify managers' perspective of LIPs</p>	<p>Managers' change readiness in following areas: Strategic Leadership, Funding/financial management, Organizational Structure, ART Infrastructure, human</p>	<p>Interviews</p>	<p>Key informants interviews</p>	<p>Managers of local IPs', Managers of Kano state AIDS control program Other key staffs from the local IPs and executive of support groups of PLWHA</p>	<p>Key informant interview guide (appendix 3)</p>

	devolution readiness	resources management, Process management, Linkages & networking, Program growth and expansion				
Objective 3: Identify and describe factors associated with the levels of ART performance before and after program devolution		ART health workers experience in relation to ART: Human resources, leadership, policy, operating system, infrastructure/resources; transparency and accountability, partnership and alliances	Interviews	Key informants interviews	1. Managers of ART facility 2. Head of laboratory 3 Head of pharmacy	Key informant interview guide (appendix 6)
Objective 4: Develop a model of change for ART program devolution		Model of change for ART program devolution development	1) <i>mapping the research findings</i> 2) <i>extensive reading and categorizing</i> 3) <i>identifying and naming</i> 4) <i>deconstructing and categorizing the models</i> 4) <i>Integrating</i>		Workshop participants: LIPs managers, ART facility managers, managers of Kano state AIDS control program, and executive of support groups of PLWHA	Workshop tool: Research document

		<i>models 5)</i> <i>synthesis,</i> <i>resynthesis 6)</i> <i>validating the</i> <i>ART devolution</i> <i>model of</i> <i>change</i> (workshop) 7) <i>rethinking the</i> <i>ART devolution</i> <i>model of</i> <i>change</i>			
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