ASSESSING IMPLEMENTATION OUTCOMES OF JOINT TB/HIV CONTROL PROGRAMME IN THE ACCRA METROPOLIS: A QUALITATIVE STUDY

BY

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JULY, 2019.
DECLARATION

I, Priscilla Okomeng, the author of this dissertation, do hereby declare that, with the exception of references to the literature and works of other researchers which have been duly cited, the dissertation is the result of my original work.

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Date: …………………
DEDICATION

This dissertation is dedicated to my mum for her unflinching love, support and prayers throughout my life. May God bless you abundantly, Mummy!
ACKNOWLEDGEMENT

My uttermost gratitude goes to the almighty God for His unending love, grace and privileges, without whom I wouldn’t have gotten this opportunity. I am most grateful to Him.

I am grateful to my mother also, for her unflinching support through prayers and counsel. I wouldn’t have been able to get this far without you. To my family, I am thankful for your warmth.

To my best friend, Miles Boakye Yeboah, I appreciate you a lot for being there to encourage me through the hard times. You have been very supportive every step of the way. God richly bless you.

To my supervisor, Dr. Amos Laar, I really appreciate your various inputs and corrections in each step of my dissertation. you have taught me to make excellence my hallmark. Thank you so much.

To my study group, the ‘GENGING GROUP’, my stay on campus wouldn’t have been exciting without you. All the moments we shared made me a better person. I ask for God’s grace for each and every one of you as we journey through life. Keep moving, friends!

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God richly bless you all!
Abstract

Introduction: Tuberculosis (TB) has been identified to be a leading cause of early death among People Living with HIV (PLHIV) in sub-Saharan Africa (SSA) and HIV has emerged as one of the key factors hindering global TB control. In SSA, although there are many HIV/TB intervention programmes, structural, contextual and individual factors prevent targets from being met. In Ghana, collaborative HIV/TB services have been incorporated into health services since 2007. However, targets are not being met. Evaluating interventions through assessment of implementation outcomes has thus become necessary.

Objective: The main objective of this study is to explore implementation outcomes of joint HIV/TB treatment programme in the Accra Metropolis in the Greater Accra Region of Ghana.

Methods: Key Informant Interviews (KII) were conducted for staff of National TB Control Programme (NTP) and the Ghana AIDS Control Programme (NACP). In-depth interviews (IDIs) were also conducted for clients attending HIV and TB clinics and health workers providing HIV and TB services. Interviews were conducted with a semi-structured interview guide. NVivo qualitative data analysis software was used to analyze data by generating themes based on study objectives.

Results: Policy makers were of the view that the joint HIV/TB programme could sustainable. Challenges to fidelity identified by service providers were lack of funds, defaulting of clients and poor infrastructure. Clients were satisfied with care. However, lack of enablers, stigma and financial constraints are threats to retention in care.
**Conclusion:** Inadequate funds, lack of human resource and stigma are major threats to implementation success of Ghana’s joint HIV/TB programme.
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<tr>
<td>AIDS</td>
<td>Acquired Immune-Deficiency Syndrome</td>
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<td>ANC</td>
<td>Ante-Natal Care</td>
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<td>ART</td>
<td>Anti-Retroviral Therapy</td>
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<td>DOTS</td>
<td>Directly Observed Therapy, Short Course</td>
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<td>FP</td>
<td>Family Planning</td>
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<td>GHS</td>
<td>Ghana Health Service</td>
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<td>GoG</td>
<td>Government of Ghana</td>
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<td>HIV</td>
<td>Human Immunodeficiency Virus</td>
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<td>High Level Meeting</td>
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<td>In-depth Interview</td>
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<td>KII</td>
<td>Key Informant Interview</td>
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<td>Lost to Follow up</td>
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<td>LTBI</td>
<td>Latent Tuberculosis Infection</td>
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<td>MDR-TB</td>
<td>Multi-Drug Resistant TB</td>
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<td>MMDAs</td>
<td>Metropolitan, Municipal and District Assemblies</td>
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<td>MTCT</td>
<td>Mother to Child Transmission</td>
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<td>MOH</td>
<td>Ministry of Health</td>
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<td>NACP</td>
<td>National AIDS/STI Control Programme</td>
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<td>NACS</td>
<td>Nutritional Assessment and Counselling Support</td>
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<td>NTP</td>
<td>National TB Control Programme</td>
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<td>OI</td>
<td>Opportunistic Infection</td>
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<td>PLHIV</td>
<td>People Living With HIV</td>
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<td>SES</td>
<td>Socio-economic Status</td>
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<td>SDG</td>
<td>Sustainable Development Goals</td>
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<td>SSA</td>
<td>Sub-Saharan Africa</td>
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<td>SSNIT</td>
<td>Social Security and National Insurance Trust</td>
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<tr>
<td>STI</td>
<td>Sexually Transmitted Infection</td>
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TB- Tuberculosis
TDR- Tropical Disease Research
UN- United Nations
WHO- World Health Organization
XDR-TB- Extensively Drug-Resistant TB
CHAPTER ONE
INTRODUCTION

1.1 Background

Tuberculosis (TB) and Human Immunodeficiency Virus (HIV) diseases constitute global health issues of key public importance (Fernandez et al., 2018) and the main burden of infectious diseases in limited resource settings (Gray & Cohn, 2013). About one-third of individuals is infected with Mycobacterium tuberculosis worldwide, with HIV being the main risk factor for active tuberculosis disease, and increasing the risk of latent TB activation by 20-fold (Getahun, Gunneberg, Granich, & Nunn, 2010a). According to Esmail et al. (2018), Tuberculosis is the leading cause of death in HIV-1 infected people. Out of the 1.7 million tuberculosis mortalities globally in 2016, 374,000 were estimated to be caused by HIV–TB coinfection. Also, 75 percent of the estimated HIV-TB coinfection deaths were from the WHO-African region (WHO, 2017). Mycobacterium tuberculosis and HIV, enhance the effect of one another, and as a result, they fast-track the deterioration of the immunological functions in the host individual (Gray & Cohn, 2013). This co-infection thus raises complexity and poses a threat to TB elimination. These and many others are reasons why the World Health Organization (WHO) recommends testing for HIV for all persons diagnosed with TB (Lange et al., 2014).

The aim of the World Health Organization (WHO) concerning the epidemic of TB in endemic countries is to improve treatment and cure through the DOTS strategy. Again, the development of the WHO Policy on Collaborative TB/HIV Activities identified that effective collaboration between the two disease-control programmes would help reduce the burden of TB and HIV infection and Acquired Immuno-deficiency Syndrome (AIDS)
in key populations (WHO, 2004). In May 2014, the WHO came up with the ‘End TB Strategy’ with the goal of reducing new TB cases by 90%, reducing TB deaths by 95% and Reducing poverty of all (100%) TB-affected families by protecting them from catastrophic costs by 2035 (Azim, Subki, & Yusof, 2015). In March 2018, the World Health Organization (WHO), in the updated and consolidated guidelines for programmatic management of latent tuberculosis (TB) infection (LTBI) (WHO, 2018) recommended that the expansion of TB preventive treatment services should move beyond the target populations of people living with HIV (PLHIV) and child household contacts of TB patients, to all households in high TB burden countries (WHO, 2018).

Also, according to Political Declarations from the first ever United Nations (UN) High Level Meeting (HLM) on TB on 26 September 2018, member states committed to provide TB preventive treatment to at least 30 million individuals by 2022.

In Ghana, collaborative HIV/TB services were incorporated into health services since 2007. A revised policy and guidelines for the implementation of HIV/TB collaborative services was enacted in 2014 (Ghana Health Service, 2014). The purpose of this policy, was to delineate the roles and responsibilities of National TB Control Programme (NTP), National AIDS/STI Control Programme (NACP), development partners and all stakeholders at all levels of the health system. The aim however is not to create a new programme or different structures. The policy aims to expand the scope of activities of the NACP and NTP and of their partners in order to achieve the following specific objectives by 2020:

- To reduce death rates of TB/HIV co-infected cases from 20% in 2012 to 10% by
2020 and uptake of ART coverage among co-infected from 37% in 2013% to 90% by 2020

- To increase the percentage of HIV-positive patients who were screened for TB in HIV care or treatment settings from 20% in 2013 to 90% by 2020.
- To address the infection control challenges of TB/HIV and MDR-TB/HIV

Its strategic frame consisted of effectively implementing the post 2015 national strategic plan for TB control by the NTP, implementation of collaborative TB/HIV activities and integrated services which is a joint responsibility of NTP and NACP, among others.

One of the principles of the 2015-2020 strategic direction was also, for the NTP to work in close collaboration with other programmes such as the HIV and services such as Ante-Natal Care (Ministry of Health Ghana, 2015). Despite the implementation of the collaborative interventions, set targets are not being met. Many researches point out many challenges affecting patronage of HIV, TB, as well as their collaborative services in Sub-Saharan Africa (SSA). These challenges include individual, societal and structural factors which encompasses perceptions about, and experiences with the health care delivery system, lack of capacity and technical know-how on the part of service providers, etc.) (Hull, Wu, & Montaner, 2012); (Musheke, M., Ntalasha, H., Gari, S., Mckenzie, O., Bond, V., Martin-Hilber, A., & Merten, 2013); (Okot-Chono, Mugisha, Adatu, Madraa, Dlodlo, & Fujiwara, 2009). According to Peters, Tran, & Adam, (2013), measuring the implementation outcomes—acceptability, adoption, appropriateness, feasibility, fidelity, implementation cost, coverage, and sustainability can all serve as indicators of the success of implementation. Policy makers, implementers and
beneficiaries (HIV/TB patients) are stakeholders whose perspectives are relevant to the measurement of these outcomes. This is because they hold the key to an efficient transfer of the policy into practice (Proctor et al., 2011). This study therefore seeks to measure perceptions of sustainability of policy makers, fidelity of implementers (health workers) and satisfaction level of beneficiaries in the context of TB/HIV control programme in Ghana.

1.2 Problem Statement

TB has been identified to be a leading cause of early death among PLHIV globally (Esmail et al., 2018), with the highest burden in Africa and Asia (Atkinson & Mabey, 2019). While much needs to be done to improve diagnosis and treatment outcomes, it is also clear that this epidemic cannot be controlled solely through treatment of infectious TB cases (Karim, Churchyard, Karim, & Lawn, 2009). Due to the fact that patients with HIV-TB usually have advanced immunodeficiency and very high mortality risk, early initiation of ART is key (WHO, 2010). According to Getahun, Gunneberg, Granich, & Nunn (2010b), despite the implementation of good-quality DOTS programs, coordinated responses addressing both TB and HIV infection have been slow. According to WHO (2018b), in 2017, fewer than one million PLHIV (36%) received TB preventive treatment in reporting countries. Though, globally, the disease burden caused by TB is declining, in all WHO regions, and in most countries, it is not fast enough to reach the first (2020) targets of the ‘End TB Strategy’ of a 4-5% fall rate per year. Globally the rate is only 2% though some WHO European and African countries have exceeded the targets per year (about 4-8%). Ghana is however not included in the list (WHO, 2018a). According to Ministry of Health Ghana, (2015), some objectives of the strategic direction (2015-2020)
included; attaining treatment success for all from 84% in 2012 to at least 89% for new cases alone and reducing case-fatality rate of TB/HIV co-infection from 20% in 2012 to 15% in 2017. Also, the policy on collaborative services had a target of reducing deaths associated with the co-infection to 10% in 2020 (GHS, 2014). However, the prevalence of TB/HIV co-infection was 14.7% (Addo et al., 2018) and according to WHO (2018a), case-fatality rate in 2017 was 18% and treatment successes for new cases stood at 85% in 2016 which was just a 1% increase from 2012. Also, number of HV/TB patients on ART stood at 53% in 2017 which was far from the 90% target by 2020 stated in the policy for collaborative HIV/TB services. In 2018, the Greater Accra region of Ghana had the highest prevalence of HIV infection (3.2%). According to Ghana Health Service (2018), the case notification of TB infections was 52 per 100,000 population in 2017 which was a 6% reduction since 2014 (58 per 100,000). The region with the highest case notification was Upper East which was 63.3 per 100,000 population. In the Greater Accra Region, the rate was 53.3 per 100,000, which was way lower than in Upper East but still above national average. TB cure rate in 2016 was 40.6% population as compared to 75% in 2014; the highest was in Western region which was 61.5%. In Greater Accra region, there has been a drastic fall in cure rates from 85.3% to 45%. Success rates have also fallen from 88% in 2014 to 85.2% in 2016. In the Greater Accra Region, success rate dropped from 92% in 2014 to 88.9% in 2016. With the poor fall rates, the menace is aggravated with Ghana being listed as part of the High burden countries with HIV/TB co-infection due to incidence (WHO, 2017). Evaluation of the HIV/TB collaborative treatment intervention is thus needed to explore what needs to be done in order to meet targets. Measuring implementation outcomes such as sustainability and fidelity at various
stakeholder levels (Proctor et al., 2011) is thus relevant to evaluate how well implementation has taken place (Peters, Adam, Alonge, Agyepong, & Tran, 2013) with respect to Ghana’s joint HIV/TB control programme. This will contribute to national policy planning and aid the remodeling of TB/HIV control programme to help eradicate TB.

1.3 Justification

About 119 low- and middle-income countries reported that, funding for TB/HIV collaborative programmes reached US$ 6.9 billion in 2018 of which the amount available each year has been in the range US$ 6–7 billion since 2014 (WHO, 2018a). Most of these funds are reported to be from domestic sources. Despite huge sums of money being pumped into collaborative TB/HIV programmes, targets are not being met especially in Ghana. The WHO and associated organizations have thus, come up with guidance on how to increase patronage and to eventually reach targets: the ‘Implementation Core Group of WHO Global Task Force on latent TB infection’, in a meeting with country stakeholders to address implementation tools of joint TB and HIV programming to scale up TB preventive treatment in Geneva, recommended that, ministries of health and national control programmes should systematically evaluate the reasons for low uptake of TB preventive treatment among PLHIV, and other at-risk groups to help develop strategies to address issues of poor attitude of physicians, health care workers and beneficiaries towards programmes to enhance coverage of TB preventive treatment (World Health Organization, 2018c). Also, achieving the United Nation High Level Meeting (UN HLM) targets will demand, not only effective adoption of the 2018 WHO guidelines; substantial increase in funding and human resources; and nationwide
coverage of TB preventive and treatment services, but also a need for Ministries of health to systematically empower civil society representatives so as to improve implementation, monitoring and evaluation. Also, according to (WHO, 2018a), ‚The Sustainable Development Goals (SDG) and ‘End TB Strategy’ targets set for 2030 cannot be met without intensified research and development and therefore recommends research to optimize implementation and impact. Again, according to (Amo-Adjei, 2013b) inadequate studies have been conducted on the significant barriers to regulate spread of the disease. As such, assessing implementation outcomes of the joint HIV/TB treatment programmes as a whole at different stakeholder levels has become crucial to identifying diverse markers of implementation failure regarding TB/HIV control programme. Results from this study will help bring to light the various challenges regarding TB/HIV control programme in Ghana at various stakeholder levels for timely remodeling of policies and interventions for effective implementation of the intervention.

1.4 Research questions

1. What are policy makers’ perceptions of sustainability of joint HIV/TB control programme in Ghana?

2. What are the challenges affecting HIV and TB care givers’ fidelity to guidelines stated in the joint HIV/TB control programme?

3. What are the perceptions of HIV and/or TB co-infected patients receiving care regarding integrated HIV/TB control programme?

4. Are HIV and/or TB patients receiving health care satisfied with care being given?
1.5 Main Objective

The main objective of this study is to explore implementation outcomes of joint HIV/TB treatment programme in the Accra Metropolis in the Greater Accra Region of Ghana.

1.6 Specific Objectives

1. To explore the policy makers’ perceptions of sustainability regarding joint HIV/TB control programme in Ghana.

2. To explore the challenges affecting the HIV and TB care givers’ fidelity to guidelines for integration of HIV/TB control programme.

3. To assess perceptions of HIV and/or TB infected patients receiving care regarding integrated HIV/TB control programme.

4. To explore the satisfaction of HIV and/or TB patients receiving health care.
1.7 Conceptual Framework

The conceptual framework above shows the various factors that affect the success of joint HIV/TB treatment programmes, which is whether or not targets are being met, and how they do so.

Figure 1: Conceptual Framework
Source: Author’s own design
The implementation outcome sustainability, which is the degree to which a new intervention is maintained or institutionalized with an organization's constant operations, and fidelity, which is the extent to which an intervention is implemented as stated in the original policy document, as well as client outcome: satisfaction, directly affect the success of the HIV/TB Joint control programme.

Underlying factors such as the socio-economic status (SES) of the country, may affect cash flow to the programme and eventually can affect sustainability of and fidelity to a programme. Once sustainability and fidelity are reduced, the success of the programme would also be hindered. In the same vein, socio-economic indicators of clients such as type of house lived in, kind of job involved in and educational level of patients affect how they perceive the diseases and the treatment options available for such diseases. This will in turn affect patient satisfaction. Again, the inability of the service providers to adhere to the guidelines as stated in the original policy or protocol, will affect patient satisfaction. Patronage of the joint HIV/TB treatment services by unsatisfied clients in this case, would ultimately be low, and this would prevent targets from being met and thus affect the success of the programme.
CHAPTER TWO: LITERATURE REVIEW

2.1 HIV/TB Co-infection

According to (Getahun et al., 2010b), the epidemic of HIV/TB co-infection poses one of the challenging public health problems and hinders the clinical treatment of HIV infected persons. Due to the fact that HIV co-infected TB patients have fewer bacilli in their sputum as compared to HIV uninfected people with pulmonary TB, it is difficult to detect the active TB disease in HIV infected persons. The microscopic smears used are of very low sensitivity and are not useful for diagnosing TB in HIV patients. Mycobacterial culture is therefore optimum for TB diagnosis and is now routinely recommended for the effective the diagnosis of TB in HIV-infected persons (World Health Organization, 2007) though a very slow process.

According to (World Health Organization, 2018a), globally, TB remains among the leading (above HIV/AIDS) cause of death from infectious diseases. Also, it remains the principal cause of mortality in PLHIV, contributing to one-third of all HIV-related deaths (Kerkhoff et al., 2017) HIV Infection is the greatest known risk factor for TB infection and the eventual progression to the active TB disease and increases the risk of reactivation of latent TB by 20-fold (Pawlowski, Jansson, Skold, Rottenberg & Kallenius 2012). The at-risk population groups among populations whose HIV prevalence was greater than 1% were women in general, adult men, and pregnant women with HIV as of 2007 (Getahun et al., 2010a)). Tuberculosis (TB) and HIV co-infection presents the health care systems with many threats which poses specific diagnostic and therapeutic challenges (Pawlowski et al., 2012).
2.2 Integration of HIV/TB treatment services

In some sub-Saharan settings such as south Africa, TB and HIV services are still segregated where the different set of service providers don’t share information on their co-infected patients with the common excuse being that, TB is highly infectious and patients need to separated (Sinai & Kinkel, 2016). In reality however, this segregation is cumbersome and ineffective, because the separation of services often leads to delays in TB diagnosis, prolonging of infectiousness period for HIV/TB co-infected individuals and the risk to other PLHIV attending the clinic. Additionally, given that patients need to attend two separate service posts, their compliance with treatment regimens could be difficult and can lead to poor outcomes, and it is concluded that the separation of services negatively impacts the quality of care. According to Getahun et al. (2010a), decentralization of HIV treatment services, and strengthening of its integration with TB services are crucial. According to Lawn & Churchyard (2009), increasing data depict that there is a high survival gain with ART for patients with HIV associated TB. In several studies in the Netherlands, Thailand, Spain and Malawi for instance, there was a of good outcomes and a reduction in the adjusted odds of death among those with HIV-TB during the ART era (Velasco et al., 2009).

2.3 Challenges affecting effective implementation of HIV Intervention Programmes

2.3.1 Policy maker perspectives and related challenges

WHO operational guidance recommends some key programmatic considerations and tools for implementation. One of such suggestions includes creating an enabling policy and legislative environment; for example, how to link TB preventive treatment services with initiatives for finding missing TB cases, joint programming (e.g. HIV and TB
programmes), etc. (World Health Organization, 2018c). policy related and organizational challenges however undermine the integration of HIV and TB services, thus preventing its success. In a study in by Amo-Adjei (2013) to assess policy maker perspectives of sustainability of TB control programme in Ghana, it was recorded among optimistic respondents that, firstly, there was the perception that because the NTP of Ghana has elements of both vertical and horizontal programme, there were high prospects for TB control activities to remain a priority of the Ghana Health Service. Secondly, there was a perception that since TB is highly connected with HIV/AIDS, it will continue to remain a priority of the GHS even without external funds. Some pessimists also indicated that, the programme was not sustainable taking into consideration the meagre portion of national resources allocated to the programme in the absence of global or external funds.

According to Wannheden, Westling, Savage, Sandah, & Ellenius (2013), shortage of staff, inadequate funding, poor integration among health services as well as inadequate promotion of services have been identified at the organizational level as challenges hindering TB and HIV services collaboration. Further, Amo-Adjei (2013b), has identified competition for attention and funding, insufficient coordination between TB and HIV control programmes, a poor public-private partnership, and feeble monitoring and evaluation of interventions were identified by as obstacles to TB control. Gebreegziabher, Yimer, & Bjune (2016) have identified shortage of trained workers and lack of motivated and committed service providers in a study to assess challenges to TB control in Ethiopia from programme coordinators’ perspective.
2.3.2 Service provider challenges

According to the World Health Organization (2018c), one of the contents of the WHO operational guidance is operational guidelines Capacity-building of key programme personnel such as TB, HIV, and maternal and child health service providers on policies and procedures for delivery of TB preventive treatment. In most sub-Saharan settings service provider challenges hamper TB/HIV collaborative services as a whole. In a study conducted in South Africa by Sinai & Kinkel, (2016), to assess an intervention designed to enhance the integration of HIV and TB services in public health facilities for PLHIV co-infected with TB, only about 79 percent of the patients diagnosed with TB in all facilities combined were registered for TB treatment. The proportion was slightly lower with HIV providers (77 percent) compared to TB providers (80 percent). Also, People Living with HIV (PLHIV) who were treated by TB service providers were more likely to complete the full treatment, and significantly less likely to default, than PLHIV treated by HIV service providers. Few of the service providers indicated increased workload additional paperwork; most of them however stated that it was a good intervention which should be scaled up. Also, according to Okot-Chono, R., Mugisha, F., Adatu, F., Madraa, E., Dlodlo, R., & Fujiwara (2009), in a study to assess health system barriers affecting the implementation of collaborative TB-HIV services in Uganda, it was found that some health system barriers identified included poor TB-HIV planning, coordination and leadership, inadequate dissemination of policy, inadequate provider knowledge, limited TB-HIV inter-clinic referral, poor service integration and recording, logistical shortages, high costs of services and provider shortages amidst high patient loads. Drug non-adherence has also been identified by (Wannheden et al., 2013) as a challenge to TB
control. According to Amo-Adjei (2013b), in a study to assess views of health service providers on obstacles to TB control, holdups in funding management, quality of physical structures were identified. Also, shortage of drugs was identified as a barrier in a study to assess service providers perspectives of challenges to TB control in Ethiopia by Gebreeziabher, Yimer, & Bjune (2016)

2.3.3 Perceptions and perspectives of patients

Tuberculosis (TB) treatment continues to be a difficult task in most low and middle-income countries due to cultural beliefs and inadequate information about the relevance of treatment adherence in key populations. According to Salifu & Eliason (2017), in study to assess patient perception about TB treatment, knowledge gap sabotages the uptake of TB treatment services; Seven out of the 10 participants attributed the cause of TB to spiritual forces and evil people. Others attributed the cause to smoking, on alcohol consumption, eating pepper and using strong body perfumes. Few however acknowledged that TB is caused by germs and that medical treatment was relevant to cure. According to Sinai & Kinkel (2016), in a study about improving tuberculosis treatment and prevention for persons living with HIV in South Africa, HIV-negative patients who were treated for TB were more likely than PLHIV to complete the intensive phase, and less likely to default. Again, in a study conducted by Musheke, M., Ntalasha, H., Gari, S., Mckenzie, O., Bond, V., Martin-Hilber, A., & Merten (2013), it was recorded that, in various settings in sub-Saharan Africa (SSA), perceptions about and experiences with the health care delivery system undermines the patronage of HIV services. Improvement in the care cascades represents a crucial step in maximizing individual and societal impacts on ART and subsequently improve the TB situation.
2.3.4 Satisfaction of HIV clients receiving care

The business world recommends a framework for increasing customer retention by paying attention to customer satisfaction. Marketing studies vividly depicts that high satisfaction levels have a positive impact on customer loyalty, repeat patronage, and more extensively, favorable referrals (Mittal & Frennea, 2010). Similarly, in comparison to the business model of customer satisfaction, patient satisfaction could serve as a focus for increasing retention in HIV care and adherence to ART.

In SSA many studies have been conducted to assess patient satisfaction with regard to HIV and TB treatment services; Ahumuza, Rujumba, Nkoyooyo, Byaruhanga, & Wanyenze (2016), reported that, patients complained that the lack of confidentiality among health workers caused their dissatisfaction; participants complained that mothers who were identified as HIV positive after testing, were called to ART units whiles everyone else was present and it made the other mothers suspect the statuses of the HIV-positive patients and made them feel stigmatized. This deterred HIV-positive mothers from returning to the facility. In the same study, due to lack of integration services, mothers were unable to return to facility for ART services on days different from antenatal care (ANC) days. This was due to long distances and high cost of transportation. This also shows that integrating HIV and TB services is relevant to increasing adherence.

According to Ssengooba et al. (2016), when patient satisfaction with TB care was assessed, factors that contributed to high patient satisfaction, were: little time spent with clinician, explanation of what was being done, technical skills, personal mannerisms of the clinician attending to them, etc. Low satisfaction factors were; long waiting time before getting an appointment, poor convenience of location for consultation, length of
time waiting at the office, etc. He concluded that, addressing factors causing low patient satisfaction may substantially impact treatment outcomes.

2.4 Implementation Outcomes

One of the greatest challenges facing the global health community is how to take proven interventions and implement them in the real world; Despite abundant evidence of the efficacy of life-saving interventions, there is little understanding of how to deliver those interventions effectively (Peters et al., 2013).

The word “implement” is generated from the Latin word “implore”, meaning; fulfil or carry into effect (Oxford English Dictionary, 1971). The scientific inquiry into questions about implementation; that is, carrying an intention to effect is termed implementation research (Peters et al., 2013) and is thus, needed to make informed policies, programmes and practices. Implementation research is, thus, of great relevance in bringing to light on the often-rough boundary between what could be achieved in theory and that which actually happens. Working with the real world, and paying much attention to realities, implementation research produces context-specific insights that cannot be simply obtained from classical research. According to Proctor et al. (2011), the outcome variables of implementation research can be identified as the designed actions to carry out services. These variables; acceptability, adoption, appropriateness, feasibility, fidelity, implementation cost, coverage and sustainability—all serve as signals of the success of implementation. Implementation research therefore uses these variables to evaluate how well implementation has taken place. In this study, two implementation outcomes; sustainability and fidelity, and one client outcome, satisfaction would be assessed.
Fidelity refers to the degree to which an intervention is delivered as it was intended in the original protocol or by the developers of a program (Dusenbury, Brannigan, Falco, & Hansen, 2003); Rabin, Brownson, Haire-Joshu, Kreuter, & Weaver, 2008). It is usually measured at the level of individual providers, institution or setting. Measuring fidelity is salient when measured at the early to middle stage of the intervention and usually measured it in terms of adherence to the program protocol, dose or amount of program delivered and quality of program delivery. There are several ways in which Fidelity could be measured; through self-report, ratings, and direct observation and coding of audio- and videotapes of actual encounters, or provider-client/patient interaction. In this study self-report approach would be employed.

Sustainability refers to the maintenance, durability, continuation or institutionalization of a new intervention. It is usually measured at the level of administrators, organization or setting and it is salient to measure at the late stages of the implementation. Case-audits, checklists, semi-structured interviews and questionnaires are available tools usually used to measure sustainability (Proctor et al., 2011). In this study, semi-structured interviews would be used to measure sustainability.
CHAPTER THREE
METHODOLOGY

3.1 Study Area

The study was carried out in the Accra Metropolis. The Metropolitan is part of the 260 Metropolitan, Municipal and District Assemblies (MMDAs) in Ghana, forming part of the 29 MMDAs in the Greater Accra Region. The administrative capital is Accra, which is located at the southern part of Ghana. The Metropolitan spans an area of 173 square kilometers. To the east, the Metropolis shares boundaries with La-Dade Kotokpon Municipal, to its west, it shares boundaries with Ga West Municipal, Ga Central Municipal and Ga South Municipal Assembly and to the south is the Gulf of Guinea. According to 2010 population and housing census, the population of the Metropolitan stood at 1,665,086 with 800,935 males and 864,151 females. According to the Ghana Health Service (GHS,2016), the population was projected from the 2010 census to reach 1,936,836 by 2016. In 2019 the Ghana Statistical Services records the population of the Accra Metropolis to be 2,052,341.

In the metropolis, there are four government hospitals namely; Princess Marie Louise Children’s hospital, Achimota hospital, Greater Accra Regional Ridge hospital and La General hospital. In addition, there are several quasi-government hospitals such as the Police hospital, the 37 Military hospital, University of Ghana hospital, Trust hospital (SSNIT) and Cocoa clinic. Study sites were offices of NTP and NACP of the GHS at the Korle-Bu Teaching hospital, and HIV and TB units at La General Hospital and Achimota hospital. The two hospitals were selected due to their provision of HIV and TB care.
3.2 Study Population

Officials of the NACP and NTP, TB and HIV service providers including nurses and pharmacists, and TB, HIV and co-infected patients receiving care at the two hospitals constituted the population of the study.

3.3 Sample Size

According to Dworkin (2012), sample sizes in qualitative research is usually lesser than in quantitative research. This is because qualitative research focuses on in-depth understanding of situations and processes. It is not concerned about generalization of findings to the general population. A number of articles (Glaser, Barney G, (1978); Morse, (1994); Creswell (1998)) recommend 5-50 participants as adequate on the basis that, sample sizes for qualitative should be large enough to obtain enough data to sufficiently describe the phenomenon of interest and address the research questions. Also, according to Malterud, Siersma, & Guassora (2016), choosing a sample size depends on aims of the study. A broad aim requires a large sample size and vice versa. Due to the narrow nature of the aims, limited resources available and time frame of study, 35 participants were included in the study. These participants included two officials from the NACP and NTP, eleven HIV and TB health workers including nurses and pharmacists and eleven HIV, TB or co-infected patients each at La General and Achimota Hospitals.
3.4 Sampling Method

Purposive sampling method was employed in this study. This method of sampling ensured that selected participants provided insightful information regarding area of interest to the research. Due to this, La General and Achimota Hospitals were purposively selected in the metropolis due to their provision of HIV/TB collaborative services.

HIV, TB and co-infected clients were purposively selected for the study. On the data collection days, only clients attending the HIV and TB clinics were informed about the study and those who showed interest received more information to consent to participation.

Also, for service providers, health care workers who provide HIV and TB services only at the facilities and provided their consent were included. They included nurses and pharmacists. For policy makers, two officials each NTP and NACP were included in the study.

3.5 Outcome variables

1. Perceived Sustainability: The extent to which an intervention is maintained or institutionalized in a given setting as perceived by a stakeholder.

2. Fidelity: The degree to which an intervention was implemented as it was designed in an original protocol, plan, or policy; adherence, delivery as intended, integrity, quality of programme delivery, intensity or dosage of delivery

3. Satisfaction: The needs and/or limitations of their intended audience; meeting the needs and taking into consideration the limitations of beneficiaries
3.6 Data collection method

Key informant interviews (KIIIs) and in-depth interviews (IDIs) were conducted. Data collection took place in June, 2019. Data was collected by a team comprising of principal investigator and research assistants with prior training. Rapport was established with study participants before were conducted. Interviews were conducted with interview guides which defined areas to be explored by interviewer, and also, allowed the interviewee to diverge in order to pursue an idea. Interviews were audio-taped and written with tape recorders, notebooks and pens.

For policy makers, the KII were conducted in the offices of officials of NACP and NTP

For service providers, IDIs were conducted for HIV and TB service providers at the selected hospitals. The interviews were conducted in their consulting rooms or any suitable place around the facility.

For patients also, IDIs were conducted for HIV, TB and co-infected clients receiving care at the two health facilities as of the time of data collection. Interviews were conducted in the consulting rooms, or any room provided by the service providers to ensure confidentiality.

At the end of the interview a mug and napkin were given to each participant for time spent.
3.7 Inclusion and exclusion criteria

3.7.1 Inclusion criteria

National HIV and TB policy makers willing to participate in the study were included in this study. Also, HIV and TB health workers who were willing to participate were included. Male and female HIV/TB co-infected patients 18 years and above who were willing to participate were included in the study.

3.7.2 Exclusion Criteria

Hospitals in the Accra Metropolis which do not provide HIV and TB services as well as those outside the metropolitan were excluded from the study. Officials at NTP and NACP who are not directly linked with HIV and TB treatment programmes were also excluded. Again, non-HIV and non-TB health care providers were excluded. Also, pregnant and severely ill HIV, TB and co-infected patients were excluded from the study.

3.8 Quality Control

To ensure the quality of data collected, the five (5) research assistants employed for the study, were trained to ensure adequate comprehension and interpretation of the interview questions for effective data collection. They were also trained to protect the confidentiality of participants. The principal investigator was on field collecting data with the assistants to monitor any activity concerning data collection, storage and analysis. Also, interviews were carried out with translators in cases of language barriers. Again, data collected was double-checked on the field to ensure that all interview questions answered adequately. During data analysis, an expert in qualitative research was consulted to ensure quality control.
3.9 Data Analysis.
The audiotaped interviews were transcribed verbatim in preparation for analysis. Analysis was done using the NVivo software. Textual data was explored using inductive content analysis. Data analyzed to generate themes and categories. Data relevant to each category of the specific objectives (perceptions of sustainability, challenges to fidelity and satisfaction) were identified and examined using the process of constant comparison, in which each item was compared with the rest of the data to verify its category. Data was coded according to emerging patterns and themes.

3.10 Ethical Considerations
Since this study involved interviewing human subjects, ethical approval was obtained from the GHS, Ethics Review Committee. The approval letter with review number: GHS ERC 035/04/19 is attached at the end of this document. Before each interview, rapport was established with the health workers and patients after brief introductions. The objectives of the study were then explained to the respondents to enable them provide verbal and written informed consent before audio recording the interviews. Potential respondents were made aware of their rights to refuse the interview, without any implications to their access to care. Informed consent forms showing vividly the researcher and research backgrounds, objectives of study, privacy information, risks and benefits of participation, contact of the administrator of the Ethical Review Committee were also administered to patients in languages they understand. Participants were required to sign or thump print to indicate voluntary participation. Minimal risk (slight discomfort) was involved in the interview due to probing nature of questions. Patients were however assured of confidentiality and that there would be no stigma associated
with disclosure of information. There was no conflict of interest to researcher. There was no coercion and participants were not aware of incentives prior to interview. As a token of appreciation, participants were given a ceramic mug and a napkin each at the end of the interview.

3.11 Data storage and usage
Data and information obtained from this study was purposefully used for academic purposes and was kept confidential. Strong passwords were used to encrypt transcribed and other electronic files. Notes taken on the field were kept under lock and key where only PI had access to. All data and information except academic booklets would be destroyed after five years.

3.12 Funding Information
This research was funded by the World Health Organization Tropical Disease Research (WHO TDR).

3.13 Contact Person(s)
The PI can be contacted regarding this study on:

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CHAPTER FOUR
RESULTS

4.1 Introduction
This chapter presents the results of the in-depth interviews (IDI) carried out among key stakeholders in the Joint HIV/TB programme. The categories of participants interviewed include eleven (11) service providers, two (2) policy makers and twenty-two (22) patients who are living with HIV, TB or coinfected with both diseases. The participants included policy makers from NACP and NTP, service providers and patients from Achimota Hospital and La General Hospital. The results are presented narratively and supported with relevant quotes. The results are presented under the various themes were generated in relation to research questions and objectives.

4.2 Socio-Demographic Characteristic of Study Participants

<table>
<thead>
<tr>
<th>Characteristics of Participants</th>
<th>Number of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Clients (N=22)</td>
</tr>
<tr>
<td>Institution</td>
<td></td>
</tr>
<tr>
<td>NACP</td>
<td>N/A</td>
</tr>
<tr>
<td>NTP</td>
<td>N/A</td>
</tr>
<tr>
<td>La General Hospital</td>
<td>11</td>
</tr>
<tr>
<td>Achimota Hospital</td>
<td>11</td>
</tr>
<tr>
<td>Mean Age of Respondents (Years)</td>
<td>45 (18-66)</td>
</tr>
<tr>
<td>Sex</td>
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</tr>
<tr>
<td>Male</td>
<td>7</td>
</tr>
<tr>
<td>Female</td>
<td>15</td>
</tr>
<tr>
<td>Level of education</td>
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</tr>
<tr>
<td>-----------------------------------</td>
<td>----</td>
</tr>
<tr>
<td>No Formal Education/Primary</td>
<td>16</td>
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<tr>
<td>Vocational School/Technical</td>
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<tr>
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<tr>
<td>Marital Status</td>
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</tr>
<tr>
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<td>5</td>
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<tr>
<td>Separated/Divorced</td>
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<tr>
<td>Occupation/ Employment Status</td>
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<tr>
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<tr>
<td>Services/sales workers/</td>
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<tr>
<td>Crafts</td>
<td>2</td>
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<td>Drivers/Elementary</td>
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<td>Retired</td>
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<tr>
<td>Unemployed</td>
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<tr>
<td>Years of working experience (years)</td>
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<td>11-20</td>
<td>N/A</td>
</tr>
<tr>
<td>More than 20</td>
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</tr>
</tbody>
</table>

Table 4.1 above shows the characteristics of all study participants included in the study. A total of 35 participants were included in the study.

The ages of 22 clients who participated in the study ranged from 18 to 66. Overall, there were 25 female participants, of which 15 were clients. Most of the clients had no formal education or primary education only and 6 had had senior secondary, vocational or technical education. Among the clients, 6 were single, 5 married, 5 divorced or separated
and 6 widowed. Jobs identified for study participants were grouped into four major
categories; managerial/professional, drivers/elementary/students, services/sales workers
and craftsmanship. The classification of jobs was adapted from the International Standard
Classification of Occupations (ISCO). The version adapted, ISCO-08 was updated in the
year 2008. Most of the clients were involved in services and sales work, 3 were involved
in either driving, elementary duties or a student, 2 were craftsmen, 1 retired and 5
unemployed.

The ages of the 11 service providers ranged from 25 to 50 years. Out of the 25 female
participants, 10 were service providers. All service providers had had tertiary education
and were involved in professional jobs.

The ages of the 2 policy makers were 38 and 54. All policy makers had had tertiary
education and were in managerial or professional positions.

4.2 Policy Makers’ Perceptions of Sustainability Regarding Joint HIV/TB Control
Programme

This theme explores the perception of sustainability regarding joint HIV/TB control
programme from the policy makers point of view. It addresses questions like general
view sustainability of the Joint programme, factors that affect the sustainability of the
joint programme, strengths and weaknesses of the joint programme, the challenges of the
joint programme and interventions to improve sustainability.

Two (2) policy makers were interviewed and under this theme they were all of the view
that generally the joint HIV/TB programme was sustainable as indicated by the quotes
below:
“It is sustainable like I earlier said especially the human resource. If we are able to put the two diseases together and manage as a unit then the number of staff we need reduces and if you are budgeting together, assigning roles and responsibilities it is easier to manage resources so that you will buy this and I will also buy this so we don’t duplicate services and our efforts” (Policy Maker #2 at an IDI)

“Yes, I think it is the best way to go; to join the two programmes because they deal with the immune system so it’s the best way to go. Measures are that during meetings, we consider our partner control programme as stakeholders during meetings and during monitoring and evaluation. We involve them in whatever we do” (Policy Maker #1 at an IDI)

Also, the policy makers were in agreement that, the joint HIV/TB programme was efficient and its ability to save cost was a strength. However, they identified funding and lack of human resource as a major challenge and a weakness of the joint programme. As indicated below:

“...Funding is a major source. Secondly, non-availability of human resource can weaken the management of the 2 diseases” (Policy Maker #2 at an IDI)

Funding is a major issue, and also human resource.” (Policy Maker #1 at an IDI)

For the programme’s strength, they had this to say:

“...Joint planning is rather economical so that the few staff we have will be able to manage the dual infection so that we don’t have to separate four staff here and another four there when we could have put six together. So, in terms of sustainability, this one is commendable” (Policy Maker #2 at an IDI)

‘The strengths are that, there is efficiency, saves costs, movement and associated risks is removed’” (Policy Maker #1 at an IDI)
When asked about any perceived conflict, one respondent was of the view that there were no conflicts with the other organizations involved in the joint HIV/TB programme. However, the other respondent had a different view as expressed below:

“Conflicts arise from ineligible expenditure. This occurs between donors, where there are some important things to be done which were not in the initial budget plan, and in the eye of the donor it wasn’t agreed upon. There is no conflict with NTP. Sometimes activities to be implemented for HIV/TB would be prevented by Malaria Control due to the clash of time and the use of same service providers” (Policy Maker #1 at an IDI)

The same respondent indicated that there are issues with bias in the collection of data as a result of one’s affiliation to either TB or HIV control programme. This view is expressed in the quote below:

“One disadvantage is that, depending on area of inclination, the officers that collect data may be biased. The principle is that there should be representation across boards, but due to the fact that the same people represent both, they are biased.” (Policy Maker #1 at an IDI)

To mitigate the challenges, it was indicated by participants in the In-depth interview that, an increase in funding, availability of human resource and improved infrastructure are some suggestions to improve on the sustainability of the programme. This is outlined in the quotations below:

“To improve on sustainability, first these commodities must be available so funding should be available and the human resource that provide the service should also be available and the infrastructure in which the service will be delivered. Infrastructure is crucial because we are talking about a stigmatized disease and you don’t want to bring everything in the open. At least people should have privacy. Currently we have to train people providing TB service, (it is called the DOTS) to provide the ARV service. We need funds to train” (Policy Maker #2 at an IDI)
“my suggestion is that, there should be an increase in funding from classical areas as private companies and businesses, to fund the programme apart from GoG. Because donor funds are dwindling, we need to have more people working in that area also, we need to involve the human resource division of GHS to involve many health workers. Because most don’t want to work in TB/HIV but work in Malaria, etc.” (Policy Maker #1 at an IDI)

4.3 HIV and TB Care Givers’ challenges to fidelity to Guidelines for Integration of HIV/TB Control Programme

Service provider’s adherence to the guidelines required for the integration of the joint HIV/TB programmes are explored under this theme. The guidelines include the provision of services such as contact tracing of patient’s partners or other contacts, HIV/TB testing counseling and treatment for patients, nutritional assessment, family planning services, detection and management of STI, counseling of drug adherence etc. In all eleven (11) service providers were interviewed from the two facilities included in the studies.

From the study, it was observed all TB service providers test for HIV but refer them to the ART unit for treatment and vice versa. Also, some screen for STIs but do not manage.

Below are some of the things the service providers had to say regarding fidelity to programme guidelines:

“yeah, through the daily counseling some clients will point out some signs and symptoms, we have those units to we refer them. We don’t manage STIs” (Service Provider #5 at an IDI)

“we are closer to the DOTS centre so the woman who just came I asked her to do the TB test and that is the result she brought. If we see anything, we refer it to the DOTs centre” (Service Provider #11 at an IDI)
“You have to counsel them before they can accept it because some of them, they don’t accept it. We talk to them and if the result is positive, we refer them to the ART clinic” (Service Provider #10 at an IDI)

Services providers from the IDI’s give counseling on drug adherence and provide nutritional services. Some facilities in addition to the HIV/TB services offer non-medical support services and counseling. The following quotations support the findings:

“Yes, we have the nutrition people coming in every clinic day to check their weight and the BMI so that if somebody is underweight, we refer them to the nutrition unit” (Service Provider #5 at an IDI)

“We do the nutritional assessment too. We use the nuts for TB and HIV too do the same thing. We have a nutrition officer here who see to our cases. The programme used to support clients who were malnourished with some formula but it is been a while since they brought it” (Service Provider #8 at an IDI)

“Yes, we do counselling before we initiate treatment. You know TB drugs are taken on daily basis and then when you don’t take the drugs as prescribed or you default, you worsen your condition so we advise that you take it and that is why we normally do the DOTS for the first two months.” (Service Provider #9 at an IDI)

“Yes, we do counselling. They have to be conscious; they shouldn’t miss any dose. They have to take it every day as prescribed” (Service Provider #10 at an IDI)

Another finding is the fact that service providers have a means of tracing patient’s partners and other contacts. As indicated in the quotes below:

“we counsel them and we tell them to bring their contacts and then we screen them for TB because they are always with them and the chances of getting it is very high because they sleep with them in the same room and do everything together. If the result is positive, we put them on medication but if it is negative, we educate them on preventive measures.” (Service Provider #10 at an IDI)

“We are now doing the in-depth client policy which says that if somebody is positive, you test the immediate family. We encourage them bring their partners and children and if their partners are also positive, we quickly put them on medication” (Service Provider #5 at an IDI)
“Another important aspect is home visits, where we visit patients one on one and we do something called contact tracing: we follow to your house, take traceable contacts of all those you live with and sleep in a room with. At our own time, we come to your house and test for all of them to fish out who and who is affected.” (Service Provider #1 at an IDI)

Service providers from the IDI findings do not provide family planning services and some service providers do not provide prophylaxis treatment for opportunistic infections as part of the TB/HIV services. As seen in the quotes below:

“No., We don’t do prophylaxis for opportunistic infections here.” (Service Provider #1 at an IDI)

“We don’t give prophylaxis, they are referred to the doctor.” (Service Provider #10 at an IDI)

“We don’t give them birth control method. What we do is if through our encounter, we realize that what you are doing is not good for your health, we refer to the family planning unit.” (Service Provider #8 at an IDI)

“I don’t see how referring a TB patient to family Planning unit helps, we don’t do that here. TB does not have anything to do with FP.” (Service Provider #1 at an IDI)

However, some service providers provide prophylaxis treatment for opportunistic infections as part of the TB/HIV services as stated by some participant below:

“Yes, we give them septrin to prevent infections like TB. Since they are prone to other infections especially TB (Service Provider #4 at an IDI)

“Yes, we do. We give them septrin to prevent infection since their immunity is down and can get diseases easily” (Service Provider #11 at an IDI)

From the service provider interview, there are some community referral systems available and also some non–medical services that are offered in addition to the HIV/TB services. The following quotes support the findings:

“yes, we do. When it comes to susceptible TB, we have TEASE maternity, they take care of them and some of the CHPS compounds those we can’t reach out to, we refer them to the CHPS zones. Even though they are not solely responsible for
them, they work hand in hand with us to provide the help” (Service Provider #8 at an IDI)

“So far no for our clients. Formally we had treatment supporters in the community but now we don’t because there is no money in the management of TB. Now we use the patients relatives as patient support. We advise that they bring close relatives that they trust so that they will be monitoring them to take their drugs” (Service Provider #9 at an IDI)

“That is a huge one. Psychosocial support, mostly or once in a while you will get a client who will tell you that I don’t take my medicine because I don’t have food. You will also call some of them and they will tell you that they don’t have transportation to go home. So out of your own pocket, you give something small which is not from the facility and it is not something that I can do every day. The last time we had a little meeting with the medical superintendent, we spoke about some of these things so I have to find time to write some proposals if some organizations can support us.” (Service Provider #5 at an IDI)

The in-depth interviews with the service providers brought out challenges experienced by the service providers whiles providing HIV and TB services. The challenges include defaulting, increased workload, financial problems, inadequate logistics, lack of infrastructure and lack of privacy, among others. This is indicated in the following quotes:

“The patients are more and I think the clinic is small. If you had come on Tuesday, you would have seen them.” (Service Provider #6 at an IDI)

“The thing is some of them have not accepted it which is preventing us from achieving 90 90 90. Yesterday I had a lady who is even a lawyer. She told me that she had been diagnosed 3 years ago but she doesn’t see herself to be sick so she refused to take medication but later on she started having rashes. So sometimes irrespective of the educational background, it is difficult.” (Service Provider #6 at an IDI)

“For challenges, some clients are very stubborn; taking the medication is a problem. We have a client who is co-infected and don’t want to start HIV treatment. For the infrastructure, this place is not the best due to poor ventilation. Imagine 20 clients coming here in the mornings, it’s bad.” (Service Provider #2 at an IDI)
“The first challenge has to do is finances. We do visit our clients, new ones. Ideally we are supposed to know their various houses before we initiate treatment but because there is no money, sometimes you just have to start treatment and later when you get money, you go for home visits because you have to know their houses at all cost and we do that with money. And then some of the patients complain that they don’t have money for the DOTS. For the DOTS they have to be here every day and they don’t have money. That one is a challenge. And this isoniazid thing, this morning for instance, there is this HIV patient who has been coming here with complaints of cough. She has done the tests and they are negative but she is still coughing so this morning I have asked her to repeat both tests. If we have isoniazid, we could have given it to her and she is still coughing. That one too is a challenge.” (Service Provider #9 at an IDI)

“for infrastructure, we have spoken about space severally that is why we have a shed here as a waiting area for them. We are hoping that things will get better as the years go by. As for staff, we have enough. Currently 3 nurses; and when we have issues above us, we take it to the OPD doctors.” (Service Provider #5 at an IDI)

From the challenges indicated by the services providers in the IDI’s they also outlined some recommendation to help improve service delivery. Service providers had these to say:

“Education. We should heighten it. Before it was everywhere, market places, churches, mosques but now it has gone down drastically. Lately we have been talking about it, I see with the adolescents, the anticlockwise thing and I don’t think it is enough. We should use the vans to the community and broadcast. Previously we were getting support to do know your status when it is a holiday. We go to La pleasure beach but now they will tell you that there are no funds for that but when organizations and churches invite us, we go there to do it. Again, now that we are using more community health nurses, we sensitise them that if you go the community and you see people with the symptoms, bring them on board so gradually we are closing the gap but we need more education” (Service Provider #5 at an IDI)

“They should develop some infrastructure and should provide some enablers which is not coming as it used to and that is the reason for the default cases because we are supposed to do contact tracing and the money is not coming so we do that with our own means” (Service Provider #8 at an IDI)

“They should give us enough funds, slots for checkups once a while, make sure we are comfortable and have sound mind since its hectic to take care of them; they can sometimes dictate for us. So, though they are stubborn we have to be nice to
them to make them feel better. Sometimes their neighbours and partners suspect an affair since we go on house visits every day to give them drugs. Their partners are not supposed to know about the disease. We can get mobbed so we usually dint wear uniforms.” (Service Provider #1 at an IDI)

4.4 Perceptions of HIV and or/TB Infected Patients Receiving Care Regarding Integrated HIV/TB Control Programme

The responses to patients’ perceptions of the integration of HIV/TB control programme are explored under this theme. A total of twenty-two participants were selected from the two health facilities. These participants were TB, HIV and co-infected patients. Questions like do you think it is better to combine TB and HIV services, perception of cause of disease, among others were addressed.

From the in-depth interview some respondents believed that the cause of their condition could be spiritual, though others shared different opinions. Participants had these to say:

“To me, I Believe the disease was caused by alcohol and second-hand smoking and dust. I have been a driver for 7-8 years on a dusty road. No, I don’t think its spiritual. I believe in Jesus Christ and by his stripes I’m healed so let’s forget about the spirituality.” (Client #12 at an IDI)

“I was surprised when I was told the disease. But I was told it was airborne. I don’t think its spiritual because if it was, the drugs wouldn’t have worked.” (Client #13 at an IDI)

“I dreamt that I was eating and people were having sex with me. I don’t really know whether it is that which caused it. Whether I had it through sex or not, I can’t really tell” (Client #15 at an IDI)

“I was surprised when I was diagnosed, because after I divorced, I didn’t be with any man. I dreamt and I went to a fetish priest. A car stopped by and someone and injected me. I don’t really know what caused the disease? (Client #16 at an IDI)

“For mine, it’s spiritual. At that time, I wasn’t going for prayers and life was hard, I worked hard to no avail. I sell kenkey, I get no profit and even my husband got
sick and died. So, I started going for prayers again though my church doesn’t allow. On one occasion, I went for prayers and was told that my sister who comes after me gave me the illness to take my children’s eyes off me. I have been hearing the same stories at three other places. Since my husband died, I have been with other men though long before the illness started.” (Client #17 at an IDI)

“Sometimes I think it is spiritual because I had a twin before I got sick. She fell sick and we went to a herbalist at Koforidua and she told me I had been given HIV spiritually and asked me to perform some rituals. Because I am a Christian, I didn’t believe until it manifested. I later went to look for the herbalist and was told she was dead. So sometimes it can be spiritual.” (Client #21 at an IDI)

“The causes are many but I am a womanizer and it is part of the cause.” (Patient #9 at an IDI)

“I think it is some organisms that are causing the disease. I will also say that my family has a hand in it because when I went to church, I was told that it is from my family” (Client #5 at an IDI)

Generally, regarding the integration of HIV and TB services, the opinion shared by the participants was that since the conditions were different, they should be separated. They were of the view that once they had HIV, they should be treated at the ART unit and vice versa for those with TB. Some of the responses are listed below:

“It is not a good idea to join TB and HIV because they have to treat you for TB before HIV” (Client #18 at an IDI)

“They should separate it because they are both different diseases” (Client #4 at an IDI)

“for me, no, it is not a good idea. Because this illness has a lot of stigma, I wouldn’t like for someone to see me here. So, there shouldn’t be any integration.” (Client #20 at an IDI)

“I think they should separate it because if you don’t have the TB and you are expected to share services, it means that you have to cover your mouth anytime you cough or else they will contract it” (Client #5 at an IDI)
Even though majority were not in favor of integration there were other participants who
embraced it. The participants had this to say:

“I receive care for HIV. I don’t know of TB. I think it will be a good idea.” (Client #7 at
an IDI)

“I don’t have TB but if they combine the services it will be ok because if you have both
diseases, you don’t have to moving from different places for medications.” (Client #9 at
an IDI)

“I think it is ok if there is a programme to combine both treatments because they are not
good diseases.” (Client #10 at an IDI)

The respondent indicated that the joint HIV/TB were not carried out at the facility they
attended and others were not sure. As the following quotes suggest:

“They do it separately” (Client #6 at an IDI)

“I don’t have any idea.” (Client #9 at an IDI)

“What I know of is that TB has its own apartment and we have our own too.” (Client #10
at an IDI)

4.5 Satisfaction of HIV and or/TB Patients Receiving Health Care

The results from this theme addresses the satisfaction level of HIV and or Tb patients
receiving health care at the selected facilities. It addresses the satisfaction levels
regarding treatment progress, confidentiality, competence and overall attitude of service
providers, among others. The general level of satisfaction with care at the facilities was
also explored.

From the results of the in-depth interview, both TB and HIV participants are generally
satisfied with the level of care received from the various health facilities. The findings are
supported by the following quotes:
I am satisfied about how I am treated here because they encourage and advise us on what to eat and what not to eat, drugs to take and how to take them, etc.” (Client #15 at an IDI)

“I am very satisfied. The way they look after me especially when my medicine is finished.” (Client #11 at an IDI)

“It is ok because that is how they are expected to work. They talk to you nicely and they have patience for us and counsel you to be positive.” (Participant Client #19 at an IDI)

Some participants who were generally satisfied, however had some form of dissatisfaction. As indicated below:

“The way they treat us is not bad, however my dissatisfaction is with the nurses’ punctuality and the fact that the skilled nurses are not always around.” (Client #12 at an IDI)

“We are okay if there are drugs but not okay if we are sent elsewhere to collect drugs.” (Client #18 at an IDI)

From the findings of the IDI’s participants indicated that, the treatment was very important to recovery with all participants confirming progress in their condition after taking the treatment. They also indicated their desire to come back to the facility to continue taking their medication. Participants had these to say:

“The medicine is good when you take it as prescribed. You get better and people will not know that you have the disease” (Client #12 at an IDI)

“I have seen massive improvements since I started treatment. I couldn’t eat well at first and my joints were weak. But now I am better. My family makes sure I take the drugs so I can’t default.” (Client #10 at an IDI)

“I will continue with the medicine if I am giving. I will still take it even when I feel I am getting ok because we don’t joke with the disease.” (Client #4 at an IDI)

Participants also indicated that, the service providers are very good at doing their work, they don’t tell anyone about their condition and they have a positive attitude towards them. These were the views of participants:
“The nurses do well, they know their job.” (Client #15 at an IDI)

“They know their job. If you don’t come as scheduled, they will reprimand you in a nice way. They talk to us to take our medicines and eat well.” (Client #10 at an IDI)

“The nurses and doctors are patient with us. They don’t shout at us.” (Participant #5 at an IDI)

I like the way I’m treated and I don’t any problem with the nurses because they ask about our wellbeing and that of our children.” Here confidentially is kept, we are treated well too, they don’t talk to us badly.” (Client #17 at an IDI)

Participants faced a number of challenges from the in-depth interviews conducted. Some challenges from the interview include difficulty with adherence to drugs, long waiting times, financial issues and stigmatization: As indicated in the quotes below:

“Taking this drug for a lifetime is difficult for me. Isn’t there any way of getting a drug to cure the diseases? It’s my problem now. Because we’ve been told to take the drugs even if the virus is undetectable, it really worries me” (Client #17 at an IDI)

“Sometimes we queue for long. We don’t have any doctor here, so we struggle before we can see the doctor at OPD. Model of hope has to ask permission or beg for us for us.” (Client #18 at an IDI)

“Sometimes, I have financial difficulties and since treatment is necessary you have to force and come because the government has supported us with medicine.” (Client #10 at an IDI)

“I am discriminated against by my other family members. My aunties have dissociated themselves from me. The way they answer my questions discourages me and I feel like hitting my head against the wall.” (Client #15 at an IDI)

“We the patients are not too many. one problem is that the nurses are not reliable because the nurses are not punctual. They don’t come at the time they tell us to come and those available are not skilled or trained for the clinic.” (Client #12 at an IDI)

“We overwhelm them. We the patients are more than the nurses. Sometimes we wait for long hours so we can’t go back to work on time until after 2. It really worries us. Sometimes the money we have is only for our fare and we need to go back early to work, but we are delayed. (Client #15 at an IDI)
From the interviews the participant gave some recommendation for the improvement of service. some of the recommendation included financial support, provision of food, adequate drugs education and a reduction in waiting time. The following are quotations to support the findings

“Sometimes we wait for long for drugs that’s the only problem. If they can hurry up with the drug distribution, I would be happier.” (Client #17 at an IDI)

“... We need food to take the medicine, because it’s too strong. We need to even buy blood tonic. We are admonished to take drugs regularly but without food or money it is difficult to take drugs. So, we have to go around an find some jobs to generate money. So, they should add small food or small money. Also, to make things better, they should give us our own special doctors not to share general OPD. Doctors should know our problems. This area should be enclosed with pharmacies so we can do everything here.” (Client #18 at an IDI)

“The help should be financial to support me.” (Client #19 at an IDI)

“If they can solve the problem of you visiting the hospital for medication all the time. They should extend the dates that we come for the drugs.” (Client #2 at an IDI)

“What bothers us now is defaulting, and for many food and money is an issue. We need everything that we can call our own doctors and place to prevent us from hiding from other people. There should be education for the general public because they don’t understand the condition. Education at churches so that pastors can refer people to the clinics for care because I have situation like that where a certain girl died because she taught it was spiritual and remained at the church. Eventually she died.” (Client #21 at an IDI)

4.6 Chapter summary
The chapter presents the results obtained from in-depth interviews with study participants. In the study, major themes that were generated were:

Perception of policy makers regarding sustainability, including funding challenges, strength and weaknesses of the joint HIV/TB programme and some recommendations. Also, factors affecting service providers’ fidelity to guidelines as well as their recommendations for better service delivery was also explored. Finally, the perceptions of clients regarding disease and treatment services, their satisfaction and dissatisfaction
with the services received. Further, their challenges faced with receiving care and their recommendations for better service delivery was identified. A discussion of the findings would be done in the next chapter.
CHAPTER 5
DISCUSSION OF RESEARCH FINDINGS

5.1 Introduction
In this chapter, the research findings would be discussed in detail under the themes that were generated based on the research objectives and questions. The limitations of the study would also be discussed in this chapter.

5.3 Policy Makers’ Perception of Sustainability of the Joint HIV/TB Control Programme
In this section, findings of the study that support the question, ‘what are the policy makers’ perception of sustainability of the joint HIV/TB treatment programme?’ would be discussed.

According Proctor et al. (2011), sustainability refers to the degree to which a newly implemented intervention is maintained or institutionalized. The two policy makers interviewed under this theme were of the view that the joint HIV/TB control programme was sustainable due to the fact, since both HIV and TB affect the immune system, it is easier and efficient to manage them together. Also, policy makers were of the view that since co-morbidity of the diseases was common, it would be more efficient to use same human, financial and other resources to manage them. The fact that TB and HIV both affect the immune system and also usually the same individual makes segregation of services cumbersome and ineffective. Thus, integration of TB and HIV services is necessary. This is because, separation of services usually results in delayed TB diagnosis, thus, prolonging the period of infectiousness for HIV/TB co-infected individuals and a risk to other PLHIV attending the clinic (Getahun et al., 2010b). Integrating the services is beneficial because, it would improve case-finding and diagnosis, treatment cascades
and outcomes for those infected with either or co-infected with both diseases, buy providing a one-stop shop for clients. This could prevent duplication of efforts and resource wastage and lead to optimal outcomes. This clearly indicates that the joint TB/HIV control programme can be maintained and institutionalized throughout the designated period of time as stated in the policy guidelines by the GHS, leading to the programme’s success. Indeed, Amo-Adjei (2013), found similar results in his study to assess policy makers’ perspectives of sustainability of TB control in Ghana. Effective integration of HIV and TB services, as well as other diseases with similar characteristics will thus help reduce the public health burden of those diseases.

A sub-theme was however generated from the interviews where policy makers identified some challenges to sustainability of the joint HIV/TB programme; they were of the view that implementation issues such as the lack of human resources and funding challenges were a threat to sustainability. Funding challenges that existed were that, donor funds were dwindling and funds from Government of Ghana (GoG) were not flowing as they used to. The identified challenges could undermine the sustainability of the programme, preventing its success. This may be because allocation of funds for preventive and Public Health purposes by GoG is not deemed as important as curative and medical purposes in Ghana. Also dwindling donor funds may be due to donor fatigue. Inadequate funds could result in inadequate drug and logistic supply, poor infrastructure, lack of enablers for clients and sub-optimal monitoring and evaluation. This could lead to reduced fidelity on the part of service providers, reducing adherence to guidelines. It could also lead to unmet medical need and delayed care (Legido-Quigley et al., 2016) leading to sub-optimal satisfaction levels for clients which could prevent patronage of integrated
services. These identified challenges tally with reports by Agarwal, Shastri, & Nagaraja, (2016), Ghana Health Service (2014), Amo-Adjei (2013b) and Amo-Adjei (2013).

The lack of human resources could be as a result of the fact that working and dealing with HIV and TB patients is not seen as attractive by many health workers, and seen as a job that comes with many risks such as contracting the diseases. Meskó, Hetényi, & Győrffy (2018) identifies the health system personnel crisis as due to one of these three key problems: global shortages, aging and exhaustion of workforce and an increased demand for chronic care. According to World Health Organization (2016), a health system relies on the availability of health workers for effective operations and subsequently, the lack of the human resource could mean reduced accessibility to the needed care and poor quality of care for clients. These could reduce client satisfaction which in turn undermine patronage of integrated services. Also, lack of motivation and commitment could be a cause of the inadequate human resource, and a study by Kaji, Thi, Smith, Charunwatthana, & Nosten (2015) reports that these are a threat to TB control.

Though institutionalization of the programme is feasible and the programme can be maintained as perceived by the policy makers, the identified barriers to sustainability could be the causes of unmet targets. Unmet targets are identified by the WHO and GHS facts sheets(Ghana Health Service, 2018;World Health Organization, 2018a). According to Agarwal et al. (2016), the idea of TB prevention and reducing TB burden in PLHIV is not well recognized in private sectors and poor public-private partnership has also been identified as a constraint to TB control (Amo-Adjei, 2013b). Thus interventions for HIV and TB should be made to look urgent and relevant to the private sector, so that, as part
of their social responsibility, they invest funds into HIV and TB control. Also, partnerships between the GoG and private business groups must be encouraged. Cost-benefit analysis, should thus be done for GoG and other private enterprises know the benefit of investing in preventive and public health avenues. Also, service providers in the HIV and TB sector could be given incentives, safe working conditions, improved infrastructure, among others to motivate them and others who are not in the sector as well. Policy-makers in charge of health systems need to explore what is not working and what could be done to make the health systems more resilient, sustainable and, subsequently, equipped to mitigate the challenges to TB HIV control. This could improve sustainability and eventually facilitate the meeting of targets.

5.3 Challenges to HIV and TB Care Givers’ Fidelity to Guidelines for Integration of HIV/TB Control Programme

In this section, service providers’ fidelity to guidelines as stated in the HIV/TB joint treatment policy would be discussed. Also, the findings that answer the research question “What are the factors affecting HIV and TB care givers’ fidelity to guidelines stated in the joint of HIV/TB treatment programme?” would be discussed.

According to Ghana Health Service (2014), the guidelines for service delivery in context of the joint TB/HIV treatment programme are;

- Routine offer of HIV testing and counselling (provider-initiated)
- Early detection and syndromic management of sexually transmitted infections (STIs)
- HIV prevention measures
- Treatment and prophylaxis of opportunistic infections (OIs)
- Drug adherence counselling
- Intensive TB case finding and treatment using DOT
- Contacts and partner tracing
• Nutritional assessment, counselling and support (NACS)
• Family planning and support
• Psycho-social support
• Referral to community TB/HIV services
• Assessment and referral of co-infected individuals for the consideration of ART at the nearest ART centre.

This study identified that service providers adhere to most of the guidelines in the policy document. The adherence increases fidelity, which aids in the success of the programme by helping to meet the targets set in the policy guidelines. However, the guidelines which were usually not adhered to were; screening and management of STIs, provision of Family Planning (FP) services and provision of nutrition support services. Integration of HIV and TB services was not fully established leading to inter-referrals between TB and HIV units. These gaps in fidelity may undermine the success of the programme by preventing targets from being met. According to Askew & Berer (2003), approximately 80% of all HIV incidences are sexually transmitted and 10% through mother-to-child-transmission (MTCT). Without FP and STI services available at HIV and TB units also, the spread of HIV through sexual contacts and MTCT could be increased leading to increased prevalence. Also, the inter-referral may cause many lost to follow ups (LTFU) if the clients are not supervised by the referring unit. According to Okot-Chono et al. (2009), limited TB-HIV inter-clinic referral, poor service integration is a challenge to collaborative TB and HIV services and this could slow down the rate of achieving targets in the context of Ghana’s HIV/TB collaborative programme. Also, full integration of services, where HIV and TB service are provided by the same service providers at the place is considered the most efficient and effective way to provide TB-HIV services, and
it is appropriate for settings with high TB and HIV prevalence (Kalonji & Mahomed, 2019).

Improving the capacities of the HIV and TB units to provide FP and STI services, coupled with full integration of services may help improve fidelity, leading to the success of the programme.

Health service providers identified various challenges that affected their fidelity to guidelines, which in turn prevent targets from being met;

From the interviews, health care providers identified financial constraint as a challenge to their fidelity to the guidelines. Financial constraint is the main factor affecting tracing of clients’ contacts and implementing DOTS for MDR-TB clients. This is because, service providers need funds for transport for homes visits, trace contacts and administer drugs. Without the funds, home visits and implementation of DOTS for MDR-TB would be an impossible task for service providers which would subsequently affect patients’ diseases progression or cure rates. Periods of infectiousness of TB would increases, thereby increasing transmission of the diseases and preventing targets from being met. These findings corresponds to reports by (Amo-Adjei, 2013b) who identified insufficient funds as an obstacle to TB control. Also, the findings are supported by reports from Kaji et al. (2015) and Wannheden et al., (2013).

Other factors identified were inadequate logistics and lack of infrastructure. Fidelity to guidelines is undermined due to this, and subsequently prevents targets from being met. Poor infrastructure means that structures to be used by service providers to provide care are not available. Weak infrastructure overstrains the health systems and this could result
in service provider exhaustion (Geng et al., 2016) and long waiting times (Wanyenze et al., 2010). Exhausted service providers usually lack the motivation to provide adequate service and long waiting times reduce patient satisfaction. This in the long run undermine service provider fidelity and patient retention in care. The inadequate infrastructure may lead to overcrowding may also deter other health workers from wanting to work in that particular department for the fear of contracting the diseases. Again, inadequate infrastructural space could mean that, counselling sessions may not be efficient since service providers would have to move outside the facility to prevent other clients from hearing what the service provider had to say. Amo-Adjei, (2013b) reported that service providers identified quality of physical infrastructure as an obstacle to TB control. The findings are also in conformity with a study by Gebregziabher, Yimer, & Bjune (2016) and (Kalonji & Mahomed, 2019).

Improvement in infrastructure could motivate health workers and clients alike to provide and seek care respectively. Financial aids would help service providers go on house visits and trace clients’ contacts as they should. This would improve fidelity, without which, targets would not be met and the treatment programme would be a failure.

5.4 Perceptions of HIV and or/TB Infected Patients Receiving Care Regarding Integrated HIV/TB Control Programme

In this section, the various perceptions of clients regarding treatment services and disease status and how they affect their receiving of care would be discussed.

From the study, it was identified that, clients believed that their diseases were caused by spiritual forces. Though this did not deter them from seeking medical treatment, it caused them to seek treatment rather late. Most of them roamed many prayer camps and only
sought medical care upon recommendation or when their situations worsened. According to Moshabela et al. (2017), this could lead to delayed access to care or interruption of care due to perceived availability of alternative methods. Also, the confidence that prayer can remedy HIV may also pose a challenge to ART adherence. This increases their period of infectiousness leading to the increased transmission of the diseases, which is a threat to TB and HIV control. It will affect the joint treatment programme by preventing targets in the policy guidelines from being met because diagnosis and early initiation of treatment would be delayed. Chimbatata, Zhou, Chimbatata, & Xu (2017), found out similar results in a study where clients were not seeking early care due to their religious and spiritual beliefs, which hindered timely diagnosis of TB. A study by Zou et al. (2009) in a rural setting reported that clients indicated HIV infection as a punishment from God. This however was not the case of participants in this study. This could be due to the urban nature of the study sites used in this study. Public education on causes and risk factors for HIV and TB as well as the relevance of early diagnosis and treatment could reduce the effect of spiritual perceptions of the diseases and increase testing and early initiation of medication. This could propel the rates of meeting targets.

Also, clients perceived integration of TB and HIV services as not relevant since they did not want to be mixed with others and seen by other people. Clients also thought that since TB is airborne, its patients should be separated. These perceptions might hinder patronage of integrated services and undermine the success the joint programme. The fear of contracting TB and the fear of being seen by other people will deter clients from patronizing a fully integrated HIV and TB services. However, full integration has been identified as the most effective way of dealing with the menace of HIV and TB. The
perceptions clients had could be because most of them did not know the relationship between HIV and TB as well as the importance of the service integration. This finding correlates with findings from a study by Sinai & Kinkel (2016) who found out that participants did not approve integration of HIV and TB services due to the fear of contracting the infectious Tb. Intensifying education and counselling is thus relevant so that TB and HIV clients are made aware of the relationship between HIV and TB and made to see the benefits of integrating services to allow them patronage better a well-integrated TB and HIV services.

5.5 Satisfaction of HIV and/ or TB Patients Receiving Health Care

In this section, the satisfaction and dissatisfaction of clients would be discussed. Also, their challenges to retention in care would be discussed.

Generally, clients were satisfied with the care being received at the facility. They were satisfied with the way service providers treated and communicated with them. They were satisfied about the confidentiality kept by the service providers. According to Chimbindi, Bärnighausen, & Newell (2014), satisfaction can be defined as perceived fulfillment of the clients’ requirements, and client satisfaction has been identified as a determining factor for uptake of treatment, devotion to and retention in care. It is a significant health system outcome and as such, the fact that clients were generally satisfied means their adherence to treatment and retention in care, which would contribute to the success of the HIV/TB joint programme. These findings correspond with a study by Hailemeskal, Sereda, Latypov, Kiriazova, & Avaliani (2019) which found out that median scores for user-friendliness, privacy and confidentiality and overall satisfaction ranged from 0.75 to 1 out of 1. Also, the findings are in concordance with a study in Nigeria by Anosike et al.
(2019) to assess clients’ satisfaction with HIV treatment and services. The study found out that about 90% of clients were satisfied with overall quality of care. In a study by Chimbindi, Bärnighausen, & Newell (2014), however, which was in a rural setting, it was found out that, clients agreed that some staff did not treat patients with sufficient respect. This does not conform to this study’s finding, probably due to the urban nature of the study sites. Thus, effective communication, coupled with maintaining confidentiality could increase patient satisfaction and if practiced in all HIV and TB facilities, could increase patient satisfaction and subsequent retention in care leading to the success of the joint HIV/TB treatment programme.

Various challenges however, were threats to clients’ retention in care. Patients stated emphatically that financial constraints, stigma from family especially and long waiting times deterred them from seeking care. This can reduce client satisfaction and subsequent retention in care, hindering the success of the joint HIV-TB treatment programme.

Financial constraints and lack of enablers such as food supplements could prevent clients from attending clinics (Bichha, Karki, Jha, Salhotra, & Weerakoon, 2018) and adhering to their drugs schedules. Clients may not able to afford transportation fares every clinic day and afford balanced diets to be taken along with the drugs. Therefore, provision of modest incentives can help improve the successes of public health interventions in a classical poor, urban population which is the case of the study participants. Also, due to stigma attached to HIV and TB, clients did not want to seek care close to them, with the fear of being seen by neighbours. Thus, they had to travel far to seek care. The fare they had to pay to travel from their place of stay, drained them financially and sometimes deterred them from visiting the facility. This could be a huge obstacle to receiving care.
especially for TB patients who are on DOTS. According to Zou et al. (2009), HIV infection continues to convey profound social and emotional costs; stigma, denial, and depression. These can undermine clients’ retention in care and cause defaulting from treatment. Defaulting remains a challenge for many tuberculosis programmes and may increase the period of infectiousness of the clients. The findings are supported by a study by Chimbatata et al. (2017) in Malawi. Again, due to the delay in the arrival of drugs and few numbers of service providers, clients usually have to wait for long hours to be served. Long waiting times have however been linked to low patient satisfaction, poor drug adherence, skipped appointments and a lower level of service provider morale. This results in inefficient treatment especially in high burden settings (Yehia et al., 2015; Chimbindi et al., 2014). Long waiting times may also exhaust clients and prevent some of them from going back to their jobs to be able to generate income for themselves. This may eventually lead to financial constraints which deter clients from seeking care. The results tally with studies by Chimbatata et al. (2017) in Malawi and Naburi et al. (2016) in Tanzania. Material resource shortage which caused long waiting times for clients were also identified by Chimbatata et al. (2017) as a barrier to TB care retention. Prolonged waiting time was again identified by Phetlhu, D. R., Mngcozelo, S., Bimerew, M. S. & Phillips (2017) as an impediment to quality of care experienced by HIV and TB co-infected clients.

According to Amo-Adjei & Kumi-Kyereme (2013), myths and fallacies about TB can serve as a blockade to efforts aimed at reducing stigmatization of people infected HIV and TB. Therefore, understanding the causes of these misconceptions is central to improving education by the national control and other preventive interventions to stop
stigmatization of HIV and TB clients. The absence of stigma would cause clients to seek care freely to aid the fight against TB and HIV. Also, financial and other forms of support such as food commodities and other enablers, consistency in drug flow, and an infrastructure that has all the necessary resources, should be made available to clients to increase retention in care and the subsequent elimination of HIV and TB as a public health issue.

5.6 Limitations of the study

Findings from this study cannot be generalized to the whole population of HIV, TB and co-infected clients in the whole of Ghana due to the application of qualitative methods in the research design. As stated by Hammarberg, Kirkman, & De Lacey (2016), in this study, emphasis on experiences, meanings and perspectives was more important than numbers which is relevant rather in quantitative research. For generalization of findings for the whole of Ghana, quantitative research methods should be employed in assessing sustainability of, fidelity to and satisfaction level of clients in context of Ghana’s joint HIV/TB programme. Due to the one-month period allocated for data collection, however, quantitative methods could not be used in this study.

Also, due to time constraints, only two facilities, which are in urban settings were included in the study. Findings could have been different if a different setting, say rural and higher number of facilities were included. According to Alhassan & Nketiah-Amponsah (2016) rural settings usually more deprived as compared to urban centres where most infrastructure is concentrated. Thus, a widening of the research setting would be beneficial in capturing more dire challenges and experiences by service
providers and clients to represent a broader picture of bottlenecks in reaching targets in context of joint HIV/TB programme.

5.7 Chapter Summary

Findings from this research were discussed in this chapter. Generated themes from the in-depth interviews in relation to study objectives, backed by significant literature were discussed. Conclusions drawn from research findings and recommendations for policy, practice and future research would be presented in the next chapter.
CHAPTER SIX
CONCLUSIONS AND RECOMMENDATIONS

Introduction
In this chapter, conclusions drawn from the study would be highlighted based on results and study objectives. Various recommendations for policy and further research would also be highlighted.

6.1 Conclusions
Policy makers are of the view that the HIV/TB joint programme could be sustainable. Financial challenges and inadequate human resource raised by the policy makers undermine the sustainability of the programme.

Fidelity to policy guidelines is incomplete. While service providers are committed to some guidelines for integration, challenges affecting their complete fidelity to guidelines are; inadequate funds, lack of logistics, poor working conditions and inadequate infrastructure

TB and HIV clients believe that spiritual forces are responsible for their diseases. They also of the view that TB and HIV services should be segregated.

HIV and TB clients are generally satisfied with services being rendered to them by service providers. Financial constraints, lack of enablers such as food, stigma and long waiting periods are however, threat to clients, retention in care.
6.2 Recommendations

To improve sustainability:

- HIV and TB policy makers should make the Government of Ghana understand the importance of investing into HIV and TB control programmes to help increase fund allocation from Government of Ghana.

- Also, the urgency of the burden that HIV and TB confers on society should be explained by HIV and TB policy makers to private sector and associated business groups to initiate or increase financial support from these sectors to aid TB and HIV elimination.

- To address inadequate workforce, more community health officers should be trained and deployed to various communities with high burden of HIV and TB to relieve workload of facility-based service providers.

- HIV and TB Policy-makers need to explore new ways of funding and improving upon the existing workforce to make the TB and HIV treatment programmes more robust, sustainable and, ultimately, ready to meet the challenges of the burdens of the diseases, and address other identified challenges.

To increase fidelity to guidelines:

- The MoH, and GHS should find effective ways of motivating service providers for HIV, TB and other diseases of public health importance. This would enable service providers commit fully to their jobs. Infrastructure at the various units should be improved to ensure service providers safety and comfort for effect service delivery.
• Funds, Logistics such as drugs and enablers for clients should be made a priority during funds allocation by GHS and GoG. This ensures that service providers are adequately enabled to carry out their duties in relation to policy guidelines 

To enhance Clients’ satisfaction and retention in care:

• There should be public education on the importance of early testing and seeking early treatment, and treatment options available for HIV and TB. This will help shorten the period of infectiousness and subsequently reduce incident cases of TB and HIV. It will also reduce stigma associated with the diseases.

• Due to the fact that seeking health care drains clients financially, and retention in care is beneficial to the society, Socio-economic empowerment and support, in the form of incentives, financial aid and supply of enablers such as food and related commodities for clients should be made a priority to ensure that financial hardships do not deter clients from visiting facilities.

• Policies and laws encouraging partnerships with spiritual healing centres and health facilities should be developed to ensure referrals from the healing centres to health facilities upon identification of early symptoms of HIV and TB.

For further research,

• Researchers should change or widen settings (to include rural) increase the number of facilities involved in the study and include more policy makers at district and sub-district levels.
Again, mixed methods research should be employed. This could help gain more data for the authentication of findings, and also for the generation of a clearer picture in a similar study, than a single method of research can yield.
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APPENDIX A: PARTICIPANTS’ INFORMATION FOR CLIENTS

Title of Study: ASSESSING IMPLEMENTATION OUTCOMES OF JOINT HIV/TB PROGRAMME IN THE ACCRA METROPOLIS: A QUALITATIVE STUDY

Introduction: I am Priscilla Kyerewaa Okomeng, a Master of Public Health student at the College of Health Sciences, University of Ghana, Legon, Accra. You can contact me on phone on 0501376432 and through email: pokomeng@st.ug.edu.gh at the school of Public Health, University of Ghana, Legon.

Background and Purpose of research: As partial fulfilment of my academic work, I am conducting a qualitative research on implementation outcomes of joint HIV/TB programme in the in your municipality and I am requesting your participation.

TB has been identified to be a leading cause of early death in among people living with HIV (PLHIV) in sub-Saharan Africa (SSA) and HIV has emerged as one of the key factors hindering global TB control. Separation of HIV and TB services negatively impacts the quality of care due to the syndemic nature of the diseases. The aim of the WHO concerning the dual epidemic of TB and HIV in endemic countries is to improve treatment and cure through the Directly Observed Therapy, Short Course (DOTS) strategy and through effective collaboration between the two disease-control programmes. In Ghana, collaborative HIV/TB services have been incorporated into health services since 2007. In SSA, although there are many HIV/TB intervention programmes, structural, contextual and individual factors prevent targets from being met. Evaluating interventions through assessment of implementation outcomes: acceptability, adoption, appropriateness, feasibility, fidelity, implementation cost, coverage, and sustainability has become very handy and will serve as indicators of the success of implementation. This research thus seeks to assess perceptions of sustainability by policy makers, fidelity of implementers and satisfaction level of beneficiaries in the context of TB/HIV collaborative treatment programmes. I am interested in knowing whether you are satisfied with services you are receiving or not. Your personal opinion would help me to come up with recommendations that would help improve quality of care received by HIV/TB co-infected patients in your district and Ghana as a whole.

Nature of research: This research is a qualitative study. In this research, I am interested in knowing whether you are satisfied with services you are receiving or not as a patient. About the 12 patients in your facility would be interviewed. Your personal opinion would help me to come up with recommendations that would help improve quality of care received by HIV/TB patients in your district and Ghana as a whole. Conversations will be audio-taped; any information given will be kept confidential and used for academic purposes only. Your name will not be mentioned in the final report and information you provide would be grouped with others and stored on a pass-word protected device. The ID codes given will be used for identification and to aid data analysis. Access to the data
would be limited to the principal investigator and two of the assistants and would be destroyed after five years.

Participants involvement
Duration /what is involved: I will be carrying out an in-depth interview which will involve audiotaping our conversations. The interview will take a maximum of an hour of your time. Your age and other personal information would be required and a code given to you for easy identification and data management. The interview would be done at your own pace and convenience.

Potential Risks: The interview may cause a little emotional discomfort; the purpose however is not to upset you.

Benefits: Directly, there may not be any immediate benefits to you as a person for participating. Information you provide, however, would help me come up with recommendations that would improve the quality of care of HIV/TB patients in your municipality and Ghana as a whole.

Costs: You will incur no costs throughout the study period.

Compensation: You will receive a mug and a plate as a compensation for your time spent.

Confidentiality: Any information given will be kept confidential and used for academic purposes only and would not affect the way you receive care. Your name will not be mentioned in the final report and information you provide would be grouped with others and stored on a pass-word protected device. Access to the data would be limited to the principal investigator and two of the assistants, and would be destroyed after five years.

Voluntary participation/withdrawal: Participation is voluntary. Any request to opt out during the interview would be granted without it having any effect on the care that you receive; your responses however could still be used. You are free to ask any questions before and/or after the interview.

Outcome and Feedback: Results obtained and recommendations made from this study will be disseminated to policy makers to enable effective remodeling of HIV/TB treatment programmes to help improve quality of care received by HIV/TB patients. A report would also be sent to the Ghana Health Service, Ethics Review Committee. You will however not receive any direct feedback. A manuscript may also be published in a peer reviewed journal.

Feedback to participant: There would be no direct feedback to you as a participant. However, information given to policy makers will help improve the quality of care you are receiving at your facility.

Funding information: This research will be funded by the world Health Organization Tropical Disease Research (WHO TDR).
Sharing of participants Information/Data: Data and information obtained from this study will be purposefully used for academics and publications. Notes taken on the field and audio-tapes will be kept under lock and key in cabinets where only PI will have access to. All data and information except academic booklets will be destroyed after five years.

Provision of Information and Consent for participants

A copy of the Information sheet as well as consent forms will be given to you after it has been signed or thumb-printed to keep.

Who to Contact for Further Clarification/Questions: If you have any questions or wish to seek further explanations on study operational issues and clarification, the study PI should be contacted:

Principal Investigator: Priscilla Kyerewaa Okomeng

School of Public Health, University of Ghana, Legon

Telephone: 0501376432

Email: pokomeng@st.ug.edu.gh.

At any point in time, if you feel that your rights have been violated, you may contact the Ethical Review Committee Administrator, Ms. Hannah Frimpong between the hours of 8am to 5pm on 0243235225 or email address: Hannah.Frimpong@ghs.org.
PARTICIPANT CONSENT FORMS-CLIENTS

STUDY TITLE: ASSESSING IMPLEMENTATION OUTCOMES OF JOINT HIV/TB PROGRAMME IN THE ACCRA METROPOLIS: A QUALITATIVE STUDY

PARTICIPANTS’ STATEMENT
I acknowledge that I have read or have had the purpose and contents of the Participants’ Information Sheet read and that all questions have been satisfactorily explained to me in a language I understand (English / Ga / Twi). I fully understand the contents and any potential implications as well as my right to change my mind (i.e. withdraw from the research) even after I have signed this form.

May I have your permission to record the foregoing conversations? Yes ☐ No ☐

I voluntarily agree to be part of this research.

Name or Initials of Participant…………………………………………………………

Participants’ Signature ………OR Thumb Print………… OR Mark ( )
Date:…………………………………….

INTERPRETERS’ STATEMENT

I interpreted the purpose and contents of the Participants’ Information Sheet to the afore named participant to the best of my ability in the language (English / Ga / Twi) to his proper understanding.

All questions, appropriate clarifications sort by the participant and answers were also duly interpreted to his/her satisfaction.

Name of Interpreter……………………………………

Signature of Interpreter…………………………
Date:…………………………………………

Contact Number: ……………………………
STATEMENT OF WITNESS

I was present when the purpose and contents of the Participant Information Sheet was read and explained satisfactorily to the participant in the language, he/she understood (English /Ga /Twi ).

I confirm that he/she was given the opportunity to ask questions and seek clarifications and same were duly answered to his/her satisfaction before voluntarily agreeing to be part of the research.

Name: ………………………

Signature……………. OR Thumb Print …………. OR Mark(              )………………..

Date: ……………………………

INVESTIGATOR STATEMENT AND SIGNATURE

I certify that the participant has been given ample time to read and learn about the study. All questions and clarifications raised by the participant have been addressed.

Researcher’s name…………………………………………

Signature …………………………………………………

Date………………………………………………………….
APPENDIX B: PARTICIPANTS’ INFORMATION FOR SERVICE PROVIDERS

Title of Study: ASSESSING IMPLEMENTATION OUTCOMES OF JOINT HIV/TB TREATMENT PROGRAMME IN THE ACCRA METROPOLIS: A QUALITATIVE STUDY.

Introduction: I am Priscilla Kyerewaa Okomeng, a Master of Public Health student at the College of Health Sciences, University of Ghana, Legon, Accra. You can contact me on phone on 0501376432 and through email: pokomeng@st.ug.edu.gh at the school of Public Health, University of Ghana, Legon.

Background and Purpose of research: As partial fulfilment of my academic work, I am conducting a qualitative research on implementation outcomes of joint HIV/TB treatment programme in your municipality and I am requesting your participation.

TB has been identified to be a leading cause of early death in among people living with HIV (PLHIV) in sub-Saharan Africa (SSA) and HIV has emerged as one of the key factors hindering global TB control. Separation of HIV and TB services negatively impacts the quality of care due to the syndemic nature of the diseases. The aim of the WHO concerning the dual epidemic of TB and HIV in endemic countries is to improve treatment and cure through the Directly Observed Therapy, Short Course (DOTS) strategy and through effective collaboration between the two disease-control programmes. In Ghana, collaborative HIV/TB services have been incorporated into health services since 2007. In SSA, although there are many HIV/TB intervention programmes, structural, contextual and individual factors prevent targets from being met. Evaluating interventions through assessment of implementation outcomes: acceptability, adoption, appropriateness, feasibility, fidelity, implementation cost, coverage, and sustainability has become very handy and will serve as indicators of the success of implementation. This research thus seeks to assess perceptions of sustainability by policy makers, fidelity of implementers and satisfaction level of beneficiaries in the context of TB/HIV collaborative treatment programmes

Nature of research: This research is a qualitative study. In this research, I am interested in knowing the factors and/challenges affecting how well you go by the guidelines as stated in joint HIV/TB programme as to how to deliver care. About 6 health care providers would be interviewed. Your personal opinion would help me to come up with recommendations that would help policy makers consider the factors and challenges mentioned for redesigning of feasible interventions and policies. Conversations will be audio-taped; any information given will be kept confidential and used for academic purposes only. Your name will not be mentioned in the final report and information you provide would be grouped with others and stored on a pass-word protected device. The ID codes given will be used for identification and to aid data analysis. Access to the data
Participants involvement

Duration /what is involved: I will be carrying out an in-depth interview which will involve audiotaping our conversations. The interview will take a maximum of an hour of your time. Your age and other personal information would be required and a code given to you for easy identification and data management. The interview would be done at your own pace and convenience.

Potential Risks: The interview may cause a distraction from work and some form of discomfort; the purpose however is not to upset and distract you from your daily work schedules.

Benefits: Directly, there may not be any immediate benefits to you as a person for participating. Information you provide, however, would help me come up with recommendations that would inform better policies and feasible interventions taking into consideration health worker concerns.

Costs: You will incur no costs throughout the study period.

Compensation: You will receive a mug and a plate as a compensation for your time spent.

Confidentiality: Any information given will be kept confidential and used for academic purposes only. It will not affect your position in any way. Your name will not be mentioned in the final report and information you provide would be grouped with others and stored on a pass-word protected device. Access to the data would be limited to the principal investigator and two of the assistants, and would be destroyed after five years.

Voluntary participation/withdrawal: Participation is voluntary. Any request to opt out during the interview would be granted without it having any effect on your job or status; your responses however could still be used. You are free to ask any questions before and/or after the interview.

Outcome and Feedback: Results obtained and recommendations made from this study will be disseminated to policy makers to enable effective remodeling of HIV/TB intervention programmes to help increase sustainability of such interventions, increase fidelity on the part of service providers and to improve quality of care received by HIV/TB patients. A report would also be sent to the Ghana Health Service, Ethics Review Committee. You will however not receive any direct feedback.

Feedback to participant: There would be no direct feedback to you as a participant. However, information given to policy makers will help take into consideration health worker concerns when designing interventions and policies.
Funding information: This research will be funded by the World Health Organization Tropical Disease Research (WHO TDR).

Sharing of participants Information/Data: Data and information obtained from this study will be purposefully used for academics and publications. Notes taken on the field and audio-tapes will be kept under lock and key in cabinets where only PI will have access to. All data and information except academic booklets will be destroyed after five years.

Provision of Information and Consent for participants

A copy of the Information sheet as well as consent forms will be given to you after it has been signed or thumb-printed to keep.

Who to Contact for Further Clarification/Questions: If you have any questions or wish to seek further explanations on study operational issues and clarification, the study PI should be contacted:

Principal Investigator: Priscilla Kyerewaa Okomeng
School of Public Health, University of Ghana, Legon
Telephone: 0501376432
Email: pokomeng@st.ug.edu.gh

At any point in time, if you feel that your rights have been violated, you may contact the Ethical Review Committee Administrator, Ms. Hannah Frimpong between the hours of 8am to 5pm on 0243235225 or email address: Hannah.Frimpong@ghsmail.org.
PARTICIPANT CONSENT FORMS-HEALTH SERVICE PROVIDERS

STUDY TITLE: ASSESSING IMPLEMENTATION OUTCOMES OF JOINT HIV/TB PROGRAMME IN THE ACCRA METROPOLIS: A QUALITATIVE STUDY

PARTICIPANTS' STATEMENT

I acknowledge that I have read the purpose and contents of the Participants’ Information Sheet and that all questions have been answered in a language I understand (English). I fully understand the contents and any potential implications as well as my right to change my mind (i.e. withdraw from the research) even after I have signed this form.

May I have your permission to record the foregoing conversations?  Yes ☐  No ☐

I voluntarily agree to be part of this research.

Name or Initials of Participant………………………………………………………………………………

Participants’ Signature ………

Date:…………………………

INVESTIGATOR’S STATEMENT AND SIGNATURE

I certify that the participant has been given ample time to read and learn about the study. All questions and clarifications raised by the participant have been addressed.

Researcher’s name…………………………………………………………

Signature ……………………………………………………………
APPENDIX C: PARTICIPANTS’ INFORMATION FOR POLICY MAKERS

Title of Study: ASSESSING IMPLEMENTATION OUTCOMES OF JOINT HIV/TB TREATMENT PROGRAMME IN THE ACCRA METROPOLIS: A QUALITATIVE STUDY

Introduction: I am Priscilla Kyerewaa Okomeng, a Master of Public Health student at the College of Health Sciences, University of Ghana, Legon, Accra. You can contact me on phone on 0501376432 and through email: pokomeng@st.ug.edu.gh at the school of Public Health, University of Ghana, Legon.

Background and Purpose of research: As partial fulfilment of my academic work, I am conducting a qualitative research on implementation outcomes of joint HIV/TB treatment programme in the Accra Metropolis and I am requesting your participation as a policy maker.

TB has been identified to be a leading cause of early death among people living with HIV (PLHIV) in sub-Saharan Africa (SSA) and HIV has emerged as one of the key factors hindering global TB control. Separation of HIV and TB services negatively impacts the quality of care due to the syndemic nature of the diseases. The aim of the WHO concerning the dual epidemic of TB and HIV in endemic countries is to improve treatment and cure through the Directly Observed Therapy, Short Course (DOTS) strategy and through effective collaboration between the two disease-control programmes. In Ghana, collaborative HIV/TB services have been incorporated into health services since 2007. In SSA, although there are many HIV/TB intervention programmes, structural, contextual and individual factors prevent targets from being met. Evaluating interventions through assessment of implementation outcomes: acceptability, adoption, appropriateness, feasibility, fidelity, implementation cost, coverage, and sustainability has become very handy and will serve as indicators of the success of implementation. This research thus seeks to assess perceptions of sustainability by policy makers, fidelity of implementers and satisfaction level of beneficiaries in the context of TB/HIV collaborative treatment programmes.

Nature of research: This research is a qualitative study. In this research, I am interested in knowing your perception of sustainability of the joint HIV/TB treatment programme. Your personal opinion would help me to come up with recommendations that would help other policy makers consider the factors, challenges and gaps mentioned for redesigning of sustainable HIV/TB interventions and policies. About 8 policy makers would be interviewed. Conversations will be audio-taped; any information given will be kept
confidential and used for academic purposes only. Your name will not be mentioned in the final report and information you provide would be grouped with others and stored on a pass-word protected device. The ID codes given will be used for identification and to aid data analysis. Access to the data would be limited to the principal investigator and two of the assistants and would be destroyed after five years.

**Participants involvement**

**Duration /what is involved:** I will be carrying out an in-depth interview which will involve audiotaping our conversations. The interview will take a maximum of an hour of your time. Your age and other personal information would be required and a code given to you for easy identification and data management. The interview would be done at your own pace and convenience.

**Potential Risks:** The interview may cause a distraction from work and some form of discomfort; the purpose however is not to upset and distract you from your daily work schedules.

**Benefits:** Directly, there may not be any immediate benefits to you as a person for participating. Information you provide, however, would help me come up with recommendations that would help other policy makers consider the factors, challenges and gaps mentioned for redesigning of sustainable HIV/TB interventions and policies.

**Costs:** You will incur no costs throughout the study period.

**Compensation:** You will receive a mug and a plate as a compensation for your time spent.

**Confidentiality:** Any information given will be kept confidential and used for academic purposes only and would not affect your status in any way. Your name will not be mentioned in the final report and information you provide would be grouped with others and stored on a pass-word protected device. Access to the data would be limited to the principal investigator and two of the assistants, and would be destroyed after five years.

**Voluntary participation/withdrawal:** Participation is voluntary. Any request to opt out during the interview would be granted without it having any effect on your job or status; your responses however could still be used. You are free to ask any questions before and/or after the interview.

**Outcome and Feedback:** Results obtained and recommendations made from this study will be disseminated to other policy makers and you to enable effective remodeling of HIV/TB intervention programmes to help increase sustainability of such interventions, increases fidelity on the part of service providers and to improve quality of care received by HIV/TB patients. A report would also be given to the Ghana Health Service, Ethics Review Committee.
Feedback to participant: Feedback would be brought to you in a form of a report. The information given and that obtained from other stakeholders would be disseminated to other policy makers including you.

Funding information: This research will be funded by the world Health Organization Tropical Disease Research (WHO TDR).

Sharing of participants Information/Data: Data and information obtained from this study will be purposefully used for academics and publications. Notes taken on the field and audio-tapes will be kept under lock and key in cabinets where only PI will have access to. All data and information except academic booklets will be destroyed after five years.

Provision of Information and Consent for participants

A copy of the Information sheet as well as consent forms will be given to you after it has been signed or thumb-printed to keep.

Who to Contact for Further Clarification/Questions: If you have any questions or wish to seek further explanations on study operational issues and clarification, the study PI should be contacted:

Principal Investigator: Priscilla Kyerewaa Okomeng
School of Public Health, University of Ghana, Legon
Telephone: 0501376432
Email: pokomeng@st.ug.edu.gh.

At any point in time, if you feel that your rights have been violated, you may contact the Ethical Review Committee Administrator, Ms. Hannah Frimpong between the hours of 8am to 5pm on 0243235225 or email address: Hannah.Frimpong@ghsmail.org.
PARTICIPANT CONSENT FORMS-POLICY MAKERS

STUDY TITLE: ASSESSING IMPLEMENTATION OUTCOMES OF JOINT HIV/TB PROGRAMME IN THE ACCRA METROPOLIS: A QUALITATIVE STUDY

PARTICIPANTS’ STATEMENT

I acknowledge that I have read the purpose and contents of the Participants’ Information Sheet and that all questions have been answered in a language I understand (English ).
I fully understand the contents and any potential implications as well as my right to change my mind (i.e. withdraw from the research) even after I have signed this form.

May I have your permission to record the foregoing conversations? Yes  No

I voluntarily agree to be part of this research.

Name or Initials of Participant………………………………………………………………………………

Participants’ Signature ………

Date:…………………………

INVESTIGATOR’S STATEMENT AND SIGNATURE

I certify that the participant has been given ample time to read and learn about the study. All questions and clarifications raised by the participant have been addressed.

Researcher’s name…………………………………………
APPENDIX D: IN-DEPTH INTERVIEW GUIDE FOR POLICY MAKERS

Id/Code: ……………………………………………

Good Morning! We are here to ask a few questions about the HIV/TB joint programme. We are interested in knowing your perception of sustainability of the programme. Tell them to answer all questions based on their experiences.

General Questions

1. Name ………………………………………

2. Sex: Male/female

3. Age /Range………………………………..

4. level of Education………………………………………….

5. Job title………………………………………….

6. Positions held………………………………………………..

7. Years of working experience…………………………….

Perception of Sustainability of Ghana’s HIV/TB Joint Programme

1. When did the joint HIV/TB programme kicked off?

2. What circumstances necessitated it?

3. What are the major aims stated in policy guidelines?

4. How receptive have the HIV/TB service providers and patients been?

5. So far, how much progress has been made? (probe on coverage, targets)

6. May I know the organization(s) which fund(s) the programme? Probe
7. Are there funding issues? Probe on the particular issues; be it shortage, delay, insufficiency, allocation, etc., how they affect sustainability and measures put in place to address the issues.

8. What measures have been put in place to ensure health care providers’ adherence to programme guidelines? Probe particularly on trainings for health care providers and data collection (for monitoring and evaluation)

9. In your view, what are the strengths and weaknesses of the programme? Probe on how these ensure or prevent sustainability.

10. Have you had any conflicts with other organizations involved? Probe on how best the conflict has affected the sustainability of the programme and how it is being resolved.

11. What do you think about the sustainability of the programme? Probe about what he/she thinks are the structures put in place to ensure sustainability.

12. What do you think are the factors/challenges affecting sustainability of this programme?

13. Can you suggest any interventions to increase sustainability?

14. Any comments?
Good Morning! We are here to ask a few questions about the HIV/TB joint programme. We are interested in knowing your challenges associated with service delivery. Tell them to answer all questions based on their experiences.

**General Questions**

1. Name ...........................................
2. Male/female......................................
3. Age /Range.......................................
4. level of Education................................
5. Job title.......................................... 
6. Positions held...................................
7. Years of working experience.........................

**Challenges with Fidelity to guidelines as stated in the joint HIV/TB treatment programme**

1. Have you ever heard about joint HIV/TB programme? If yes, probe on knowledge of guidelines and aims stated in the policy.
2. How did you receive it? Probe on positive or negative responsiveness
3. Have you ever received any training on how to deliver services in the context of joint HIV/TB programme? Probe on when and how frequent programmes are held
4. Do you offer to HIV/TB testing, counselling and treatment for your patients? Probe on reasons for doing so or not.
5. Are you able to detect and manage other STIs? Probe on reasons for doing so or not
6. Do you give treatment prophylaxis for any opportunistic infections? Probe on reasons for doing so or not.

7. Do you give patients counselling on drug adherence?

8. Do you have any way of tracing patients’ partner or other contacts? Probe on reasons for doing so or not

9. Is there any method for nutritional assessment, counselling and support? Probe on methods available, how it is done and reasons for doing so or not

10. Do provide family planning and support services for your patients? if yes, probe on which ones exist. If no, probe on reasons why

11. Do you give any non-medical support services? Probe on availability of psycho-social support services

12. Is there any community referral system? Probe on referrals to Models of Hope, whether it is done, and reasons for doing so or not.

13. What changes, if any, have occurred (in your department, in your job) that you think are a result of the new strategic plan? Probe on how it affects positively or negatively how care is delivered

14. In what areas have you achieved success? probe on coverage, drug adherence, reduced prevalence and incidence, cure rates any available data or reports to show progress.

15. What challenges /factors affect your ability to deliver care efficiently? Probe on factors affecting ability to go by the guidelines as stated in the programme guidelines; such as high patient-to-nurse ratio, increased work load, lack of training, lack of infrastructure and technologies, etc.
16. What are your recommendations on measures or structures to put in place to mitigate these challenges?

17. Anything else you might want say?
APPENDIX F: IN-DEPTH INTERVIEW GUIDE FOR HIV CLIENTS

Id/Code: .........................................................

Good Morning! We are here to ask a few questions about the HIV/TB joint programme. We are interested in knowing how you see the services delivered here and whether you are satisfied with the services or not. Tell them to answer all questions based on their experiences.

General Questions

1. Name .................................................
2. Male/female...........................................
3. Age/Range............................................
4. Level of Education...................................
5. Marital Status (Single/Married/Divorced/Separated/Widowed)
7. Occupation...........................................
8. Kind of house lived in (mud/wooden/block/brick)
9. How many people sleep in a room .................?

Perception about joint HIV/TB treatment services

1. How did you get to know your status? Probe on what encouraged testing or not.
2. How did you get to know the facility?
3. Can you explain what you think caused your disease? Probe on whether or not they think its spiritual or caused by microbes
4. Do you think treatment is important to treating/managing the illness? Probe on what the patient thinks is most important to curing their current state.
5. Since you started treatment, have you realized or been informed about any progress in your health? Probe on how the outcome of treatment has influenced his/her retention in care.

6. Do you think it is a good idea to combine HIV or TB services with any other service? Probe particularly on integration with TB, HIV, child health, reproductive health, ANC, etc.

7. Do you receive HIV and TB care separately in this facility? If no probe on how integrating of HIV and TB services has improved his/her health?

8. In your opinion, are the patients too many for service providers? Probe how the service provider-patient ratio affects their care?

9. Have you ever received care for this condition elsewhere (another facility)? How does it compare to the care you receive here? Probe on similarities and differences, whether the patient prefers the current or former and why.

10. Would you recommend this facility to a friend of family with this disease?

11. Anything else you want to add? comments? Suggestions, etc.?

**Satisfaction about service delivery**

1. What is the clinic open days and hours? Probe on whether patient is okay with it and reasons for dissatisfaction if any and any suggestions.

2. Do you have any problem with the distance from your place of stay to the health facility? If yes, probe on issues concerning the distance: cost, time spent to get to facility, transport systems (traffic), etc.
3. Do you usually have to queue for long periods of time to access care? Probe on patients’ problems with time spent with provider (doctor, nurse, pharmacist, lab scientist) and waiting time.

4. Do you have any problems with confidentiality with the service providers? Probe on what forms confidentiality is breeched; telling other health workers or patients about disease status, telling outsiders about disease status, addressing patients in a loud manner to the hearing of bystanders.

5. What do you think about the service providers’ competence? Probe on their perceptions on ability to provide skilled service or not.

6. How do you feel about the way the service providers treat you? Probe on satisfaction with how they are communicated with and attitudes shown to them.


8. Are you usually told to return another day to access service? Probe on problems with the availability of service providers?

9. What do you think about the capacities of the facilities in terms of drugs, technology, etc.?

10. What do you think about accessing a support system, be it financial, social, etc.? Probe on whether there exist such structures or he/she would prefer such; e.g. Models of Hope.

11. Are you discriminated based on your disease status? Probe on sources of stigma; whether from family, friends or service providers.
12. Are you generally satisfied with the services you receive? Probe on particular things he/she is satisfied with or not.

13. Any other issues you want to talk about? Probe on suggestions for better service delivery approaches.