## **Abstract of Master's Dissertation**

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Course	International Health	Name	Heri Aime Bitakuya	
	Development			
Thesis Title	Assessment of the implementation of TB/HIV Collaborative activities: A case study of Lufungula health zone in Kinshasa, Democratic Republic of the Congo (DRC)			

**Background:** According to WHO, the Democratic Republic of Congo (DRC) is one of the 20 high burden countries for TB/HIV co-infection, with an increased mortality rate due to this co-infection observed between 2014 and 2015 (from 8.4 to 21 per 100,000). The programmatic results on TB/HIV collaboration have also been showing lower performances for most indicators despite the establishment of the National Roadmap on TB/HIV collaboration in 2012 and its consequent funding through the first joint TB/HIV concept note by The Global Fund in 2015.

**Objective:** This study aimed at providing a snapshot on the level of implementation of TB/HIV collaborative activities recommended by WHO, while attempting to understand underlying reasons of inadequate implementation of these activities and identify factors associated with unfavorable TB treatment outcomes, in the case of Lufungula health zone in Kinshasa.

**Methods**: This case study was carried out based on a triangulation mixed-methods design, made of a cross-sectional quantitative strand concurrently conducted with a qualitative strand. A predesigned excel sheet enabled the extraction of aggregated data on TB/HIV indicators and desegregated data on TB treatment from HIV and TB registers used in facilities that offered these services between January 2015 and December 2017 in Lufungula health zone. In addition, TB infection control measures were assessed using a standard checklist administrated to healthcare providers.

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The qualitative component was made of in-depth interviews with key informants from the health zone's management team, healthcare providers from targeted facilities, community health workers and representatives of patient's support groups for adherence to treatment.

Result: In this study, six health facilities were visited in Lufungula health zone. Of these facilities, the three referral hospitals offered an integrated package of HIV and TB services, while the remaining health centers delivered only HIV services. Of 267 newly tested HIV-positive patients in the six facilities, from January 2015 to December 2017, none was offered isoniazid preventive therapy. Poor compliance to infection control measures was also observed in the three facilities offering integrated TB/HIV services (55%, 50% and 40% at Kabila, Lufungula and LNI referral Hospitals, respectively). Among the 2,919 patients enrolled for TB treatment, almost all knew their HIV status (98.9%) and 145 (5.0%) of those with known HIV status was found positive. Among HIV-associated TB patients recorded, provision of ART and co-trimoxazole was reported in 88.3% and 84.1% of cases, respectively. Poor dissemination of policies on TB/HIV collaborative activities among care providers and community actors, irregular funding for community activities and lack of essential drug supplies and commodities (especially INH) were the principal barriers to the implementation of TB/HIV collaborative activities. Additionally, stigma and a weak supporting system for treatment adherence were reported to interfere with optimal access to recommended TB/HIV collaborative services.

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Finally, treatment success rate among TB patients who completed TB treatment by end of December 2017 was 99.0% (n=2,478), among which 62.7% had completed treatment and 36.3% cured. Unfavorable treatment outcome was observed only in 26 (1.0%) TB cases. The age range of 65 years and above (aOR: 7.49, 95% CI:1.32-42.32) and HIV-positive status (aOR: 12.15, 95% CI:4.43-33.31 and aOR: 22.40, 95% CI:7.38-68.02, respectively for newly diagnosed HIV-positive TB patients and known HIV-positive patients) were strongly associated with an unfavorable outcome. Conclusion: This study shows suboptimal implementation of TB/HIV collaborative activities among TB patients. From the side of people living with HIV, many improvements still need to be done on TB infection control and regarding IPT, with much attention to its adherence. High probability of unfavorable TB treatment outcome among HIV-associated TB patients who were already on ART suggests better management of co-infected cases especially regarding ART initiation, adherence as well as possible co-morbidities related with old age. More inclusive studies based on a prospective design are necessary to investigate further on the findings of this study. In the meantime, strong sensitization on TB and HIV diseases, adequate dissemination of guidelines, revitalization of patient's support system for adherence, regular supply of essential medicine and commodities are highly required to improve the current situation in Lufungula health zone.