Background
Currently, the global leading cause of death among people living with HIV is tuberculosis (TB) [1]. Without appropriate treatment, 28-33% is at risk of dying, and this risk increases to 65-94% among those who are co-infected with HIV [2].

Material and Methods
Retrospective cohort study to obtain prevalence, incidence, mortality rate and percentage cure among incarcerated patients living with HIV/TB. We used as a diagnostic method for TB: chest X-ray, basilsocopy, culture and GeneXpert in expectoration and or gastric juice. Inclusion criteria: (a) incarcerated, male patients infected with HIV and (b) any type of TB diagnosis within the time period of May 2013 to April 2018. The number of study subjects by time period was as follows: 185 from May 2013 to April 2014, 197 from May 2014 to April 2015, 212 from May 2015 to April 2016, 195 from May 2016 to April 2017, and 197 from May 2017 to April 2018.

Results
A prevalence rate of 4.1% (8 cases) was estimated up to 1 April 2013. During the time period of May 2013 to April 2018, 63 cases of TB (51 pulmonary, 9 milliary, 2 ganglionic and 1 testicular) were diagnosed, 3 of which were M. tuberculosis resistant to rifampin. We estimated the following incidence rates according to time period: 10.8% (2013–2014); 6.6% (2014–2015); 6.1% (2015–2016), 5.1% (2016–2017) and 3.5% (2017–2018). There were 11 deaths directly attributable to TB infection, with an estimated mortality rate for the following time periods of: 2.1% (2013–2014); 1.5% (2014–2015); 1.4% (2015–2016), and 0.5% (2016–2017 and 2017–2018) (Table 1 and graph 1). Of the total number of patients with HIV and TB: 81% were cured with anti-TB drugs, 17.4% died and 1.6% were lost in follow up while on treatment (Figure 1).

Conclusions
- Local conditions that are possibly driving the transmission of TB in the center include:
  (a) Overcrowding
  (b) Little or no ventilation in the prison and
  (c) Promiscuity
  (d) Use of inhalable drugs and sharing of drug paraphernalia.

- Detection and proper treatment allow for:
  (a) The control of TB transmission,
  (b) An increase in the percent of patients cured
  (c) The decrease in the rate of mortality.
  (d) Also should be included in public health policy permanently to decrease mortality amongst patients co-infected with HIV/TB incarcerated.

References

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