# IMPLEMENTATION OF TUBERCULOSIS PREVENTIVE THERAPY AMONG PEOPLE LIVING WITH HIV IN VOLTA REGION, GHANA



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The consequences of low TPT initiation rates could be an increased risk of TB infection in HIVinfected persons; this could lead to higher TB transmission rates and worsened HIV disease progression. Addressing this aligns with the Sustainable Development Goal (SDG 3) on ensuring healthy lives and promoting well-being for all.

#### **BACKGROUND**

TB preventive therapy (TPT) is a key intervention for the prevention of TB among people living with HIV (PLHIV). TPT implementation remains suboptimal despite compelling evidence of its benefits. This study assessed the implementation of TPT among HIV patients receiving care in two municipalities in the Volta region, Ghana.

### **METHODS**

HIV patients' records were extracted from registers at Antiretroviral Therapy (ART) clinics for the period 2021-2022 using an extraction sheet. Also, a cross-sectional study was conducted among 806 HIV patients aged >18 years attending ART clinics. Patients were interviewed using a structured questionnaire to collect data on characteristics, clinical history, sociodemographic implementation and perceived barriers to implementation. Data was exported to STATA/MP 17.0 for analysis. Descriptive and logistic regression analyses were performed, and statistical significance set to p<0.05 at 95% confidence interval.

# RESULTS

A total of 806 participants were recruited for the cross-sectional study with mean age of 44.7 years (±13) and majority being females, 599 (74.3%). Majority, 481 (59.68%), were found to have poor knowledge of TPT, and only 236 (29.28%) eligible for TPT were initiated of which 196 (83.05%) completed their treatment. Barriers perceived by PLHIV to TPT initiation were distance to facility, poor health education, and limited drug availability.

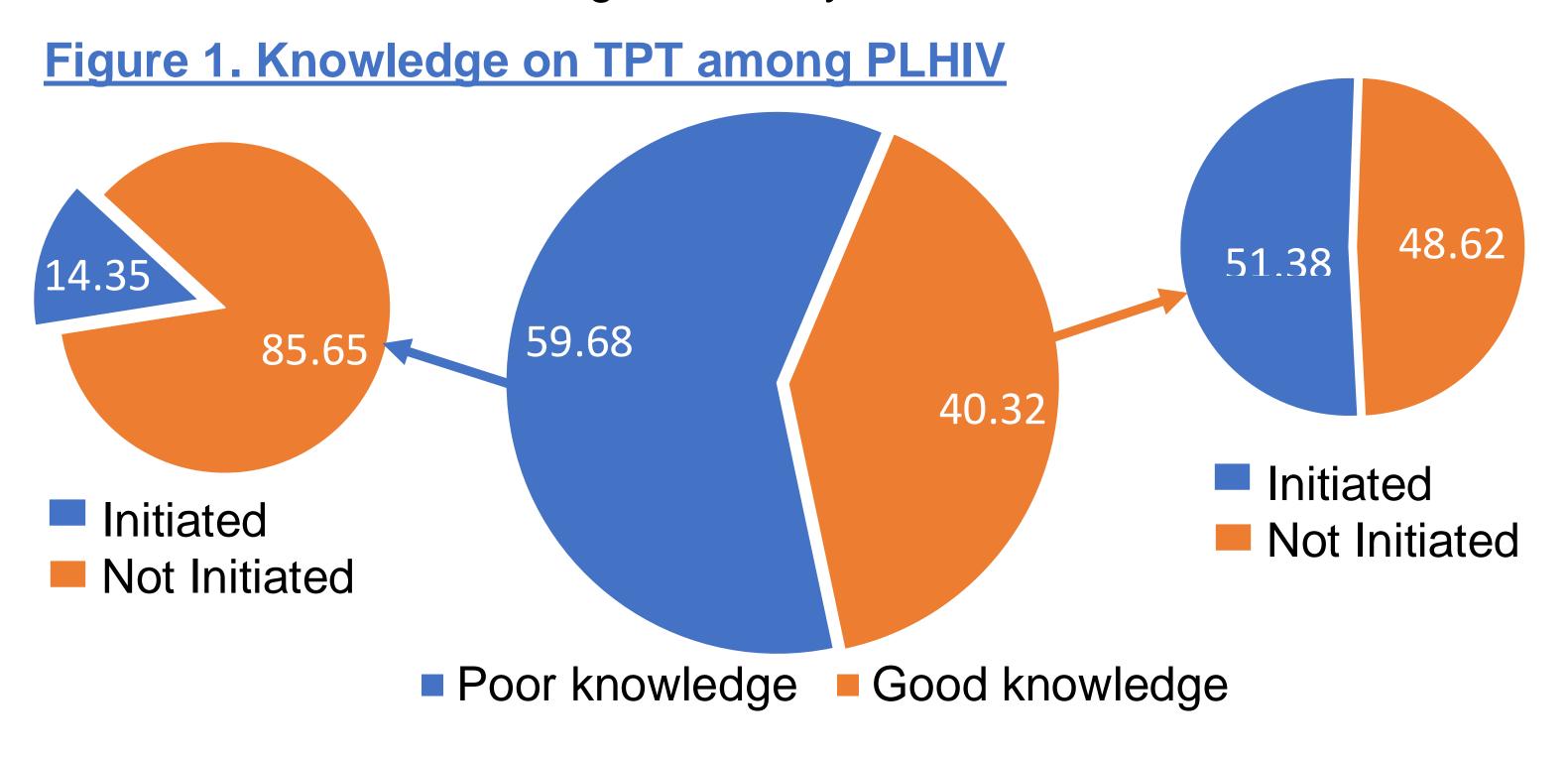
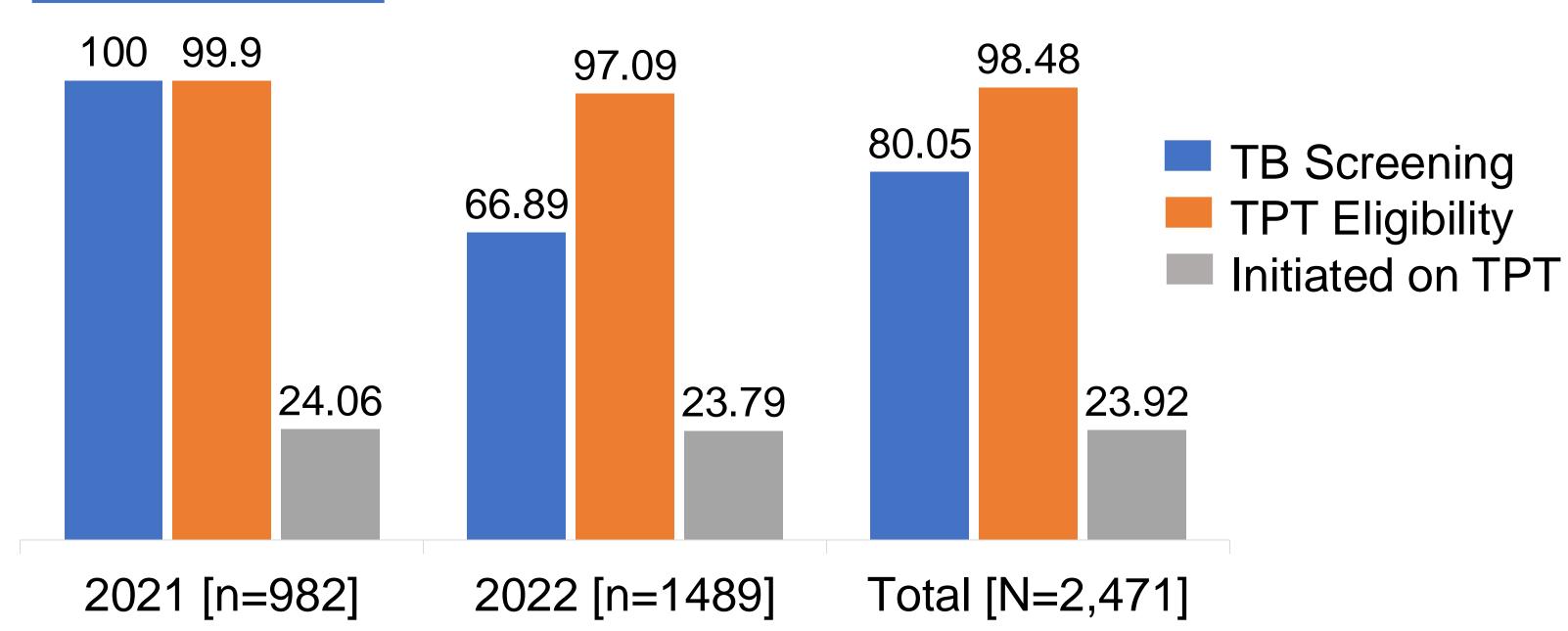


Figure 2. Proportion of PLHIV Screened for TB, Eligible and **Initiated on TPT** 



#### RESULTS CONTINUED

Table 1 Factors Influencing TDT Initiation Among DI LIV

Table 1. Factors Influencing TPT Initiation Among PLHIV			
Factors [TPT No(%), Yes(%)]	cOR(95%CI), p-value	x <sup>2</sup> p-value	aOR(95%CI), p-value
Knowledge		<0.0001	
Poor [412(85.65), 69(14.35)]	Ref.		Ref.
Good [158(48.62), 167(51.38)]	6.31(4.51-8.82), 0.000		7.35(5.16-10.47), <0.001
Years of HIV Diagnosis		<0.0001	
Less than a year [75(90.36), 8(9.64)]	Ref.		Ref.
One year and more [495(68.46), 228(31.54)]	4.32(2.05-9.10), 0.000		4.56(1.01-20.52), 0.048
HIV Classification		0.0001	
Stage 1 [350(66.92), 173(33.08)]	Ref		Ref.
Stage 2 [130(83.87), 25(16.13)]	0.39(0.24-0.62), 0.000		0.32(0.19-0.53), < <b>0.001</b>
Stage 3 [90(70.31), 38(29.69)]	0.85(0.56-1.30), 0.463		0.57(0.35-0.92), <b>0.021</b>

# CONCLUSIONS

The consequences of low TPT initiation rates could be an increased risk of TB infection in PLHIV; this could lead to higher TB transmission rates and worsened HIV disease progression. Addressing this issue aligns with the Sustainable Development Goal (SDG 3) on ensuring healthy lives and promoting well-being for all, as it highlights the need for strengthened healthcare systems, improved drug and logistics availability, and enhanced patient education. Additionally, investing in further research to understand the multifaceted barriers to TPT implementation is crucial for achieving universal health coverage and reducing TB and HIV-related mortality, both of which are key targets of SDG 3.

# ADDITIONAL KEY INFORMATION

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