

Title: TB-related Knowledge and Stigma Among Pregnant Women in Low Resource Settings of Pune, India

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Introduction

Background: Pregnant women have a high risk of tuberculosis (TB) disease, but data on TB-related knowledge and stigma are lacking for this population.

Objective:

1. We assessed the overall prevalence of TB-related knowledge and stigma among pregnant women from low resource settings of Pune, India.
2. We assessed the factors, including HIV status, education, income and age, associated with TB-related knowledge and stigma among pregnant women from low resource settings of Pune, India.

Hypothesis:

1. Half of the pregnant participants enrolled in the Prachiti study at the antenatal clinic in BJMC will have an incomplete score for TB knowledge and stigma respectively.
2. Pregnant women with an HIV negative status, lesser education, lower age, and lower income will be associated with an incomplete TB knowledge score and incomplete TB stigma score.

Results

Demographics

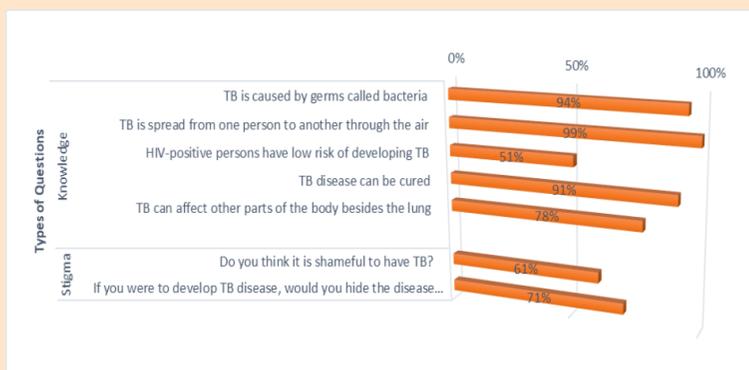
- The median age of study participants (N=202) was 23 years [interquartile range 21-26].
- Twenty-five percent of the women were HIV-positive
- Twenty-five percent of participants were educated at a primary level or lower
- Seventy-six percent had an annual household income below India's poverty line (i.e. ≤Rs. 10,255).

Table 1: Factors Associated with Stigmatizing Attitude Towards TB

	Total N=202, n (%)	Univariate Analysis		Multivariate Analysis	
		OR (95% CI)	p	aOR (95% CI)	p
HIV Status					
HIV-negative Status	151 (75)	ref	ref	ref	ref
HIV-positive Status	52(25)	0.85(0.45-1.60)	0.61	0.87(0.40-1.88)	0.72
Age					
18-20	50 (25)		ref	ref	ref
21-25	89 (44)	0.92(0.46-1.83)	0.80	1.09(0.46-2.54)	0.84
26-30	45 (22)	0.94(0.42-2.10)	0.88	1.26(0.48-3.32)	0.63
Greater than 30	18(9)	0.75(0.25-2.24)	0.60	0.73(0.19-2.90)	0.66
Income					
<10255 INR	153 (76)	ref	ref	ref	ref
≥10255 INR	49 (24)	1.17(0.61-2.22)	0.64	1.19(0.54-2.59)	0.66
Education					
Illiterate to Primary Education	50(25)	ref	ref	ref	ref
Middle School and Above	152(75)	1.12(0.59-2.13)	0.74	1.03(0.46-2.30)	0.94
Total Knowledge					
Complete	129(64)	ref	ref	ref	ref
Incomplete	73(36)	14.99(6.98-32.1)	<0.01	15.99(7.28-35.13)	<0.01

Results (Cont.)

Table 2: Proportion (%) of Correct Responses for Knowledge and Stigma Survey Question



Conclusion

- Approximately two-thirds of participants had incomplete knowledge of TB and one-half of participants had a stigmatizing attitude towards TB
- While assessed risk factors were not associated with incomplete knowledge, we showed that incomplete knowledge was associated with stigmatizing attitudes
- Addressing TB knowledge gaps is an important part of antenatal care and may also decrease perceived stigma, potentially improving TB diagnosis and treatment outcomes
- Future studies should assess the potential impact of TB knowledge and stigma on diagnostic barriers and treatment outcomes

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Design/Methods

- A cross-sectional study to assess TB-related knowledge and stigma was conducted among pregnant women who were enrolled in a cohort study from July 2016 to 2019 at Byramjee Jeejeebhoy Government Medical College (BJGMC)
- The study participants consisted of HIV-positive and-negative pregnant women, with and without latent tuberculosis infection (LTBI)
- A baseline TB knowledge and stigma questionnaire was administered at the enrollment visit
- Logistic regression models were fit to investigate risk factors for incomplete TB knowledge (1 or more incorrect; 5 questions) and stigmatizing attitude (1 or more incorrect; 2 questions).

References

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