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**ABSTRACT BOOK**

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## **PC-94315-07 Factors associated with delayed tuberculosis test-seeking behaviour**

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**Background:** Early diagnosis of tuberculosis is important for minimising individual morbidity and mortality, and also at a public health level to reduce transmission and emergence of drug-resistance.

**Objective:** To determine factors associated with delay in symptomatic individuals seeking diagnostic testing for tuberculosis in the setting of the Peruvian Amazon.

**Methods:** The duration of symptoms prior to seeking medical care was assessed by interview for 108 newly-diagnosed pulmonary tuberculosis patients in the city of Iquitos, Peru, which has high tuberculosis incidence. Beliefs associated with tuberculosis and socio-demographic factors were assessed in these 108 patients and 335 randomly-selected healthy community controls.

**Results:** Median delay from symptom onset to diagnostic testing was 61 days (inter-quartile range 30–91 days). Factors associated with prolonged delay are detailed in the table: male gender, lower educational level, the perception that tuberculosis is curable and the belief that tuberculosis prevalence is high (all  $P < 0.05$ ). Compared with healthy controls, patients reported these beliefs more frequently, described more stigmatizing beliefs about tuberculosis, had received less education, had lower socio-economic indices, and lived in more crowded conditions (all  $P \leq 0.01$ ).

**Table** Factors associated with delay in tuberculosis test-seeking behaviour

	Association with patient delay in test-seeking behaviour			
	Univariate regression		Multiple regression	
	Coefficient	<i>P</i> value	Coefficient	<i>P</i> value
<i>Socio-demographic factors</i>				
Female gender	-0.267	0.2	-0.483	0.02
Age (in years)	0.012	0.05	—	—
Education (by grade level completed)	-0.330	0.1	-0.441	0.03
Ownership asset-based wealth index	-0.105	0.1	—	—
<i>Perceived risk factors</i>				
Belief that TB is curable	0.642	0.08	1.002	0.01
Perception of high TB prevalence in the local community	0.462	0.03	0.568	<0.01
<i>Risk of tuberculosis exposure</i>				
History of contact with TB patient	0.486	0.02	—	—

**Conclusions:** There was frequently prolonged delay in seeking medical care for tuberculosis symptoms, which is likely to increase transmission and morbidity. Patients with more delayed test-seeking were usually male and less-educated individuals, implying that case-finding activities should prioritize these groups. Current health promotion activities emphasize tuberculosis curability and high tuberculosis prevalence. However, these beliefs were associated with delayed test-seeking behaviour and therefore interventions promoting these beliefs require prospective evaluation because they may paradoxically increase diagnostic delay.