
CROSS SECTIONAL ANALYSIS OF KNOWLEDGE ABOUT TUBERCULOSIS AMONG PREVIOUS TUBERCULOSIS CASES AND CONTACTS IN HIGH-INCIDENCE AREAS OF VANUATU, 2023

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INTRODUCTION

- On average, 90 cases of tuberculosis are reported annually in Vanuatu (data 2016-2020)
- Many cases are identified from key geographic areas or from families with previous cases (i.e. cases are often previously identified contacts)
- There remain delays in seeking care by TB cases
- There is a need to identify gaps in understanding that can be addressed to encourage timely presentation to healthcare facilities



METHODS

- Two area councils per province with the highest number of TB cases diagnosed from 2018-2022 were identified
- Five contacts per case were targeted for interviews
- Informed consent was sought before starting the interview. All participants were able to stop the interview at any time
- The survey was conducted in Bislama or the local language by a trained officer



METHODS

- A total knowledge score was calculated out of six
- If an answer was partially right, half points were given, and if no answer was given this was counted as incorrect
- Mean and standard distribution were calculated for total knowledge score
- Univariate analysis was done to determine predictors of knowledge scores for cases and contacts separately



RESULTS – PARTICIPANTS

- A total of 761 participants were interviewed, including 139 cases and 622 contacts from all provinces, which was 62.6% of target cases (range: 16.7% - 100%) and 56.0% of targeted contacts (range: 13.3% - 145%)

Province	Cases			Contacts		
	Target	Interviewed	%	Target	Interviewed	%
Malampa	20	12	60.0%	100	83	83.0%
Penama	6	1	16.7%	30	4	13.3%
Sanma	54	40	74.1%	270	165	61.1%
Shefa	84	38	45.2%	420	92	21.9%
Tafea	54	44	81.5%	270	249	92.2%
Torba	4	4	100.0%	20	29	145.0%
Total	222	139	62.6%	1,110	622	56.0%

RESULTS – DEMOGRAPHICS

- There was significant difference between cases and contacts for age distribution, sex, education levels and ease of access to healthcare
- A total of 83% of respondents were not employed in the formal economy (similar to national rate)
- Access to healthcare was reported easy or very easy for 67% of all participants

Characteristic	Overall, N = 761 ¹	Case, N = 139 ¹	Contact, N = 622 ¹	p-value ²
Age (years)				0.008
Under 15 years	24 (3.2%)	9 (6.5%)	15 (2.4%)	
15-25	163 (22%)	27 (19%)	136 (22%)	
26-35	166 (22%)	30 (22%)	136 (22%)	
36-50	221 (29%)	29 (21%)	192 (31%)	
Over 50	184 (24%)	44 (32%)	140 (23%)	
Sex				0.001
Female	422 (56%)	60 (43%)	362 (58%)	
Male	336 (44%)	79 (57%)	257 (42%)	
Education				<0.001
No school	193 (25%)	36 (26%)	157 (25%)	
Primary school	287 (38%)	50 (36%)	237 (38%)	
Secondary school	258 (34%)	41 (29%)	217 (35%)	
University	22 (2.9%)	12 (8.6%)	10 (1.6%)	
Current work				0.7
No	614 (83%)	109 (81%)	505 (83%)	
Yes	129 (17%)	25 (19%)	104 (17%)	
Access to healthcare				0.006
Very easy	130 (17%)	27 (20%)	103 (17%)	
Easy	368 (50%)	68 (50%)	300 (49%)	
Hard	173 (23%)	19 (14%)	154 (25%)	
Very hard	72 (9.7%)	21 (16%)	51 (8.4%)	

¹ n (%)

² Fisher's exact test; Pearson's Chi-squared test

RESULTS – CASES VS CONTACTS

- The mean knowledge score was 66.7% (sd = 16.4%) for cases compared with 55.3% (sd = 20.2%) for contacts ($p < 0.05$)
- For cases, no demographic factors had significant association with knowledge score
- For contacts, there were significant associations for age group, education, and province



DISCUSSION

- These results show that general knowledge about TB is higher among previous TB cases compared with TB contacts
- Knowledge levels are of concern, particularly when considering that cases and contacts should be well informed
- The differences in knowledge for certain demographics also highlight that tailored education programmes are needed



RECOMMENDATIONS / IMPLICATIONS

- This study highlights that improved awareness and knowledge of TB is needed to promote timely presentation to healthcare facilities for new cases
- Targeted education should be conducted in high incidence areas as well as lower incidence but at-risk areas
- Another KAP survey should be conducted, with the same questions, in a few years
- The study team is working on the analysis of attitudes and practices section of the survey



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