Addressing the Social Determinants and Consequences of Tuberculosis (ASCOT): A Pilot Randomised Controlled Trial of a Psycho-socioeconomic Intervention in Nepal

Kritika Dixit and Anchal Thapa

Birat Nepal Medical Trust

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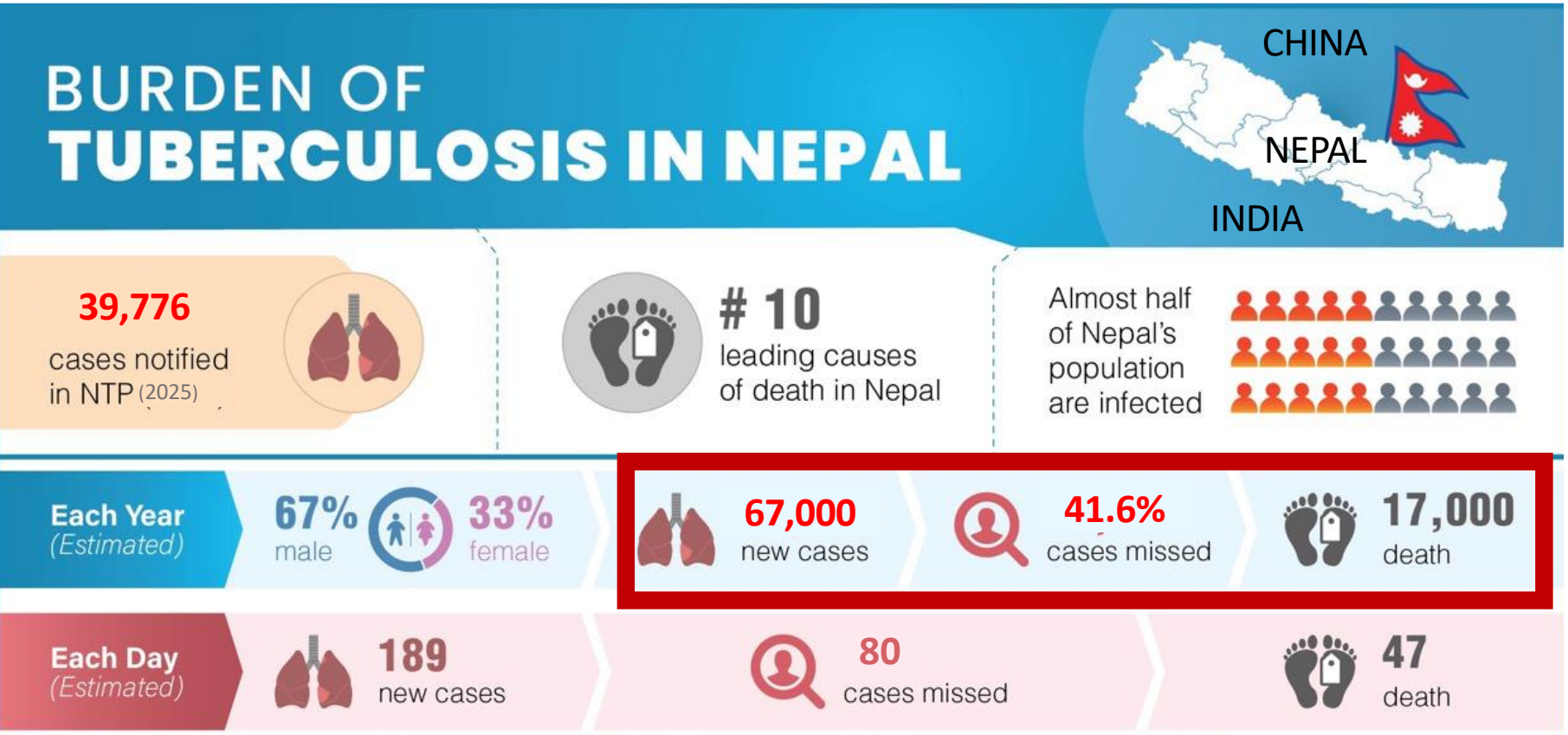
Nepal



TB-SDG MONITORING FRAMEWORK

Population living below the international poverty line (% of population)

15%

Population covered by social protection systems (% of population)

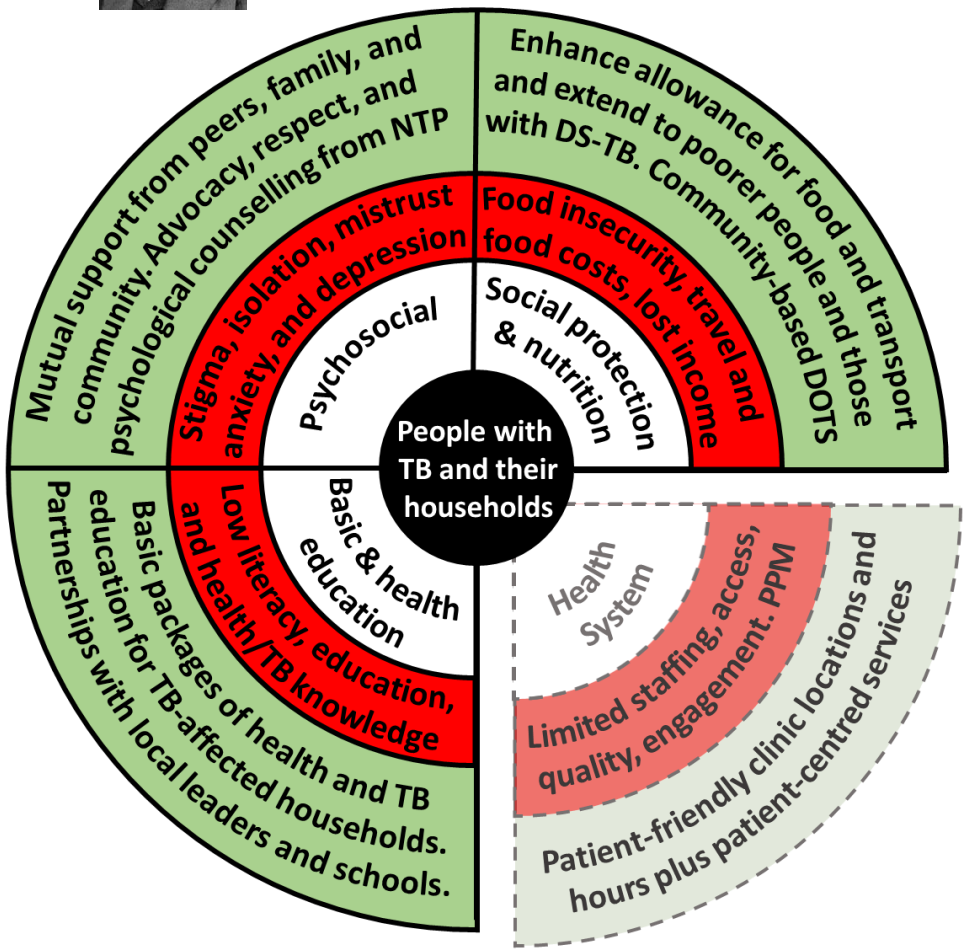
43%

People with TB and their households facing catastrophic costs (% of population)

51%

“Tuberculosis is a social disease”

- Rudolf Virchow, 1879



Dixit et al, BMC Global & Public Health, 2024

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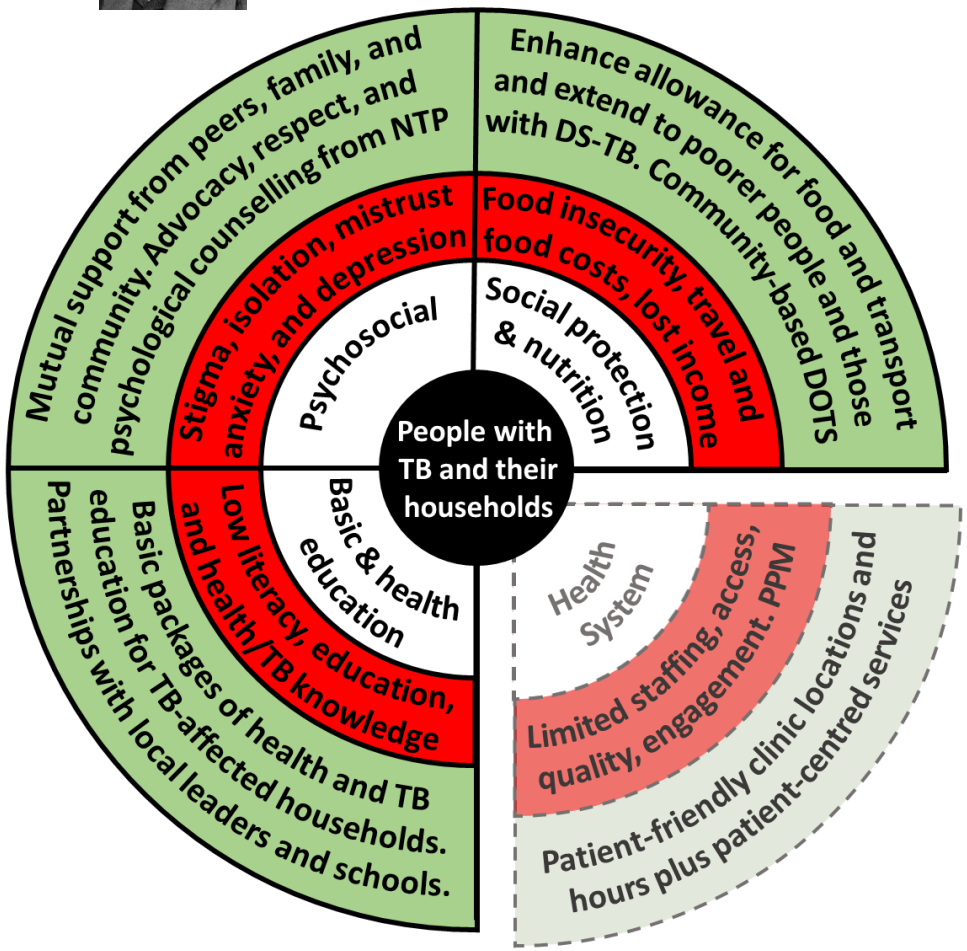
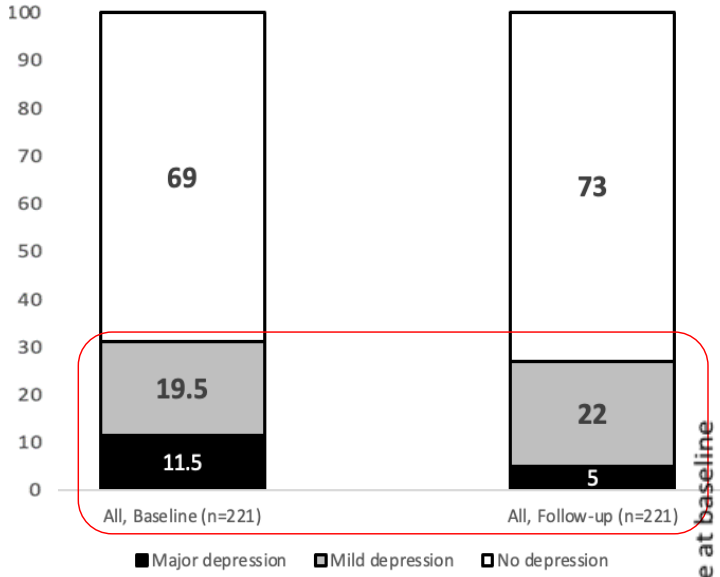
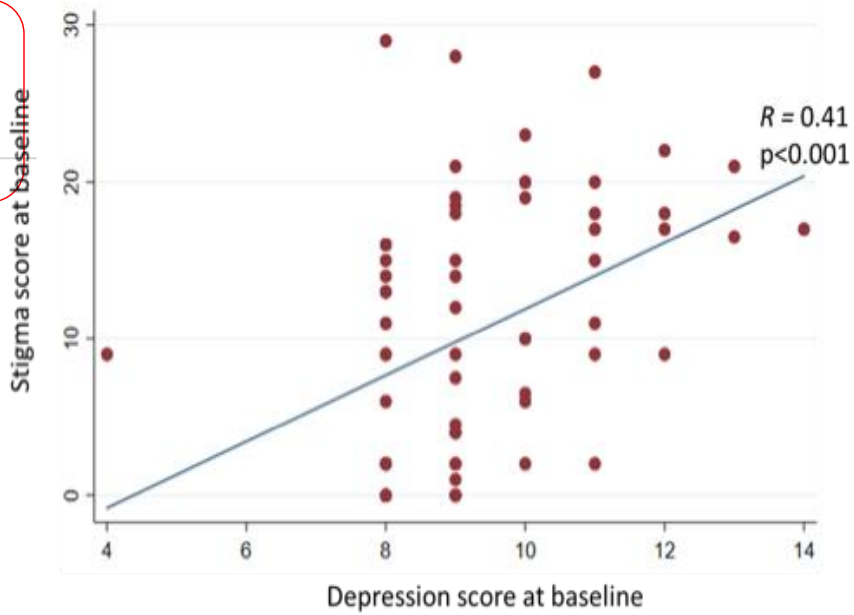




TB is associated with (often persistent) depression



Stigma and depression are clustered

[Dixit et al, BMC Global & Public Health, 2024]

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Psychosocial consequences of TB in Nepal

- WHO's 2015 End TB Strategy calls for integrated, person-centered psycho-socioeconomic approaches
- Participatory workshop, multisectoral stakeholders including NTP & people with TB

Table 3. Design of and votes for psychosocial and economic elements of potential integrated socioeconomic support package for people with TB.

Psychosocial Package	Votes	Economic Package	Votes
A. CB-DOT provider / CHV assesses stigma level at household visit (or in hostel) and invite whole household to local mutual peer support TB group	21% (8/38)	**A. Economic intervention:** • Monthly basic cash transfer for all patients (DR-TB NRs 6000; DS-TB NRs 1000)* • Pocket money for people with DR-TB in hostel NRs 1500 • Conditional cash transfer for medication side effects to health centre (DR-TB 5000 NRs; DS-TB 1000 NRs.)	12% (4/34)
B. CB-DOT provider / CHV assesses stigma level at household visit and do stigma counselling session with household during visit	79% (30/38)	**B. Economic intervention:** • Monthly basic cash transfer for all patients (DR-TB NRs 6000; DS-TB NRs 1000)* • Pocket money for people with DR-TB in hostel NRs 1500 • Additional cash transfer for socially high-risk persons (to be defined) with TB (3000 NRs.)	88% (30/34)

Rai et al, Trop Med Inf Dis 2020

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ASCOT Pilot Trial Objectives

Dr Tom Wingfield
Principal Investigator

Mr Bhola Rai
Project Manager

Can psycho-social and economic support be integrated into routine TB care in a way that is acceptable, feasible, and potentially scalable?

- To evaluate the ***feasibility and acceptability*** of providing socioeconomic support intervention to TB-affected households in Nepal

Accepted for publication: The Lancet Regional Health South Asia

Addressing the Social Determinants and Consequences of Tuberculosis (ASCOT): a four-arm randomized controlled trial evaluating the feasibility and acceptability of a psycho-socioeconomic support intervention for tuberculosis-affected households in Nepal

Authors

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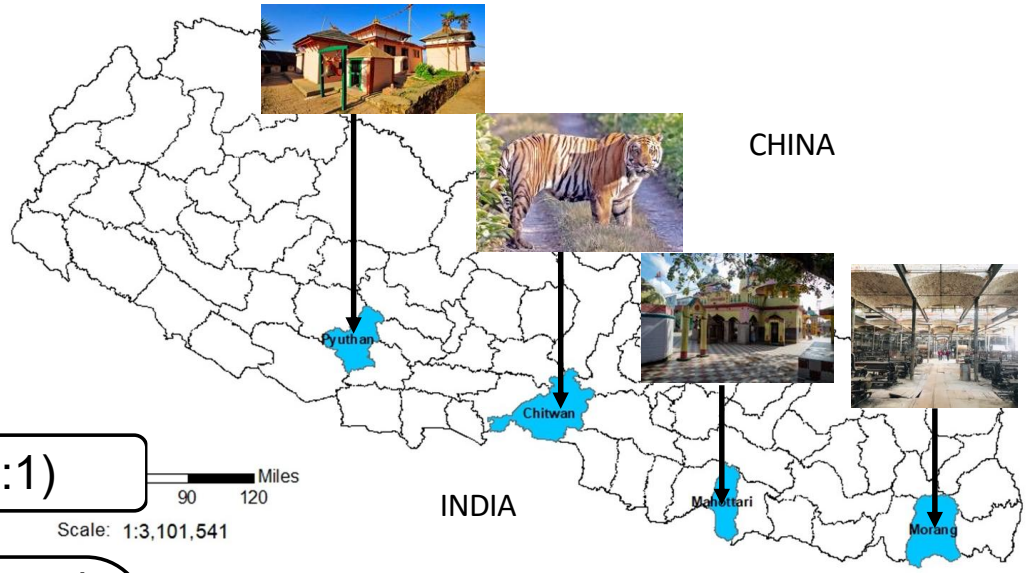
Methods

Design: Four-arm, unblinded, individually randomized controlled pilot trial

Participants: Adults with drug-sensitive pulmonary TB



128 people with drug-sensitive TB recruited and randomised (1:1:1:1)

Control standard of care plus food basket (n=32)

Social support (n=32)


Wall calendar


TB Club mutual support groups


Animated stigma reduction video


IEC during home visits

Economic support, 20 USD/mth (n=32)


Cash transfers

Socioeconomic support (n=32)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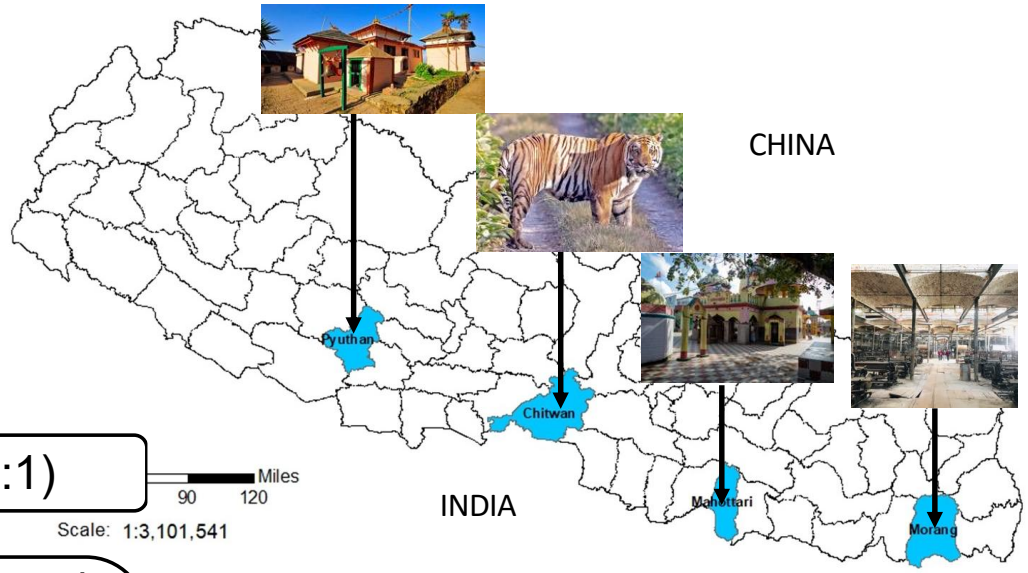

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- **Feasibility**
  - Participant fidelity to recruitment, follow-up, and intervention
  - ASCOT project and team fidelity to protocol and SOP
- **Acceptability**
  - Participants' survey feedback on intervention
  - KIIs & FGDs: NTP, people with TB, health workers, ASCOT team
  - In-depth interviews (IDIs): people with TB across study arms

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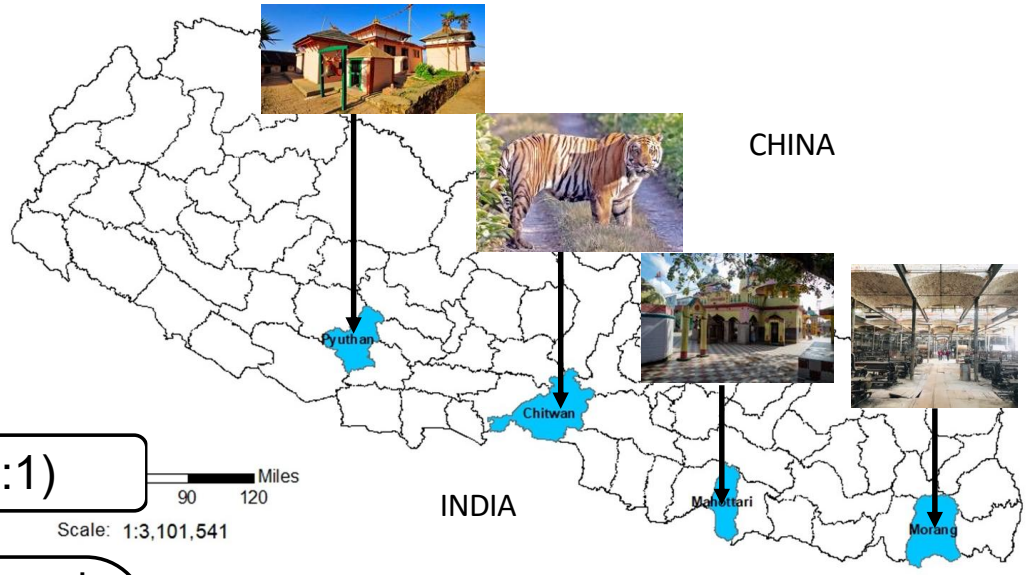

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Costs incurred by TB-affected families

- WHO Patient cost survey
- Longitudinal study design

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Results

Recruitment, follow-up, study activity completion and participant survey feedback			ASCOT pilot trial arm				Participant qualitative survey feedback on support package activities received
			Control	Economic 	Social 	Socioeconomic 	
Support package activities received and completed as per protocol and participant survey feedback	Cash transfer 	Completed (%)	-	30/32 (94%)	-	32/32 (100%)	***"Timely financial support"***
		Rated Good or Very Good (%)	-	26/30 (87%)	-	29/32 (91%)	***"Cash transfers helped to reduce my out-of-pocket costs"***

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	Home visits and IEC 	Completed (%)	-	-	30/32 (94%)	27/32 (84%)	***"Good counselling and motivation"***
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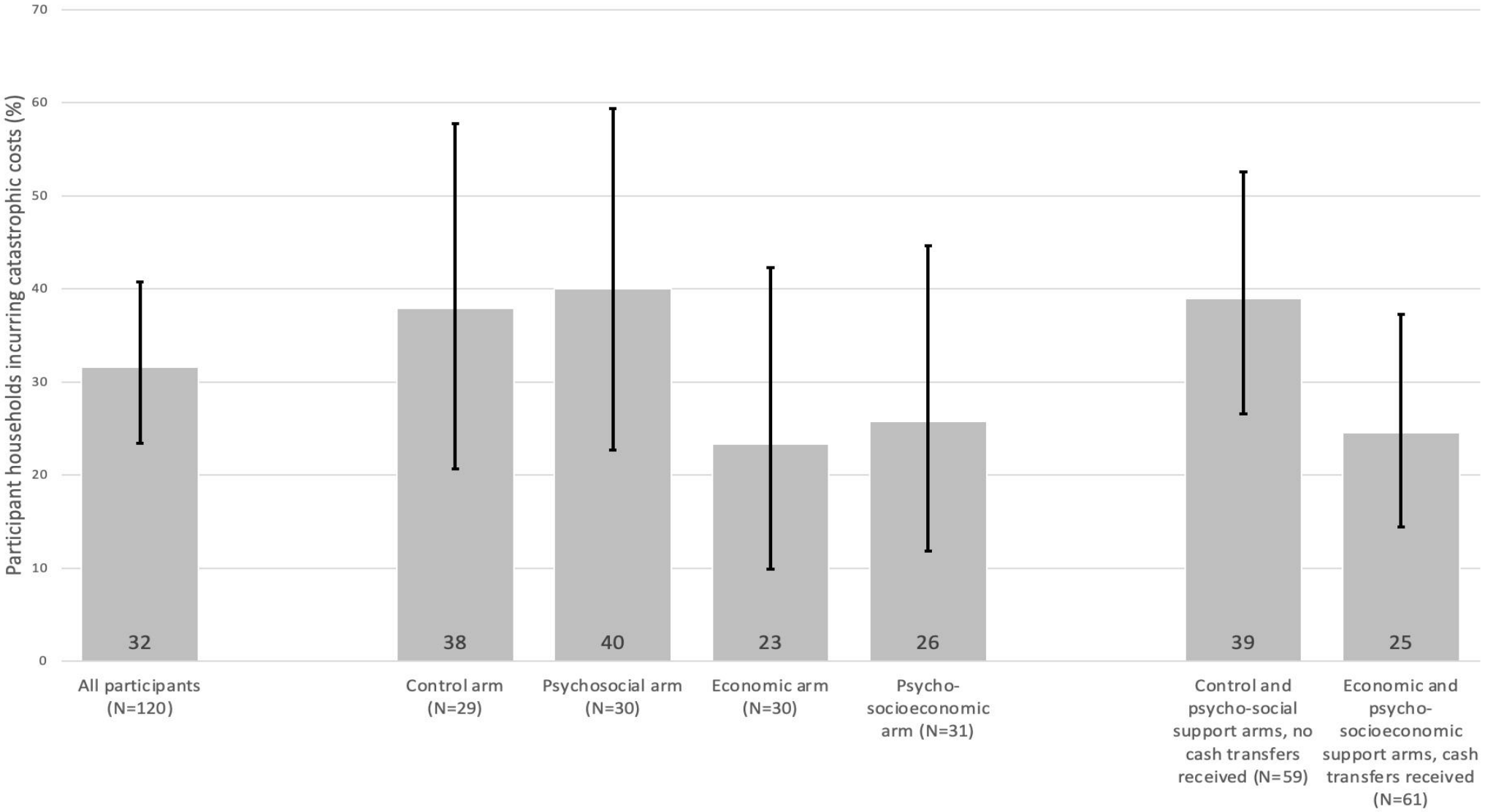
		Rated Good or Very Good (%)	-	-	29/30 (97%)	27/27 (100%)	*"We had opportunity to ask about side effects"*
	TB Clubs	Completed (%)	-	-	25/32 (78%)	29/32 (91%)	*"I liked sharing experiences with other people at the TB clubs"*
		Rated Good or Very Good (%)	-	-	25/25 (88%)	29/29 (87%)	

Incidence of catastrophic costs, 20% threshold



Operational lessons

- The ASCOT pilot trial showed that integrated socioeconomic support had optimal feasibility and acceptability to TB-affected households in Nepal
- The socioeconomic support intervention is suitable for large-scale trial evaluation
- Cash transfers appeared to facilitate participation in social support activities

ACKNOWLEDGEMENT

People with TB, families and health care workers
BNMT project staff
Academics and TB professionals

National Tuberculosis Control Center

Medical Research Council
Liverpool School of Tropical Medicine

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Government of Nepal
Ministry of Health and Population
Department of Health Services
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