
TPT preferences among children and adolescents

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Why is this important?

TPT is the best way to control the TB epidemic in children and adolescents in high TB burden settings

New TPT regimens are available but evidence of their alignment with children, adolescents, and caregivers' preferences are unknown

Operational guidance for updated TPT guidelines accompanying new TPT regimens is a priority to ensure optimal uptake and adherence

Discrete Choice Experiments (DCE)

Quantitative behavioral economics method used to understand relative importance of preferences of different characteristics of health services, trade-offs people make, and total benefit and satisfaction derived from different combinations of these characteristics

Participants make choices in a series of hypothetical scenarios that force trade-offs to reveal how they prioritize attributes and attribute levels

Internal validity depends on specification of these attributes and levels

Useful for formulating patient-centered policies, designing programs that maximize uptake, and predicting demand for healthcare services

Would you prefer a Toyota or a Volkswagen?



OR



Toyota Corolla

2014 model

20 000km

R150,000

Red

Volkswagen Golf

2016 model

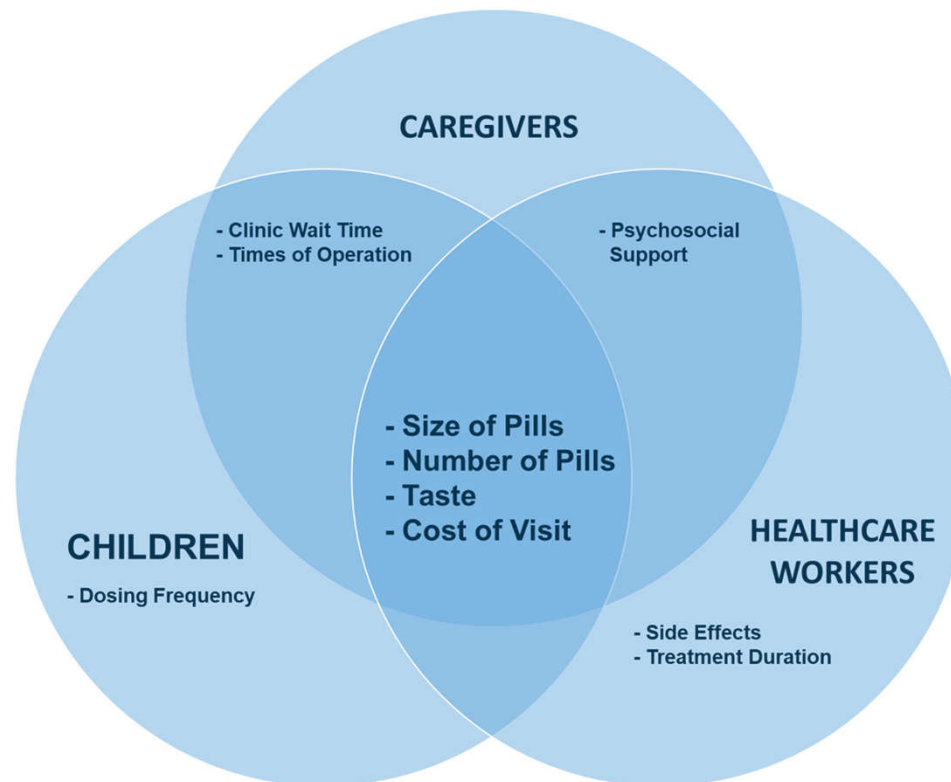
60 000km

R200,000

Silver

Qualitative – top TPT preferences

Four attributes were each ranked in the top 7 by all three types of participants



Eswatini DCE

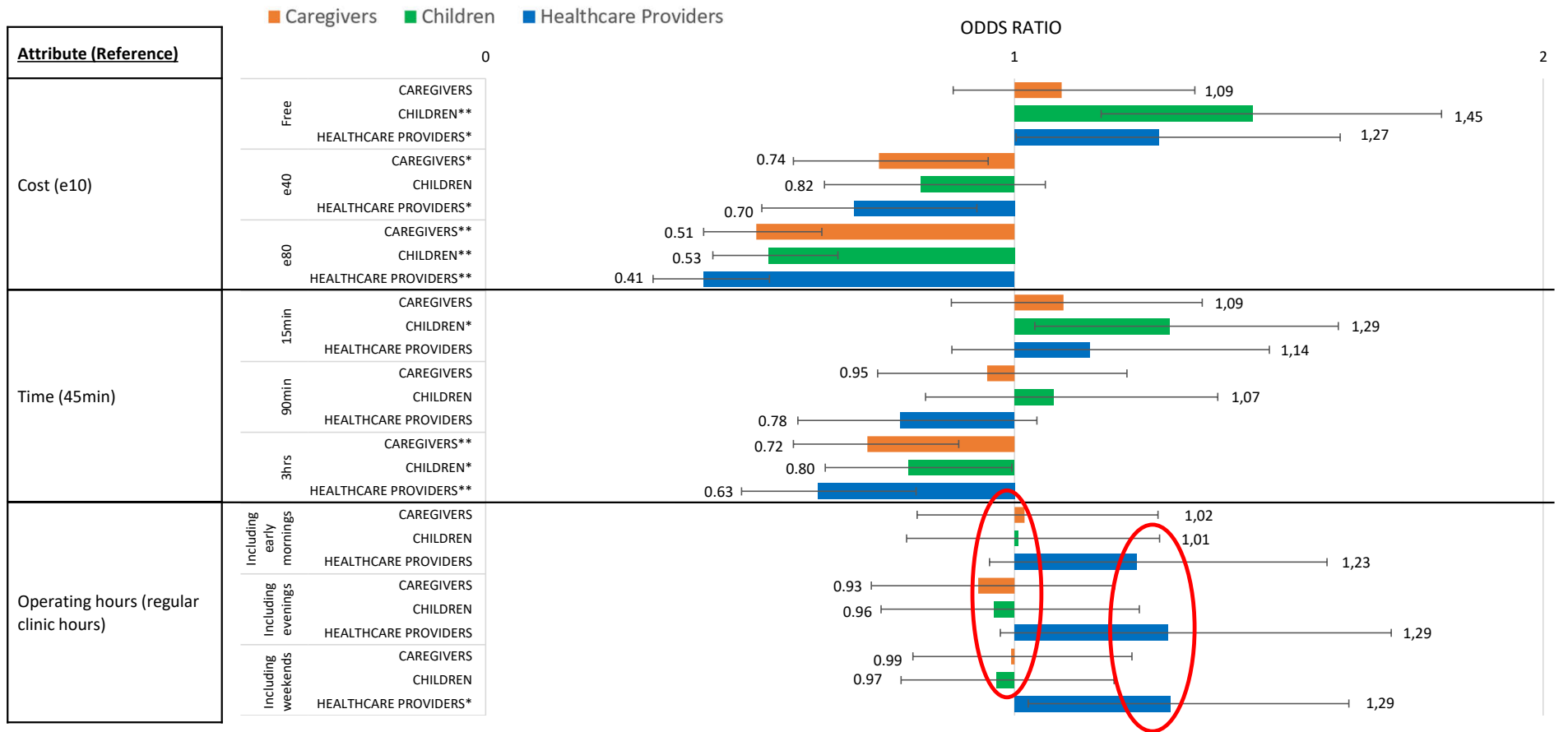
Which of the following models of TB preventive treatment for children would you most prefer?

Option A		Option B	
	E10		Zero Cost
	45 minute wait		15 minute wait
	2 small pills		6 small pills
	Medication daily		Medication twice a week
	3 months of treatment, 1 visit		6 months of treatment, 1 visit
	Monday- Friday 8am-4pm,		Monday- Friday 7am-4pm,
	Bitter taste		No bitter taste

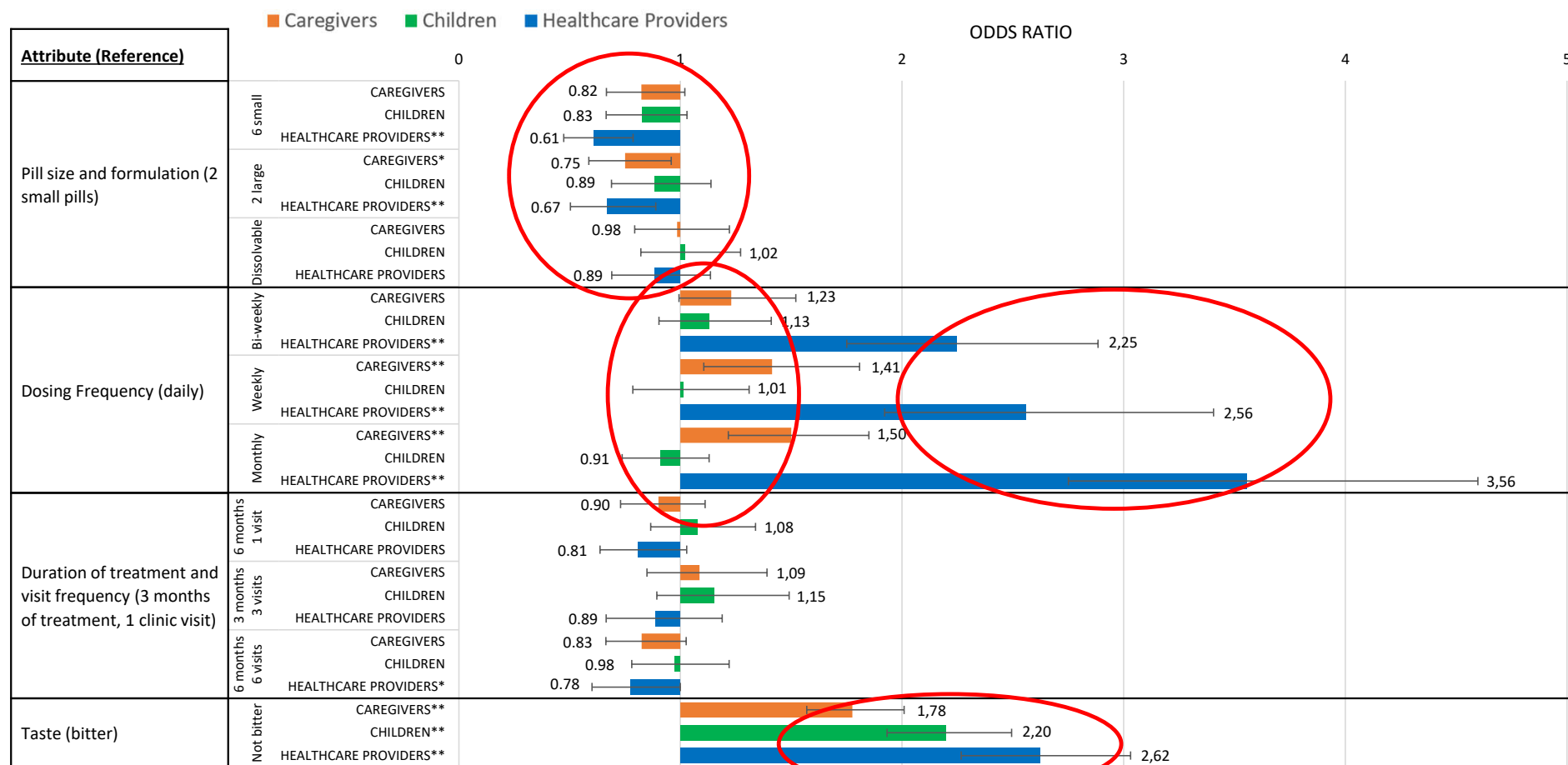
Eswatini participation

	Qualitative	DCE
Caregivers of HIV-/HIV+ children	40	150
HIV+ children	20	150
Health workers	20	150
Key informants	11	N/A
TOTAL	91	450

Healthcare Facility Attributes Comparison



Drug Regimen Attribute Comparison



Eswatini key messages

Overall, strong preferences for lower cost of visit, shorter wait time, less frequent dosing, smaller pills, and better tasting medications

Taste was a strong attribute for all groups, especially children

South Africa DCE

Which of the following models of TB preventive treatment for children would you most prefer?

Option A	Option B
 Local clinic	 Community health worker home visit
 45 minute wait	 1 hour and 30 minute wait
 6 months of treatment, 1 visit per month	 3 months of treatment, 1 visit per month
 Medication daily	 Medication once a week
 2 small pills	 2 large pills
 No side effects	 Side effects that will be obvious to other people who have had TB treatment
 Non-discreet/ noisy packaging	 Discreet/quiet packaging
 Bitter taste	 No bitter taste

South Africa participation

	Qualitative	DCE
Caregivers of children	5	173
Children	8	131
Adolescents		170
Health workers	5	N/A
TOTAL	18	474

Health system attributes

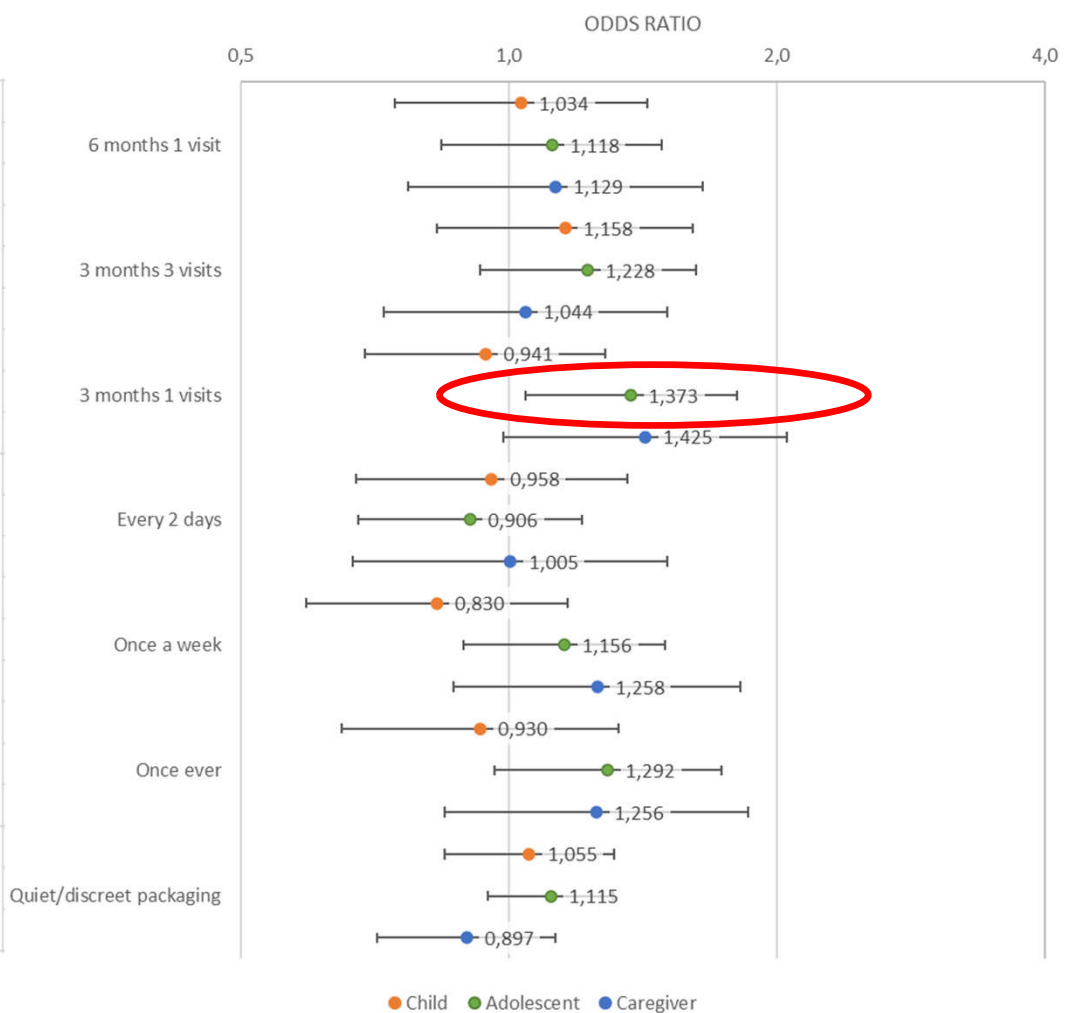


Drug regimen attributes (1)

Duration of treatment and visit frequency (6 months 6 visits)

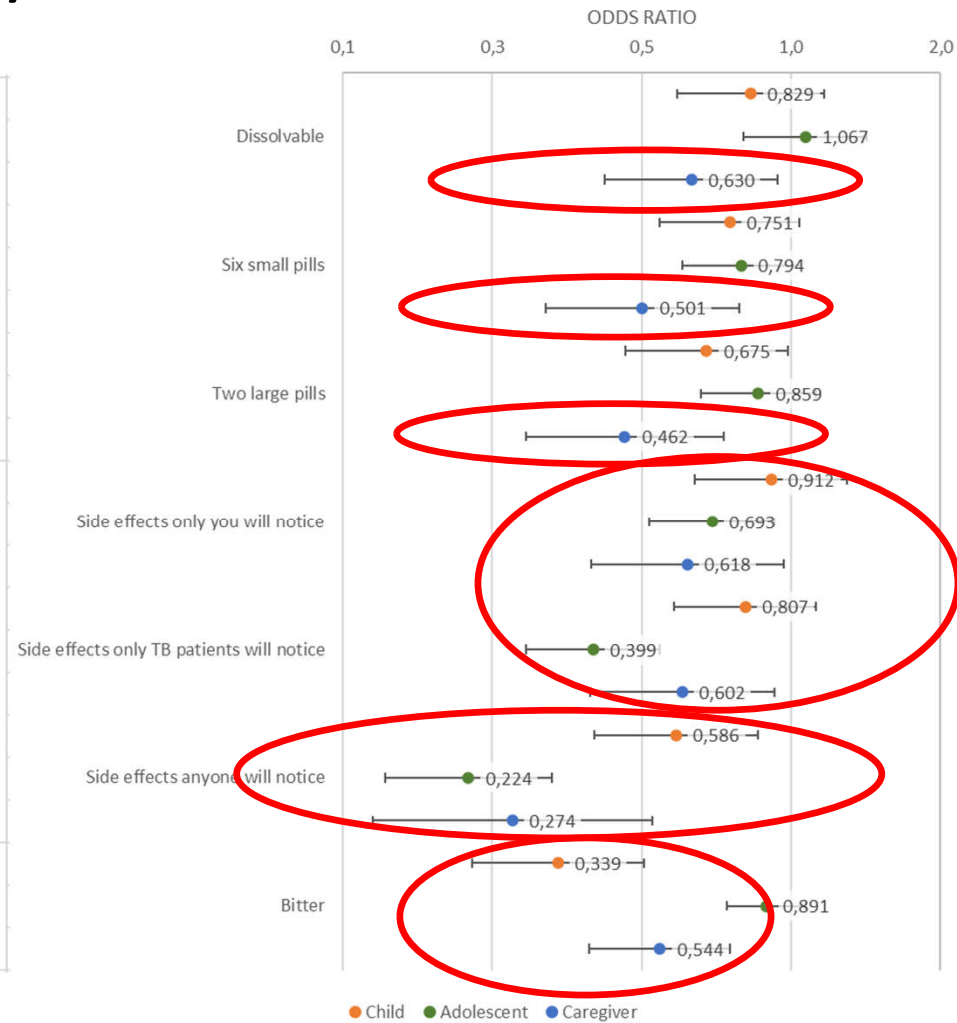
Dosing frequency (Daily)

Packaging (Noisy/non-discreet)



Drug regimen attributes (2)

Formulation (Two small pills)
Side effects (None)
Taste (Not bitter)



South Africa key messages

Children prefer TPT regimens that have smaller pills, with no side effects, and are not bitter

Adolescents prefer TPT regimens that do not require community-based care. They prefer short waiting times, few clinic visits, and no side-effects

Caregivers prefer TPT regimens that are easy to prepare and administer, with less frequent dosing and no side effects

Conclusions

DCE studies force trade-offs, but sometimes lack clarity on *why* participants are willing to prioritize some attributes; qualitative methods in combination with DCE helped leverage the strengths of each approach and triangulate findings

Recent innovations in reducing the duration and dosing frequency of TPT regimens are promising because they align with patient preferences

The diversity in preferences between children, adolescents, and caregivers suggest that there will not be a one-size-fits-all preferred regimen and choices between available TPT regimens should be offered

Time in health facilities, especially for adolescents, must be minimized, potentially with fast-lane pick-up systems or similar systems

Developing a family-centred, integrated approach to contact tracing, TPT initiation, and adherence support between community- and facility-based health workers is important to capitalize on opportunities afforded by newer regimens

Recommendations – future priorities



Offering more palatable formulations for children and caregivers of young children is a priority



This may require clearer guidance on how to use food/flavor agents to mask taste until such formulations are developed



Designing adolescent-friendly TB prevention services is imperative



Ensuring that TPT is adequately explained (and proven effectiveness communicated) is important to ensure that end users have faith in new options

Questions?

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