ADHERENCE TO AND ACCEPTANCE OF RADICAL CURE FOR *P. VIVAX* MALARIA IN TIMIKA, PAPUA

URL CHANDRA
INTRODUCTION

Study context

• TRIPI: A randomized controlled trial on malaria primaquine treatment in Timika, Indonesia.
• Effectiveness of 14 days PQ treatment in Supervised vs. Unsupervised patients with uncomplicated malaria

Timika setting

• Timika: capital city of Mimika District, Papua
• Indigenous tribes and domestic migrants
TRIPI: SOCIAL SCIENCE STUDY

Objectives

1. Acceptability and perceived effectiveness of radical cure among patients
2. Acceptability and perceived effectiveness of G6PD testing among health care staff and local policy makers
3. Assessing social aspects of illness and malaria preventive measures among patients, care takers and other community members
4. Acceptability and perceptions of trial
METHODS

Study population

• Community members:
  • Highland groups: Damal, Dani, Moni and Paniai
  • Lowland groups: Komoro
• Trial and health center staff
• TRIPI patients
METHODS

Study sites
<table>
<thead>
<tr>
<th>Type of research activity</th>
<th>Respondent profile</th>
<th>N</th>
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<tbody>
<tr>
<td>Focus group discussions</td>
<td>Dani tribe community members</td>
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<td></td>
<td>Komoro tribe community members</td>
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<td>TOTAL FGD</td>
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<td>In-depth interviews</td>
<td>TRIPI patients</td>
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<td>Study staffs</td>
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<td>Health workers</td>
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<td></td>
<td>Community members/patient relatives</td>
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<td></td>
<td>Policy maker</td>
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<td>Informal conversations</td>
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<td>Community members/patient relatives</td>
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<td>Respondents’ houses</td>
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<tr>
<td>TOTAL OBS</td>
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PRELIMINARY RESULTS
ADHERENCE

✧ Perceptions of Medicine

DHA-piperaquine (DHA-Pip)

• standard medication
• well integrated in communities as the ‘blue pills’
• Socially acceptable (“social efficacy”)
• perceived side-effects part of the package of care

→ Adherence to DHA-Pip optimal
ADHERENCE

✧ Perceptions of Medicine

Primaquine

• Not commonly known or integrated
• Referred to as the “brown” tablet
• Size is perceived to be smaller than DHA-Pip (associated with being ‘less’ strong and ‘unimportant’)
• Not perceived to be a malaria treatment but rather a vitamin/complementary medication (for the spleen e.g.) due to its difference with the ‘blue’ pills for malaria
ADHERENCE

✧ Perceptions of Medicine

- Adherence to primaquine suboptimal due to:
  - Perceived side-effects (bitter taste that affects nausea and vomiting)
  - Perceived effectiveness (size, colour)
  - Improvement in symptoms quicker than duration of treatment
  - Duration of treatment (14 days) too long in relation to work requirements
ADHERENCE

✧ Measuring adherence

Supervision of treatment

• Home visits on alternate days for directly observed treatment with Pq between Days 3-15
  • (-) Study participants are not often home during home visits
  • (-) Response bias higher
  • (+) Home visits perceived to be higher quality of care
ADHERENCE

ширк Measuring adherence

• Direct observation is challenging and time consuming
  • Fieldworker and supervisor motivation crucial!
• Additional questionnaire on last day of treatment

Additional adherence form RECURRENCE DAY 1 for supervised AND unsupervised arm

We would like to understand whether it was perhaps difficult to take the medicine the previous time you were sick and had to take this medication.

1. Could you tell us whether you were able to take the medication on all days during the last illness episode?
   □ I took all the medication
   □ I did not take all the medication
   □ No answer/Don’t know

*If patient did not take all the medication:*

1.1. Why did you prefer not to take all the medication the previous time?
   □ I forgot
   □ Taking too many pills is not good for one’s health
   □ The medicine makes me feel sick
   □ I felt too sick
   □ I felt better
Provider preferences

- **Malkon** (semi-private, linked to mining companies) preferred over Puskesmas (public)
  - Perceived better quality of care
  - Direct blood-testing at Malkon vs. conditional blood-testing in Puskesmas depending on the symptoms
  - Distance is less important than quality → informants living closer to Puskesmas would rather travel further to get treated at the Malkon
  - Less crowded in Puskesmas
HEALTH SEEKING BEHAVIOUR

✧ Provider preferences

• Traditional health care
  • purifying blood draining
  • use of leaves
HEALTH SEEKING BEHAVIOUR

✧ Malaria diagnostic practices

• Self-diagnosis for malaria based on fever is common
  • Home treatment (paracetamol & traditional treatments)
• Health facility diagnosis as a second step
  • Disappointment negative test results and consequential lack of prescribed medication at HC
• Visit different HCs to (dis)confirm first test results
2 types of malaria with specific symptoms are distinguished:

- “Tertiana” malaria: body pain, long fever, sometimes lack of appetite, cannot do any activities
- “Tropical” malaria: headache, short fever, lack of appetite

→ Different home treatments
→ Tertiana makes you ‘weaker’
→ Relapse not associated with kind of malaria but with kind of activity
TRIAL EFFECTIVENESS

✧ Communication
  ✧ Importance of speaking the same language
    ✧ participants
    ✧ health care workers
    ✧ trial staff
    ✧ Protocols

✧ Perception of being ‘malaria program’
  ✧ Perceived better quality of care
  ✧ Sustainable?
TAKE HOME MESSAGE

• Locally contextualized information and sensitization in local language might help communities AND health care workers have a better understanding of the study treatment purposes, G6PD testing and radical cure

• Measuring adherence is complex and challenging: integrating some tools from social science could be a way forward