Study on knowledge, attitudes and practices of malaria and malaria treatment in the small scale gold mining sector in Suriname

Heemskerk, M and Duijves, C November 2013









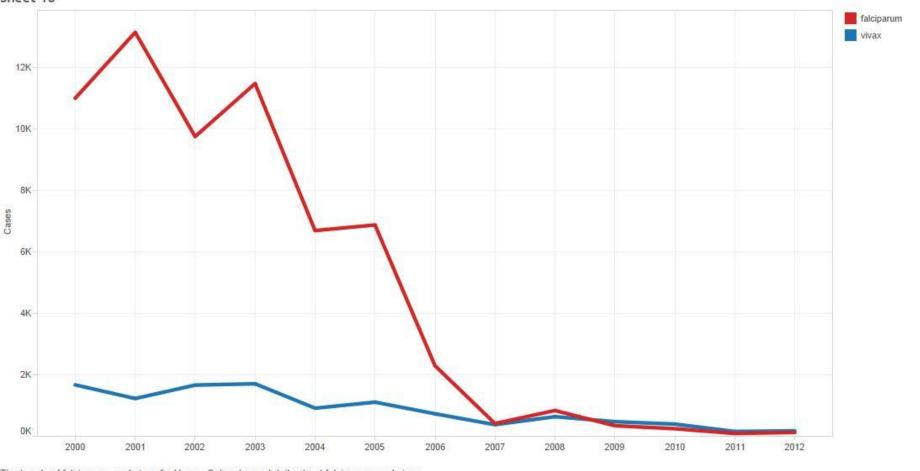


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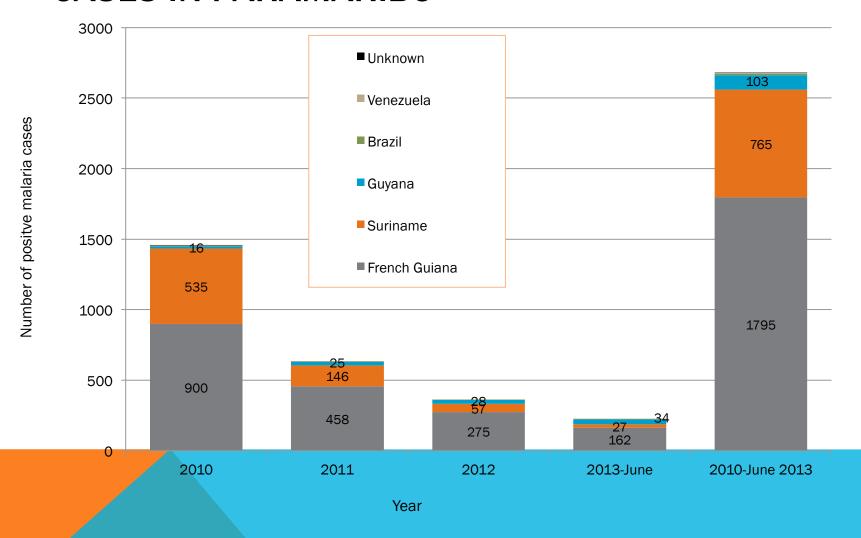
BROAD OBJECTIVE?

Collect baseline data on malaria treatment knowledge and behavior in gold mining areas, and evidence to design appropriate interventions to improve access to and adherence to malaria treatment in gold-mining areas and Paramaribo

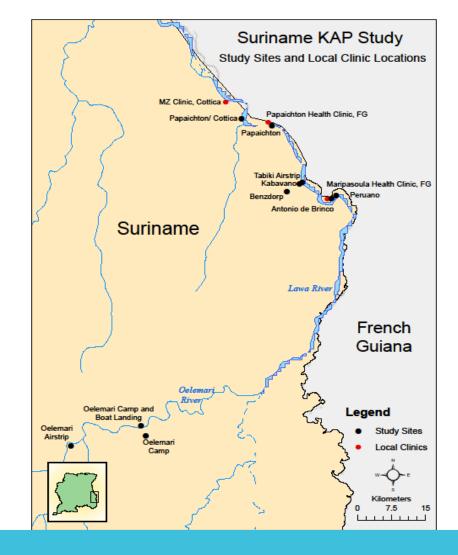


The trends of falciparum and vivax for Year. Color shows details about falciparum and vivax.

CASES IN PARAMARIBO

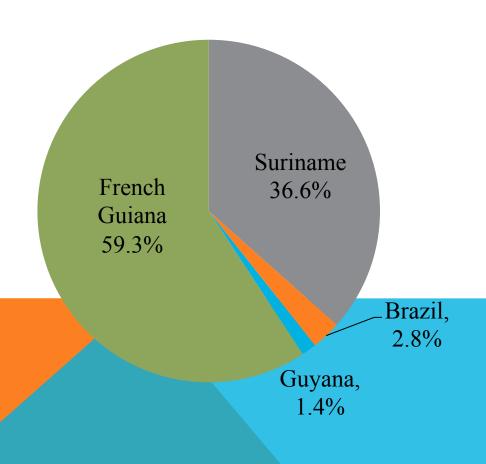


WHERE?



RESULTS: EXPERIENCE WITH MALARIA

The country where the person was the last time he or she experienced (suspected) malaria.



Note: Persons working (also) in French Guiana also reported, on average, more incidences of suspected malaria in the past 1 ½ years as compared to persons only working in Suriname.

SYNTHESIS OF THE SITUATION IN THE MINING AREAS

% completed treatment
29.4%

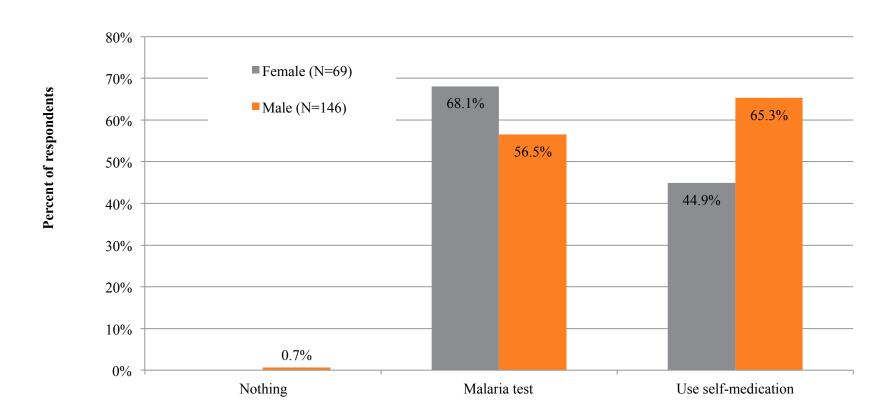
% received free medication
35%

% tested positive for malaria
45.8%%

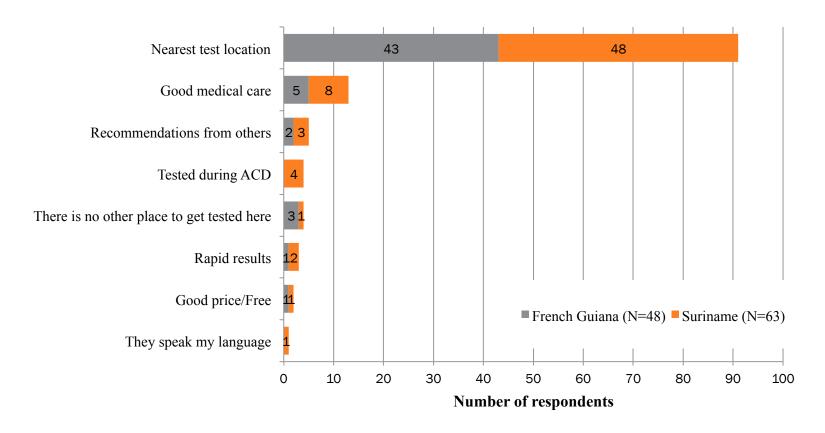
% with diagnosis at health facility
53.3%

Persons with malaria-related symptoms in past 1 1/2 years
100% of interviewees

STRATEGIES UNDERTAKEN BY MALE AND FEMALE

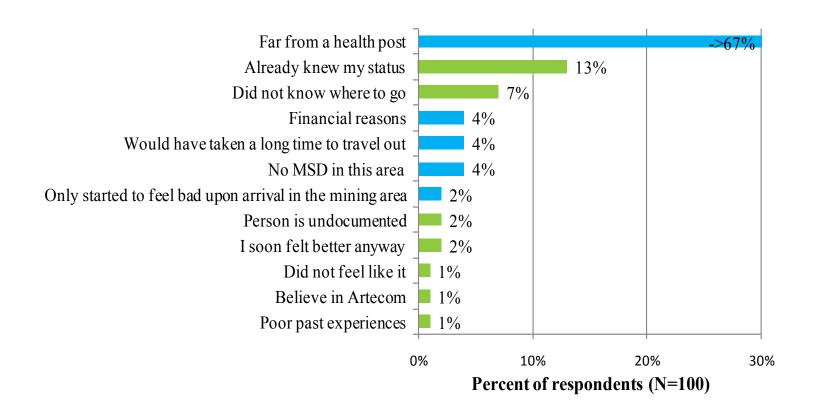


MOTIVATION TO SELECT A SPECIFIC HEALTH SERVICE



distinguishing people who tested in French Guiana (N=48) and those who tested in Suriname (63).

REASONS FOR NOT TAKING A MALARIA TEST



blue color indicating any reason having to do with geographical barriers.

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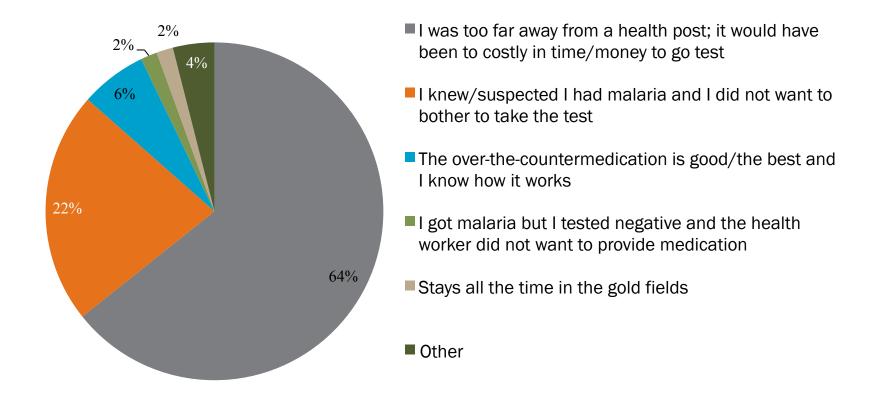
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REASONS TO RELY ON SELF-MEDICATION



WHY?

- "I could no longer bare the pain and fever" [and hence he took the first medication he could lay his hands on].
- "I had no money to go test"
- "I already felt better when I went to go test because I already took Artecom
- "It is not necessary to see a doctor to obtain kidney medication"
- "The MSD had run out of medication"
- "There was police control [in FG] and hence I could not leave"

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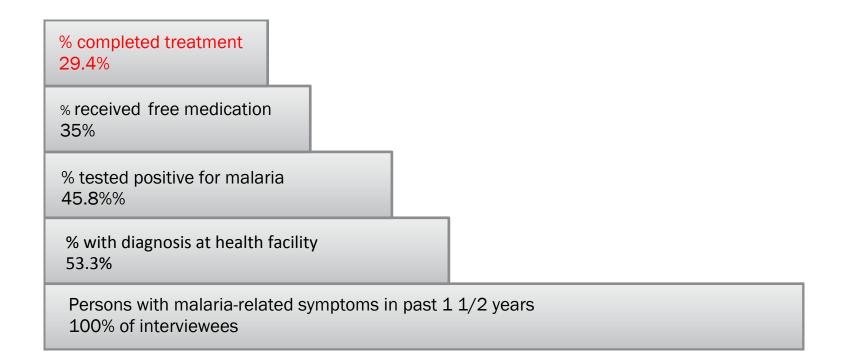
Medicine	N	%
Artecom	106	83.5%
Coartem	16	12.6%
Nivaquine	9	7.1%
Lariam/Mefloquine/Eloquine	3	2.4%
Malarone	3	2.4%
Chloroquine + Primaquine	2	1.6%
Coartem + Primaquine	1	0.8%
Primaquine	1	0.8%
Chloroquine	1	0.8%
Halfan	1	0.8%
Creoline	1	0.8%
Undefined medication	1	0.8%
Plant-based medicine	1	0.8%
Antibiotics	1	0.8%
Xantinon (liver medication)	1	0.8%
Aguardente	1	0.8%

Drugs Used

LOCATION WHERE OBTAINED MALARIA MEDICINE

Location	N	%
Supermarket/pharmacy in the mining areas	86	68.3%
Traveling vendor in the forest	13	10.3%
Supermarket/pharmacy in Paramaribo	11	8.7%
From a friend/colleague	4	3.2%
From the enterprise where I worked	3	2.4%
Brazil	3	2.4%
In French Guiana	2	1.6%
Health post/pharmacy in FG	2	1.6%
Homemade	1	0.8%
Paris	1	0.8%
Total	126	100%

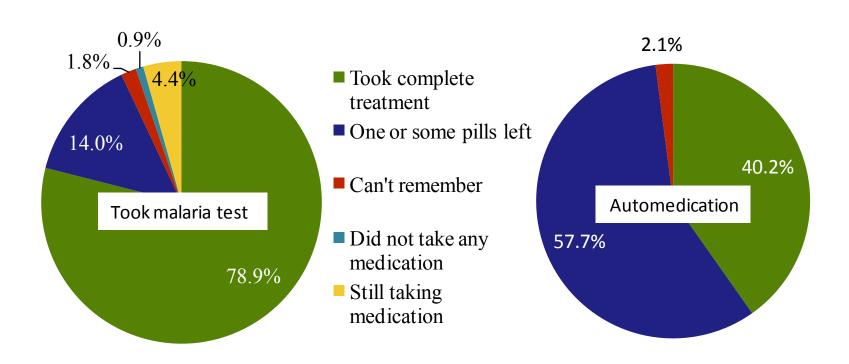
SYNTHESIS OF THE SITUATION IN THE MINING AREAS



REASONS FOR NOT TAKING ALL THE PILLS

Why did you have pills left?	N	%
I felt better	59	78.7%
Experienced side effects	13	17.3%
Forgot to take the pills	3	4.0%
Malaria comes back so I saved pills	2	2.7%
The pharmacy did not have all medication	1	1.3%
Medication vendors just want to sell	1	1.3%
Wanted to drink alcohol	1	1.3%
I have not yet bought medication/I am still		
taking medication	2	2.7%

COMPLETED THEIR MEDICATION VERSUS NOT



CONSISTENCY?

Among those who had reported that one should complete the cure, almost 1/3 had pills left the last time he or she used malaria medicine

CONCLUSIONS

- Access to illicit malaria medication seems easy
- People who test for malaria at formal health services are more likely to complete the cure
- Knowledge does not translate to behavior

CONCLUSIONS

- Malaria treatment behavior is largely shaped by practical considerations – cost (as time, distance of monetary)
- Many gold miners in SU contract malaria in French Guiana and also seek treatment in FG
- The most used Suriname treatment places were MSD and formal test locations in Paramaribo

IN THE AMAZON WHAT IS NEAR IS FAR AWAY



WAY FORWARD

Stable populations

Mobile delivery

Boat, ATV, Red flag identification

Mobile MSDs

Mobile populations

Stable delivery

MZ clinics

Stable MSDs - Shops, Church, Security

FINISH YOUR TREATMENT

TARGET BEHAVIOR CHANGE - MARKETEERS

MALARIA COMES BACK IF TREATMENT IS NOT COMPLETED

MALARIA IS TRANSMITTED IF TREATMENT IS NOT COMPLETED

MALARIA IS NOT CHRONIC

TREATMENT WILL NOT WORK IN THE FUTURE IF NOT COMPLETED

THINKING OUT OF THE BOX



IMPROVE SELF
DIAGNOSIS AND
TREATMENT
?

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FROM ARTEKIN TO ARTECOM

A Joint effort with the mining community to impact the Malaria in the remotest areas.

A kit for malaria prevention and control?