

Malaria risk perception and barriers for effective prophylaxis in the Sub-Saharan Africa 'Visiting friends and relatives' (VFR) traveller community in Hamburg

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No conflict of interest to declare!





Background



- VFR travellers to Africa have higher risk of contracting preventable travel associated infections such as malaria than other travellers.
- About 1000 malaria cases are reported in Germany per year: 65% of these infections are VFR travellers.
- Approximately 60 patients with malaria (hospitalised annually) in UKE-Hamburg, 80% are West African VFR travellers(own data)
- Improved access to travel medicine consultations for VFR travellers may help
- Identification of barriers important to improve malaria prevention in VFR.







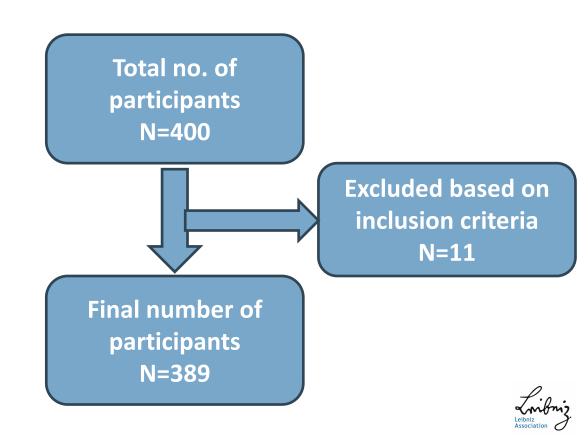
Aims

- explore the malaria risk perception and experience of West African VFR travellers and their attitude towards prophylactic measures and travel medicine advice
- identify strategies to better reach this group with tailored travel advice

Methods

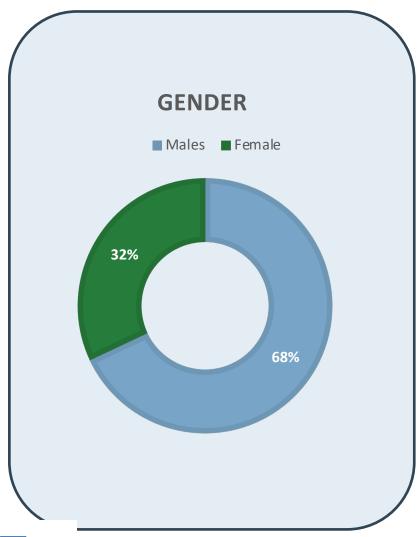
- Questionnaire based anonymous survey
 - Interviewers: African VFRs
 - VFR from Sub-Saharan Africa at Hamburg Airport
 - 3 languages- English, French and German
- Conducted from Jan-August 2023
- Educative leaflet was given to participants after the interviews
- Inclusion Criteria
 - 18+
 - Sub-Saharan African decent
 - Visited an African country recently





Demographics and travel profile

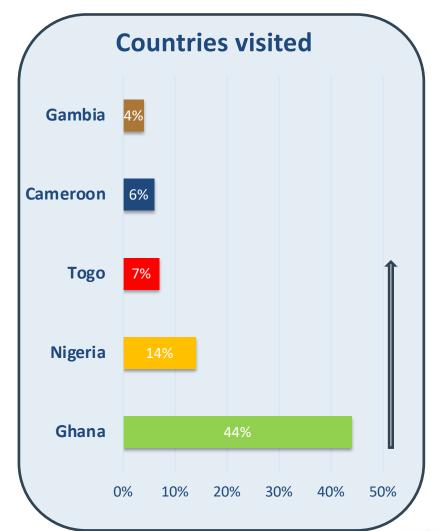




- N = 389 adults
- N = 92 Children
- Male > Female

Duration

- 70% = 4 wks and less
- Median duration: 4 wks
- **90% = 2018-2023**







Results



	N=389		
Before your last journey to Africa, did you seek medical travel advice?	N (col %)	What was the reason for not seeking travel medical advice?	N=181
Yes	208(53)	I don't think its important	71(39)
No	181(47)	I did not think of it	64(35)
Where did you seek travel medical advice?	(N=208)	I didn't have time, because I had to travel on short term notice	9(5)
Institute for tropical medicine	51(26)		
Medical practice specialized in travel medicine	8(4)	I didn't have time, because I had to work	5(3)
General practitioner	127(61)	I only sought travel medical advice for the vaccination against yellow fever and my vaccination was still valid	3(1)





^{*** 9%} thought there was either a vaccine for malaria or believed they were vaccinated against malaria.

Results



Mode of transmission

- 308(79%) knew how malaria can be transmitted
- However only 260(67%) chose bite from mosquito as the only and correct mode of transmission.
- 16%- food and water,
- 3% direct human to human
- 10%-did not know

Personal risk perception

■ 32% - perceive risk as high

Exposure prevention methods

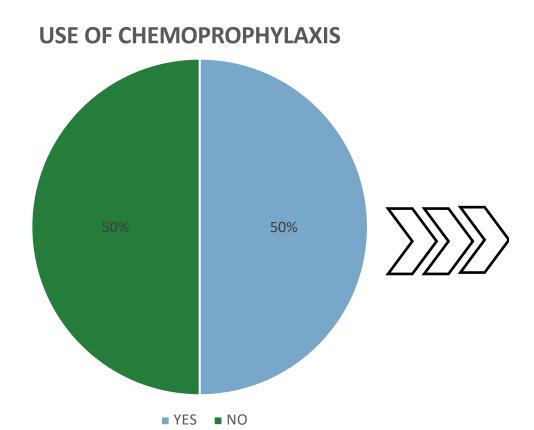
- 212(54%) : Bed nets
- 174(46%): Mosquito repellent
- 73(19%): Clean environment/ good hygiene
- 8(2%): Impregnation of clothing with mosquito repellent

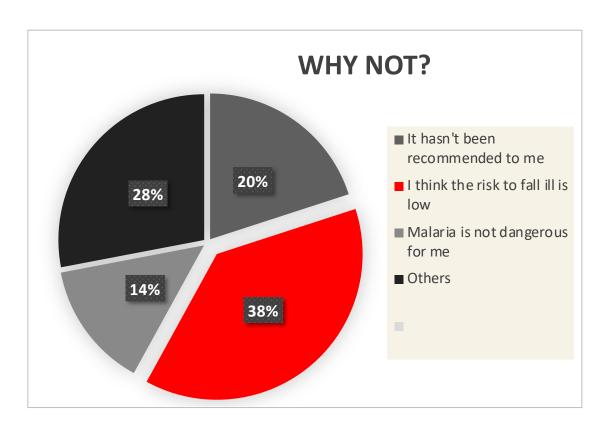




Results: Malaria Chemoprophylaxis







81% - no side effects

19% - experienced side effects





Sub-analysis of results



Gender

Females more often seeking medical travel advice(MTA) and using antimalarial drugs

Born/not born in Africa

Africans not born abroad are more likely to seek MTA and to use prophylaxis

Transmission
Risk assessment
Travel advice
Malaria prophylaxis

Age

Majority of people age 18-29, often use malaria prophylaxis and seek MTA Children

-70% used antimalarial drugs
-Higher risk perception for children





Discussion



- General knowledge of malaria is satisfactory
- About 50% sought travel medical advice, 50% used malaria chemoprophylaxis
- Risk perception is low
- Risk perception for children is high
- Mistrust in healthcare providers on tropical infections was noted





Discussion



Strengths

- The mode of administration of the survey allowed us to properly assess the knowledge of malaria
- Unbiased setting and interviewers were of African descent
- The data is representative
- Survey was in English, French and German

Limitations

- Rejections due to time constraints at airport
- Data is representative for Hamburg- potentially Germany
- More data from other countries needed
- VFRs predominantly from West and Central Africa





Conclusion



- VFRs 65% of malaria cases in Germany
- Main reasons; low risk perception, mistrust and lack of culturally tailored medical travel.
- GPs play a key role, better doctor-patient communication
- More specialized services for VFR travel advice!





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