

Age-related attitude to malaria and travel

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There have been a number of studies that have examined the knowledge of travellers regarding the potential health risk when overseas and the precautions they have taken to reduce the risks of travel related illness.^{1,2,3,4} Amongst these are the airport surveys which use questionnaires to gather data from travellers just prior to flight embarkation or return.^{5,6,7} There has been comparatively little work that has sampled a wider population concerning their knowledge of specific health hazards relating to travel. This paper reports on a piece of survey work that provides some insight into the knowledge and attitude of the UK population regarding the risk of malaria, particularly in respect of how this may be influenced by age.

For the last six years GSK have sponsored a very successful malaria awareness campaign in the UK.⁸ This has consisted in particular of taking advantage of media opportunities to communicate the various messages concerning the risk of malaria to travellers and how to minimise contracting the disease whilst away. In 2009 a survey was commissioned by GSK to gain some insight into the attitudes of the public regarding malaria. The data below has been extracted from the survey with their permission and reanalysed in particular to highlight the position of different age groups.

Method

The survey was advertised in various newspapers, magazines and websites. Participants were invited to use an on-line web based survey form if they were planning to travel abroad in the next 12 months in order to respond to a variety of questions broadly related to malaria and travel health. The survey ran for 5 days in April 2009 and was conducted by Opinion Matters/Tickbox.net. Results were downloaded to an Access database for analysis. Test for significance regarding relationship to age group were performed using a chi-square test on Minitab version seven.

Results

A total of 1004 respondents answered the questionnaire and the breakdown of their demographics is shown in Table 1. The analysis of the data explored specifically whether there was any relationship between the potential behaviour of the respondents if visiting malaria endemic areas and age. One area of concern is the trend for travellers to seek 'last minute' travel arrangements, which results in potentially less time for a travel health consultation. Respondents were asked whether the credit crunch and the strength of the Euro against the pound made them consider last minute long haul deal outside of Europe. Figure 1 describes the [percentage who agreed with the statement and illustrates that this trend is age related ($p < 0.0001$, Chi-square 110, DF=4) with those age 16-24 more likely to consider such a trip. Overall 82% of respondents said that they would seek pre-travel health advice before booking a last minute holiday, although again this trend is age related ($p < 0.034$, Chi-square 10.6, DF=4) with the younger age group less likely to seek such advice as shown in figure 2. The tendency amongst younger age groups to not seek pre-travel advice is further shown in figure 3 ($p < 0.0001$, Chi-square 37, DF=4) when asked what would be the first thing they would think about after booking a holiday abroad. In this case there appears to be a prioritisation of what clothing to be worn amongst the younger age groups ($p < 0.05$, Chi-square 9.65, DF=4). What do whilst away was a high priority but no significant difference was observed with increasing age. 94% appreciated that malaria was a fatal disease although this was lowest in the 16-24 year olds at just 80% (figure 2). Respondents were asked to

identify countries where there was a high risk of malaria and 79% correctly identified the Gambia, which has been a particular problem for UK travellers in recent years, but the correct answer being significantly associated with age as shown in figure 4 ($p < 0.01$, Chi-square 16.1, DF=4). Thailand is a lower risk area in the main but only 48% identified this correctly with no correlation to age being observed.

Discussion

This survey examines some of the factors that may influence travel health seeking advice and general understanding of malaria. Unlike other surveys the study population are not specifically those about to travel overseas but a represent the views of the general public in the UK. Being a WEB based survey and advertised through a limited range of media may have biased the results to a specific grouping, so may not necessarily be representative of those travelling to malaria endemic areas. For instance more females answered the survey and the numbers in the younger age group are quite low. However, the results do seem to support the general observations regarding the relationship between age and attitude to travel health. It has been recognised that the under 25 year age group is particularly at risk of travel health related hazards.^{9,10,11,12} In a very recent study¹³ health risk perceptions and behaviours of US students studying abroad was examined by a web based survey and concluded that they did not find any travel health threats particularly worrisome. There are also reports of clusters of cases of malaria in this age group likely to be related to poor adherence to travel health advice.¹⁴ One important factor in failure to receive the correct advice when travelling abroad is uptake of last minute travel and this studies does indicate that younger age groups will be increasingly more likely to consider this form of holiday and that they are less likely to seek travel health advice in this situation. There is also evidence that increasing age results in prioritising seeking travel health advice. There does seem to be a raised awareness in all age groups of the severity of malaria and the sub-Saharan Africa is a particular area of concern, although again this lower in the youngest age group. In addition there is less awareness of those areas classified as having a lower risk.

Conclusion

The younger age groups have attitudes and behaviours that may put them at risk of travel related disease. The policy of targeting such age groups in campaigns to raise the awareness of hazards such as malaria when travelling overseas appears justified.

The survey was commissioned and paid for by GlaxoSmithKline. GlaxoSmithKline provided the author with the raw data and have had no further input into the content of the paper.

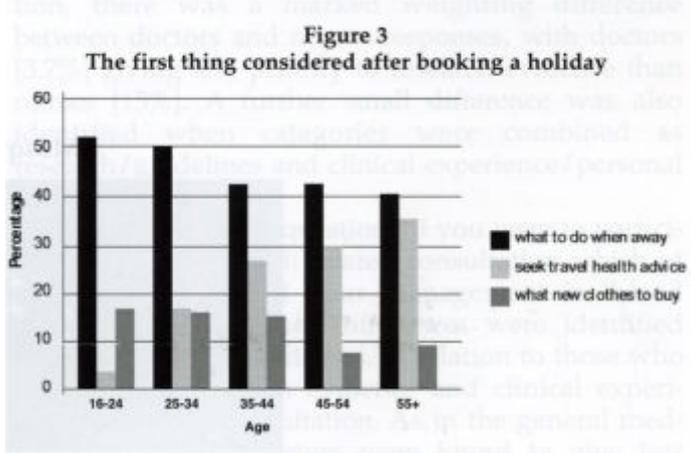
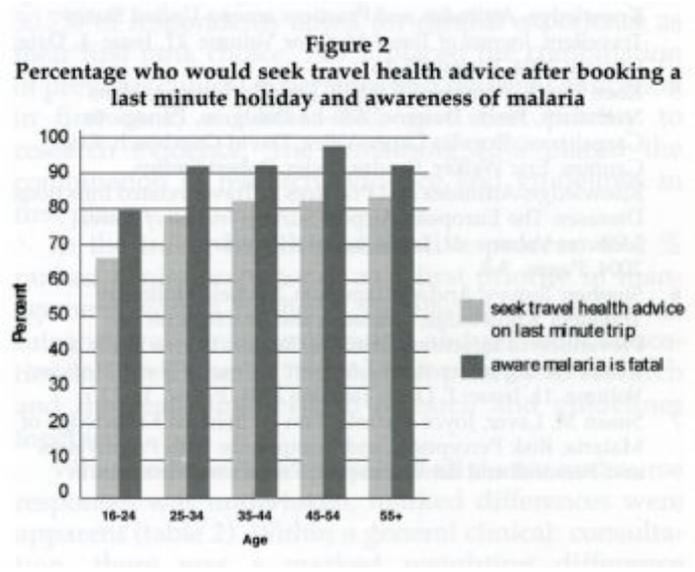
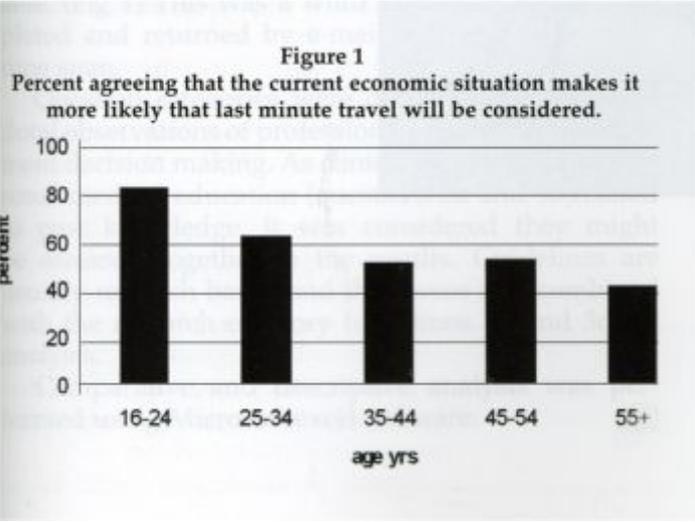
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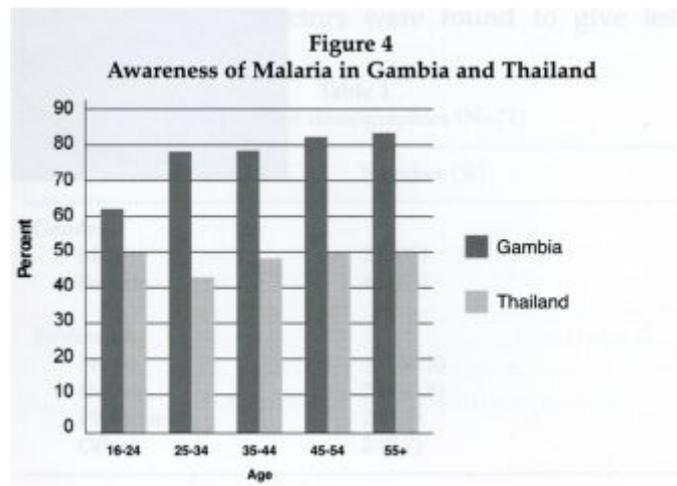


Tables and figures on following pages

Table 1
Demographics of Respondents

<i>N=1004</i>	<i>Number (%)</i>
<i>Age (yrs)</i>	
16-24	55 (5)
25-34	189 (18)
35-44	256 (25.5)
45- 54	239 (24)
55+	265 (26.4)
<i>Gender</i>	
Male	357 (36)
Female	647 (64)
<i>Region</i>	
East	110 (11)
London	128 (13)
Midlands	146 (14)
North East	36 (4)
Northwest	129 (13)
North Ireland	10 (1)
Scotland	83 (8)
South East	153 (15)
South west	90 (9)
Wales	40 (4)
Yorkshire	93 (9)





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