

Nordic travelers' knowledge about mode-of-transmission of malaria and vaccine preventable diseases

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Background:

We evaluated the level of knowledge among adult Nordic travelers on transmission routes of malaria and various vaccine preventable diseases.

Method:

Questionnaires were used to conduct a travel health survey in Denmark, Finland, Norway and Sweden. We included 18-74 years old adults stratified according to the general population by age, gender and residency. At-risk travelers were defined as those having traveled outside Europe/North America at least once during the previous two years.

Results:

The study comprised 4.154 respondents, 1.999 of them at-risk travelers (Denmark N=1.044/511, Finland N=1.047/505, Norway N=1.019/478, Sweden N=1.044/505). Only 37.2 % received vaccines at pre-travel visit; 57.8 % had been vaccinated earlier. Of at-risk travelers 79% knew that malaria is transmitted by mosquitoes. Likewise, 78 % were aware that rabies is transmitted through animal bites or scratches. Whereas 52.7 % knew that hepatitis B is transmitted by blood and bodily fluids, 42.8 % thought the same for hepatitis A. On the other hand, 33.6 % and 39.4 % replied that hepatitis A and nearly one-fifth that hepatitis B is transmitted by contaminated water or food, respectively. More Finnish travelers than those from the other Nordic countries knew that yellow fever is mosquito-borne (46.5% vs. 33 %). More than one-fourth of the respondent's lacked suggestions for transmission routes of yellow fever. Half of the respondents provided no information on transmission of Japanese encephalitis; only 20.4 % knew it is mosquito-borne. While 45.7 % and 29 % considered contaminated water and food as sources of cholera, the respective information for typhoid fever was provided only by 24.5 % and 22.5 %. As for meningococcal disease, 38.6 % felt they had no knowledge and only 29.5 % gave the correct answer.

Conclusions:

Most travelers know how malaria and rabies are transmitted, but for other vaccine preventable diseases the level of knowledge is low across the Nordic countries. Travelers tend to confuse hepatitis A and hepatitis B. Prevention of various travel-acquired infections, calls for improving travelers' general knowledge about transmission routes of vaccine preventable diseases.