ABSTRACT

Background: Travel Counsellors may be a source of health advice to travellers and might influence travellers’ decisions to seek consultation from health professionals. We examined the travel health advice that Alberta travel counsellors currently provide their clients and assessed their health knowledge and practices.

Methods: Cross-sectional postal survey of travel counsellors who book international trips identified from a random sample of Alberta travel agencies in 2000.

Results: The response rate was 54.4%. Over 80% of respondents routinely provide clients with general health advice, and approximately 70% advise on malaria risk and vaccines required for travel. The risk of malaria was correctly identified by 72% of the respondents who frequently book clients to malarious destinations. Most respondents (79%) thought they should be involved in promoting the health of international travellers. Their preference was to provide health advice to their clients (90%) rather than refer them to a health professional (67%).

Conclusions: A large proportion of Alberta travel counsellors provided travel-related health advice to clients. Their preferred role of counselling rather than referring conflicts with the recommendations of the International Society of Travel Medicine.

La traduction du résumé se trouve à la fin de l'article.

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A cross-sectional mail survey of Alberta travel counsellors was conducted in the spring of 2000. The 1999 Personnel Guide to Canada’s Travel Industry\textsuperscript{18} was used as the sampling frame to select a geographically stratified random sample (N = 300) of travel agencies. The sample size was chosen to determine if the proportion of Alberta TCs who provided advice was 50% +/- 10%, with 99% certainty,\textsuperscript{19} assuming a 65% response rate.

The questionnaire was mailed to the managers of the agencies with a cover letter requesting that it be completed and returned by the member of their staff who most frequently booked international trips. The questionnaire was based upon one used elsewhere,\textsuperscript{15} refined by review with key informants (faculty members of the Southern Alberta Institute of Technology Travel Counseling Certificate Program), and pre-tested in a sample of 10 TCs.

To assess the travel-related health advice that TCs currently provide their clients, respondents were asked the frequency with which they provided information on a closed-ended list of health advice topics. To examine knowledge, respondents were asked to list the four overseas destinations to which they most frequently sent their clients, then to indicate if there is a risk of malaria for each destination. The accuracy of these responses was evaluated using the “Vaccination Requirements and Health Advice” section of the 1999 edition of the C.D.C. “Yellow Book”.\textsuperscript{8} Information sources were examined using a list of closed-ended choices from which respondents were asked to choose all which they would normally access when providing travel health advice to their clients. TCs were asked to indicate their level of agreement with statements outlining methods of involvement in the promotion of travel-related health.

Three mailings were sent at 4-week intervals. Data were double entered into an Epi Info\textsuperscript{20} database and validated. Univariate analysis was carried out using contingency tables. Counting the number of items for which respondents indicated they provided advice created an index score for the number of topics on which respondents provide advice.

The study was approved by the University of Calgary Conjoint Health Research Ethics Board.

### METHODS

### RESULTS

One hundred and forty-six completed questionnaires were mailed back; and another 26 were returned by the post office as “undeliverable” (response rate 54.4% of agencies with a valid address). The majority of the respondents (76.4%) were female. The mean number of years in practice was 13.4 with a range of 1 to 37. One half of the respondents (50.9%) had been college-trained, with the remainder trained on the job. The average number of counsellors in the respondent’s office was 5.8 (range 1 to 90).

Figure 1 displays the frequency with which respondents provide clients traveling overseas with health advice on specific topics. All routinely discuss travel health insurance with their clients. Over 80% (115/143) routinely provide clients with general health advice, and approximately 70% give more specific advice, e.g., vaccines required for travel (99/141), malaria risk (98/140). Only 53.9% routinely (76/141) recommend that their clients seek pre-travel medical advice from a specialized travel clinic. Even fewer, 40.4% (55/136), routinely recommend that clients see a doctor prior to travel. However, a greater proportion of respondents agreed that clients who were elderly or who have health problems (92/145, 66%) or travelers planning physically challenging trips (134/145, 92%) should be referred for pre-travel medical advice.

Respondents from rural locations were less likely (34/58, 58.6%) to refer to a travel clinic or physician than their colleagues in large urban centres (57/84, 67.9%; p=0.34). There was a statistically significant positive association between the

### TABLE I

<table>
<thead>
<tr>
<th>Information Source</th>
<th>Number of Respondents (%)</th>
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<tbody>
<tr>
<td>None, do not provide health advice</td>
<td>9 (6.3)</td>
</tr>
<tr>
<td>More experienced colleague</td>
<td>11 (7.7)</td>
</tr>
<tr>
<td>Alberta Health</td>
<td>40 (28.0)</td>
</tr>
<tr>
<td>Travel Clinic</td>
<td>51 (35.7)</td>
</tr>
<tr>
<td>Other Travel Industry Publications/Databases</td>
<td></td>
</tr>
<tr>
<td>World Travel Guide</td>
<td>28 (19.6)</td>
</tr>
<tr>
<td>Galileo</td>
<td>25 (17.5)</td>
</tr>
<tr>
<td>Sabre</td>
<td>15 (10.5)</td>
</tr>
<tr>
<td>Apollo</td>
<td>39 (27.3)</td>
</tr>
<tr>
<td>Tour Operators</td>
<td>25 (17.5)</td>
</tr>
<tr>
<td>The Internet</td>
<td>32 (22.4)</td>
</tr>
<tr>
<td>Other</td>
<td>36 (25.2)</td>
</tr>
</tbody>
</table>

Note: more than one source possible for each respondent, thus totals exceed 100%
amount of advice given and referral to physician or travel clinic. The mean advice index score was 4.2 among those who sometimes/never referred their clients compared to 5.3 among those who referred more frequently (p=0.02).

Malarious areas (excluding Mexico) were among the top four destinations listed by 64.9% of respondents. Of this group, 71.8% (61/85) correctly identified the destination as having malaria risk. Those who appropriately recognized malaria risk (45/61, 75%) were more likely to refer than those who did not recognize the risk (10/23, 43.5%, p=0.014). Mexico was listed in the top four destinations by 32.4% of respondents, but only 24.4% of these identified the malaria risk.

Table I outlines the information sources used by respondents when providing travel health advice to their clients. TIMATIC, a computerized database which provides destination-specific information on many subjects including traveller health, was the most popular information source, used by 67.8% of respondents. The health information in TIMATIC is based on World Health Organization recommendations which closely resemble those of the Yellow Book. Responses to the “Other” category were varied, however the most common response was “local health unit” (9/36).

Most respondents (78.5%; 113/144) agreed that they should be involved in promoting the health of international travellers. Figure 2 reveals their level of agreement with various methods of involvement.

Many respondents (68%; 98/144) perceived that their clients expect them to discuss key travel health issues, and 63% (91/144) indicated that it was company policy to provide overseas travellers with travel-related health advice. The three most frequently identified impediments to travel health promotion were: 1) fear of being sued for incorrect advice (49/145; 33.8%), 2) insufficient knowledge (39/144; 27.1%) and 3) beliefs that travel-related health issues are not the responsibility of TCs (23/145; 15.9%). Few indicated that they had insufficient time to discuss travel-related health issues (10/144; 6.9%).

DISCUSSION

International travellers experience morbidity and mortality that could often be prevented by following simple health advice. Although many travellers do not seek this advice from health care professionals prior to travelling,11,12 many contact a travel counsellor (TC). TCs are thus uniquely positioned to positively influence travellers’ health.

Similar to the study conducted in Western Australia,15 we found that almost all TCs routinely discuss travel health insurance with their clients. This is not unexpected since they receive a commission for selling this insurance. However, this also provides a seamless opportunity for TCs to discuss health issues with their clients. Indeed, the discussion of travel health insurance might be the context in which TCs address how to find a physician overseas, explaining the frequency with which this was discussed with clients.

The high percentage of respondents who reported providing both general and destination-specific travel health advice was unexpected. This finding may be real but might also be due to response bias. If all non-respondents are assumed not to provide travel health advice, then only 38.3% (105/274) of Alberta TCs provide travel health advice. This is substantially lower than the 56% of Australian TCs15 who provide broad travel-related health guidelines. It is likely that the true proportion of Alberta TCs who provide general travel health advice lies somewhere between 40 and 80%.

Although the proportion of respondents who routinely recommend that their clients visit a specialized travel clinic or physician prior to travel was similar to that found by Ivatts et al.,15 it is much lower than desired by the International Society of Travel Medicine (ISTM). The 1996 ISTM consensus statement recognizes the significant role that TCs can play in promoting travel-related health, and recommends that TCs advise clients to consult a health-care professional to obtain health advice about foreign travel.21

It is important to note that 41.8% of respondents in this study were not from a major urban centre, and that the referral rate was lower among these respondents. This is in contrast to the results found among Quebec TCs, where those practicing outside Montreal were more likely to recommend consulting a travel clinic than their urban counterparts.15 Possible explanations for this might include limited geographic access (e.g., long distances) to specialized travel clinics, limited physician resources in smaller centres, or the utilization of other health care professionals, such as nurses at public health units. It may also be due to geographic differences in travel patterns between Quebec and Alberta.

Most travel health advice is of a general nature and requires limited medical knowledge. However, malaria prevention requires physician prescription of appropri-
ate prophylactic medications. It is therefore essential that TCs recognize clients who are at risk and refer them appropriately. We found that the majority of respondents who frequently send their clients to malarious destinations correctly identified malaria risk and would appear to recognize that this risk is an indication for referral to a health professional.

A distinct difference from both the Australian\textsuperscript{15} and Quebec\textsuperscript{16} studies was the information sources used by respondents. Computerized databases were used twice as frequently, and travel clinics one half as often. This may be indicative of differences in access or in awareness of travel clinics in Alberta.

The proportion of respondents who expressed a desire to be involved in promoting the health of international travellers was very high, similar to that of Quebec TCs.\textsuperscript{16} However, Alberta TCs preferred to directly provide travel health information to their clients in contrast to Quebec TCs\textsuperscript{16} who referred clients to travel clinics. This difference might reflect differences in one or more of knowledge, policy or practice, client expectations or awareness, or access to services between the two provinces.

The current IST\textsuperscript{3} M consensus statement\textsuperscript{21} recognizes the significant role that TCs can play in promoting travel-related health, and recommends that they advise all international travellers to consult a health-care provider prior to travel. The difference in concordance with this statement between Alberta and Quebec TCs highlights that TCs are a heterogeneous group. One strategy that might be acceptable to TCs which would also forward the goals of the IST\textsuperscript{3} M would be for TCs to provide their clients with pamphlets on travel health which would also specifically advise travellers to see a health-care professional prior to departure. Given the eagerness of respondents in this and other studies\textsuperscript{15,16} to provide their clients with pamphlets, the positive associations between the amount of travel health advice given, the current provision of pamphlets and referral, this approach may also increase the number of travellers receiving travel health advice from health-care providers.

This study was conducted prior to September 11, 2001. The events of that day as well as variability in the economic climate have severely affected the travel industry, which may impact TCs' willingness and ability to be involved in the promotion of travel-related health in the future. Ongoing assessment is required, however, as adverse economics might make the provision of health advice an attractive “value added” component of the services provided by travel counselors.

**CONCLUSION**

A large proportion of Alberta travel counselors currently provide travel-related health advice to their clients; however, only 53.4% frequently refer their clients to specialized travel clinics. They prefer to have a direct role in the provision of travel-related health advice to their clients, which differs from TCs in Quebec and conflicts with current IST\textsuperscript{3} M recommendations. Clearly there is a need for increased cooperation and communication between and among the travel and the health industries.

**REFERENCES**

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**RESUME**

Contexte : Les conseillers touristiques peuvent être une source de conseils de santé pour les voyageurs, qui peuvent encourager à consulter des professionnels de la santé. Nous avons examiné les conseils que donnent actuellement les conseillers touristiques de l'Alberta à leurs clients en matière de médecine des voyages, afin d'évaluer les connaissances médicales et les pratiques de ces conseillers.

Méthode : Enquête postale transversale auprès de conseillers touristiques qui réviennent des voyages à l'étranger, choisis à partir d'un échantillon aléatoire d'agences de voyage albertaines en 2000.

Résultats : Nous avons obtenu un taux de réponse de 54,4%. Plus de 80% des répondants donnaient systématiquement à leurs clients des conseils de santé généraux, et environ 70% leur donnaient des conseils sur le risque de contracter la malaria et sur les vaccins requis en voyage. Le risque de malaria a été correctement souligné par 72% des répondants qui faisaient souvent des réservations vers des destinations où cette maladie est endémique. La plupart des répondants (79%) considéraient qu'il était de leur devoir de promouvoir la santé des voyageurs internationaux. Ils préféraient cependant donner des conseils de santé à leurs clients (90%) plutôt que de les orienter vers un professionnel de la santé (67%).

Conclusions : Une grande proportion des conseillers touristiques de l'Alberta donnent à leurs clients des conseils de santé liés aux voyages. Le fait qu'ils préfèrent conseiller les voyageurs plutôt que de les orienter est cependant contraire aux recommandations de la International Society of Travel Medicine.