Communicating risks to the traveller

Lorraine M Noble

Despite the considerable time invested by health professionals each year in providing travellers with precautionary advice, compliance with recommended measures is still much lower than it should be. Non-compliance is not random but is caused by a number of predictable factors which can be addressed in the consultation. The role of communication between the professional and the traveller is vital in ensuring that travellers are able and willing to follow the advice they are given.

The traditional model of 'compliance to treatment' assumes that on leaving the consultation, patients are both able and willing to follow the recommendations they have just received. Unfortunately, studies investigating rates of compliance throughout medicine have established that failure to comply with an adequate regimen of treatment is commonplace, and travel medicine is no different. Taking as an example malaria prophylaxis, Phillips-Howard et al (1986) found that 48% of 326 British travellers who had contacted a malaria advisory service reported that they had adhered fully to the regimen they had been recommended. In a much larger study of European and North American travellers, 48% of 5489 travellers reported that they were following a regimen for malaria prophylaxis which would be considered adequate (Lobel et al, 1990). Both of these studies used self-report, which tends to overestimate rates of compliance.

A number of studies across Europe and North America have found that certain groups are more at risk for not taking adequate precautions when travelling (Phillips-Howard et al, 1986; Harries et al, 1988; Lobel et al, 1990; Kollaritsch and Wiedermann, 1992; Held et al, 1994, Gyorkos et al, 1995). These are:

- People visiting friends and relatives
- Business travellers
- Travellers under the age of 40
- People who had been to the area on a previous trip
- Travellers staying longer than 4 weeks.

About two-thirds of non-compliance to prophylactic medication is related to the failure of travellers to continue with the regimen on their return home for the specified time period; the remainder is mainly due to irregular medication use.

There are predictable patterns in non-compliance because there are a number of clear identifiable reasons why people are insufficiently motivated or simply unable to follow the recommendations given. The key to addressing these problems lies in the consultation between the health professional and the prospective traveller. This article discusses a number of strategies that can be used to improve communication and hence improve uptake of travel medicine advice.

Dr Lorraine M Noble is Lecturer in Communication Skills, Department of Psychiatry and Behavioural Sciences, University College London Medical School, London W1N 8AA

Quality of information given

The information given to travellers from professional sources must be complete, accurate, and consistent: Ley (1981) coined the term 'professional non-compli-

ance' to describe how health professionals often fail to adhere to recommended guidelines about appropriate treatments. He pointed out that unless patients are given health advice that is complete, accurate and consistent it is difficult, if not impossible, for them to follow the appropriate regimen. In travel medicine, deficiencies have been found in all three aspects of the information given by health professionals to prospective travellers.

Kollaritsch and Wiedermann (1992) found that Austrian travellers were reasonably well informed about vaccinations, chemoprophylaxis and dietary hygiene, but were very poorly informed about other recommendations, particularly concerning sexually transmitted diseases and the use of a basic medical travel kit. In terms of accuracy of information given, Held et al (1994) compared the information given by different sources to World Health Organization guidelines and found that institutes of tropical medicine and travel agencies gave the most accurate advice, but that family doctors had a significant incidence of giving wrong advice. Consistency of information is also a problem. Phillips-Howard et al (1986) found that 77% of 123 British travellers were given different recommendations when contacting different sources.

The issue of consistency is particularly important if travellers tend to 'shop around' for advice, and all the evidence shows that they do. Phillips-Howard et al (1986) and Kollaritsch and Wiedermann (1992) both found that travellers tended to contact on average two to three sources of advice about malaria prophylaxis. Inconsistency of advice causes confusion and misunderstanding, with a consequent reduction in adherence. Held et al (1994) found that adherence was lower in travellers who had discussed prophylaxis with more than one professional source.

Travellers should be warned against altering their regimen because of advice from non-professional sources: Travellers compare notes with people within their own social network, a phenomenon called 'lay consulting' (Scambler et al, 1981). This is a problem if travellers are being given a variety of regimens, and indeed Lobel et al (1990) found 68 different drug regimens among travellers in Kenya. Phillips-Howard et al (1986) found that one of the most common reasons given for failing to comply with the recommended regimen of medication was being told that it was unnecessary by friends or local people.

Travellers' understanding of advice

Adherence to health advice is significantly improved if the person actually understands it (Hall et al, 1988). The person needs to be clear about what they should do and when. This may seem obvious, but in fact patients frequently do not understand what they have been told by health professionals (Ley, 1977; 1982). Research has found that doctors tend to concentrate most on providing information and instructions, with little time spent on checking how the information is being received and what the person wishes to know (McClellan, 1986).

When travellers' understanding of advice given over the telephone by a malaria advisory service was informally assessed, Phillips-Howard et al (1986) found that 257 callers appeared to fully understand the recommendations, but 57 had some difficulties in understanding. This appeared to be related to the complexity of the regimen.

Calibration is one of the most difficult tasks when exchanging information with patients and should not be underestimated. It requires the language and pace of information to be tailored to a level the person will understand and a balance achieved between what the person wants to know and what the professional feels they need to know.

Tips for maximising understanding

Be aware of language used: Medical jargon should either be avoided or clearly explained. Health professionals should also avoid making blanket assumptions about a person's ability to understand purely based on their apparent level of intelligence. In addition, the type of language used can depersonalize the situation and leave the traveller feeling less at risk than they are; for example, the use of statistics in a discussion rather than the phrase 'You are at risk'.

Agree on goals and priorities: Travellers are likely to know that they may need vaccinations and medication, but may not be aware of the full range of risks to their health. In particular, the risk of diseases transmitted through sexual intercourse, such as HIV and hepatitis B, should be highlighted. It is also important to correct any misconceptions about the level of risk and the types of behaviour that put people at risk, as these are likely to be different from the home country (Jong and McMullen, 1992).

Check comprehension frequently: Ideally the consultation should begin with a phrase to the effect that if the person does not understand anything at any point, they should interrupt and ask. There are many different cues that can be used to assess whether someone has understood what has been said throughout the consultation. Non-verbal cues are important but are not sufficiently specific. Understanding should be checked in detail by asking the person to repeat the instructions or to demonstrate any procedures to be followed. The question 'do you understand?' should not be relied upon.

Check comprehensibility of all written materials: This applies to leaflets (Ley, 1982), notes that the traveller makes, or notes that the professional makes for the traveller.

Travellers' recall of advice

Failures of recall are frequent, even immediately after a consultation (Ley, 1982). The factors which are related to recall have been clearly established and there are a number of communication strategies which are particularly helpful.

Recall is linked to the complexity of the regimen. Phillips-Howard et al (1986) found that 86% travellers who were given one regimen recalled the information correctly, compared with 19% of travellers given two or more regimens. Ideally travellers should only be required to remember a few key points, hence regimens should be kept as simple as possible. Long, information-intensive consultations do not aid recall: consultations should be kept short (within 10–15 minutes). If it is possible for the person to attend on two separate occasions, information can be shared between the consultations, and this also provides opportunities for reinforcement of previous advice. Where complex regimens are unavoidable, travellers must be given additional help for them to remember (e.g. a written summary).

Another important determinant of recall is level of anxiety. Recall is poor when the person either has very little anxiety (hence no motivation to remember the measures being recommended) or too much anxiety (i.e. so panic-stricken they cannot attend to the information long enough for it to register). The ideal for optimum recall is a mild to moderate level of anxiety. In travel medicine, as in other health promotion contexts, the health professional will most commonly be required to raise the person's awareness of the risks to their health. The traveller needs to be clear about the seriousness of the diseases from which they are at risk, which can be a difficult concept for young, healthy people who feel invulnerable to serious illness.

Tips for improving recall (Ley, 1977) include:

- Provide instructions and advice as early on as possible
- Stress the importance of the advice
- Use short words and sentences
- Provide an overview of the entire plan at the beginning
- Clearly signal the beginning of each new segment when going through the plan in detail
- Repeat important information
- Give instructions that are as specific, detailed and concrete as possible.

Lay beliefs

People have a variety of beliefs about illness and treatment, and these are important determinants of adherence to health advice. For example, Stimson (1974) studied patients' beliefs about medication and found a number of misconceptions that were related to patients' non-adherence. These included beliefs that medication should be taken only when the person feels ill and stopped when they feel better, that the body needs a rest from medicines from time to time, and that people can become dependent on medication or immune to its effects with prolonged use. None of these beliefs had been discussed with the doctor. Patients modified their regimen or reduced their intake of the prescribed medication in accordance with their beliefs.

Prospective travellers, like other groups of patients, have explanatory models of illness and expectations and beliefs about treatment. Problems arise when travellers have gaps in their knowledge or misconceptions. In a survey of 502 British residents before their appointment at a travel clinic, Behrens and Phillips-Howard (1989) found that 27% thought that malaria occurred in countries such as Spain or Australia, 31% thought that malaria was contracted by drinking local water, 23% would take inappropriate action if they suspected malaria, and if symptoms

of suspected malaria persisted after an initial visit to a doctor, 14% would not seek further medical help. Particularly worrying was the apparent lack of awareness of the seriousness of malaria and the likelihood that travellers would delay seeking medical help. Behrens and Phillips-Howard commented that as this sample had taken the trouble to visit a travel clinic, their level of knowledge was likely to be higher than the general public's.

Misconceptions about prophylaxis are also prevalent among people staying abroad for longer periods, whom it would be expected would be better informed. In a study of British residents of Malawi, Harries et al (1988) found that two of the most common reasons for not taking any malaria chemoprophylaxis were dislike of taking medication for long periods and the assumption that several years residence in Africa had produced immunity. Harries et al also found that 27% were not intending to take chemoprophylaxis for the recommended 4–6 weeks on their return to Britain, and 10% were not intending to take any at all on their return. These reasons indicate that people in this sample did not fully understand the nature of the illness or the mechanism of chemoprophylaxis.

Strategies for addressing lay beliefs derive from a number of models:

- The health belief model (Becker, 1985)
- Readiness to change and motivational interviewing (Prochaska and DiClemente, 1983)
- Risk perception (Fischoff et al, 1993).

Tips for addressing lay beliefs are as follows. First of all, identify the person's current understanding of the illnesses from which they will be at risk and what they know about the prophylactic measures they need to take.

A good starting point is to ask an open question (e.g. 'What do you know about...?') and then focus in with more specific questions ('Do you know how serious this disease is?', 'Are you aware that HIV is common among heterosexual people in the country you are going to?').

Second, be aware of common misconceptions and reasons for non-adherence and mention these as a matter of course during the explanation. For example: 'So you need to take these tablets starting from today and until you have been back in the country for four weeks. Often people think that when they are back home they are not at risk of getting ill, and stop taking the medication. It's important that you continue to take the tablets, because of the way they work. Do you have any questions about this?'

Follow up the advice that is given

There are two aspects to this:

Discuss potential barriers to following the advice: Travellers should be given the opportunity to mention any problems they foresee with the regimen. Some people know that they always forget to take tablets. Others might be concerned about remembering a complex regimen. Travellers may have queries about how they deal with problems occurring en route (e.g. if they lose their tablets or they have a digestive upset and cannot take their medication for several days). A couple of minutes spent on problem solving can prevent the wholesale abandonment of a regimen later — 'I couldn't take my tablets for three days, it's probably not worth it anymore.'

Wherever possible, monitor adherence: In their meta-analysis of studies in doctor–patient communication, Hall et al (1988) found a positive relationship between doctors asking patients about their adherence to treatment, and actual levels of adherence. Asking a traveller on their return home about how they are getting on with their regimen has the effect of encouraging the person to continue.

However, this should not consist of just one question to which the answer will inevitably be 'Fine'. The person should be asked in detail about what they are still taking, whether they have had any side-effects, and whether they have noticed any changes in their health as a result of their trip (Steele et al, 1990). The reasons for this are threefold. First, the person may have been taking a reasonable level of precautions yet still have been unlucky enough to get ill. Second, if the person has not been following their regimen adequately, for whatever reason, this will be highlighted and may be corrected. Third, if a health professional does not ask about adherence or asks only casually, this conveys the impression that the advice was not terribly important in the first place — and this is likely to lead to non-compliance next time.

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KEY POINTS

- **Ensure that the information being given to the traveller is accurate and complete.**
- **Warn travellers not to modify their regimen on the basis of advice from non-professional sources.**
- **Check that the traveller fully understands the advice.**
- **Use strategies to help the traveller to recall the information.**
- **Take into account travellers' lay beliefs and correct any misconceptions.**
- **Discuss potential barriers to following the recommendations.**
- **Monitor adherence.**