on which over the counter drug they had recommended and the reason for the recommendation.

Table 1 gives the number and proportion of consultations at which information on prior use of an over the counter drug was elicited and at which a prescription was issued or an over the counter drug was recommended, or both. Over the counter drugs were recommended during 444 consultations, but the actual drug was stated in only 413. The six general practitioners varied considerably in their rates of recommending over the counter drugs (from 2.3% to 37.5%) and issuing prescriptions (from 30.6% to 78.2%). Recommending an over the counter drug seems to be a management option that is used in addition to, rather than instead of, issuing a prescription.

Most recommendations (305/413) were for simple analgesics, especially paracetamol preparations (184/413). Medicines that have changed since 1990 from being available only on prescription to being available in pharmacies hardly featured (8/413). The main reason doctors gave for recommending over the counter drugs was that they were cheaper for some patients. Increasing patient autonomy or capacity for self care and potential savings in the practice's prescribing budget did not emerge as major reasons for recommending over the counter drugs.

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Telematics will be useful in providing information

EDITOR.—The *BMJ*'s recent series on over the counter drugs and self medication¹⁻⁴ recognises the increasing empowerment of patients with regard to self care and analyses the self medication process. One of the critical issues of this process is the provision of relevant information and education to patients. Community pharmacists will have an even greater role in providing the population with help, advice, and information about self medication products and the circumstances in which a doctor should be consulted; thus they need permanently updated information and education on over the counter drugs and guidelines on how to use them to treat minor, everyday ailments.

On the eve of the information society, use can be made of the information highways to provide lay people and professionals with access to relevant electronic information and advice on health related topics.⁵ Consequently, the European Union is funding a series of research and development projects on the applications of telematics for health. In particular, TESEMED (Telematics in community pharmacies for responsible Self MEDication) is a continuing project devoted to developing and testing prototypes of telematic systems to be used by commu-

nity pharmacists and patients to get information and education on the appropriate use of over the counter drugs.

Technologies and approaches considered include multimedia systems running in stand alone personal computers for the applications aimed at pharmacists, and touch screen information kiosks for the patient information systems. Dissemination and updating of the applications will be done through Internet facilities, including open and restricted services on the worldwide web (see <http://www.sema.es/projects/TESEMED>). A clear advantage of telematics in providing community pharmacists with updated information on over the counter drugs as well as continuous training on pharmaceutical care is that this technology overcomes the pharmacists' geographical dispersion and shortage of time.

Finally, one aspect of TESEMED that will contribute to the dissemination of the information and the impact of the project is the participation of the European organisations of pharmacists (the Pharmaceutical Group of the European Union) and manufacturers of over the counter drugs (the European Proprietary Medicines Manufacturers' Association) as partners in the consortium, in addition to academic institutions and specialists in health informatics.

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GPs lack awareness of non-steroidal anti-inflammatory drugs available over the counter

EDITOR.—Neither James G Kennedy's editorial on over the counter drugs¹ nor Jo Erwin and colleagues' short report on general practitioners' views on over the counter sales by community pharmacists² mentions the availability of non-steroidal anti-inflammatory drugs over the counter. I wish to highlight findings from my survey.³

One hundred general practitioners were sent a standard questionnaire; 70 questionnaires were returned and analysed. Twenty four respondents said that they regularly asked their patients whether they bought non-steroidal anti-inflammatory drugs over the counter; the rest

either did so occasionally or never did so. Only a few practitioners were aware that some of the non-steroidal anti-inflammatory drugs—for example, benorylate (14)—were available over the counter, but there was greater awareness of the availability of other drugs, such as ibuprofen (60). When asked about the brand names available without prescription most respondents had not heard of some of the brands—for example, Proflex (56)—although most had heard of Nurofen (51); both are brands of ibuprofen. A substantial proportion of the respondents did not know the contents of non-steroidal anti-inflammatory drugs available over the counter. Most of the respondents (57) thought that they were poorly informed about the availability of the drugs without prescription, and most (65) thought that the firms marketing over the counter drugs should inform general practitioners of their availability. Many rheumatologists have expressed similar concerns in the past.⁴

Lack of awareness of the availability of some non-steroidal anti-inflammatory drugs without prescription is compounded by the variety of brand names under which these drugs are marketed. Further problems may be encountered by the absence of lists of these drugs in reference texts commonly used by the medical profession. Consideration should be given to listing these preparations in such publications—for example, the *British National Formulary* and the *Data Sheet Compendium*. OTC Index lists all medicines available over the counter and should help general practitioners towards more rational prescribing. Many patients with rheumatic disorders use self prescribed drugs,⁵ and both general practitioners and patients should be aware of the possibility of adverse reactions resulting from duplication of treatment or an undesirable combination of drugs obtained over the counter.

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Errors by locums

Each locum should carry a logbook

EDITOR.—There is an urgent need to review the rules that govern the employment of locum doctors in NHS hospitals. Examples of substandard practice given in the BBC Radio 4 programme *File on Four* on 6 April, the errors reported by John Warden,¹ and recent personal experience all show the need for this. A working group on this subject reported to the chief medical officer at the Department of Health early in 1995,² and its recommendations are still under consideration.

These various reports show that the welfare of patients continues to be at risk because of the practice of some locums, and there is currently no effective system of communicating a warning of such experiences to potential employers of these locums. Reports on the performance of locums, most of whom provide a valuable service, must be fair, but the clear advice of the General Medical Council must be followed: "you must protect patients when you believe that a colleague's conduct, performance or health is a threat to them...the safety of patients must come first at all times."³

The working group's recommendations that each locum should carry a logbook and that a central register should be set up need carry no threat to those who are competent. This majority must accept that appointment committees apply strict criteria before employing clinical staff and that it is right that those who replace them temporarily should also be subject to scrutiny.

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Histopathology departments already audit diagnostic errors

EDITOR,—John Warden, in his report on diagnostic errors made by locum consultant histopathologist Dr Samuel Kiberu, repeatedly asserts that there are no comparative data on mistakes in pathological diagnoses and states that the report on this case calls for new research.¹ The research that has already taken place, both in Britain and in the United States, seems to have been overlooked. In 1986 a review of 12 934 cases in the British Army Histopathology Registry detected 521 diagnoses (4.0%) that contained an error; 141 of these errors (1.1%) were classed as "clinically significant" and were likely to have affected the patient's care.² In an audit of 518 cases in Southampton in 1993, errors were found in 20 cases (3.8%), and in six (1.2%) the error was judged to be clinically significant.³ Two pathology departments in the United States have reported the effects of appointing an extra senior pathologist to check all their diagnoses. In one department the checker detected 14 discrepancies of potential clinical significance in 5397 cases (0.26%),⁴ while in the other department major errors were detected in 1.2% of 2694 cases.⁵ Although these studies used slightly different methods, it is notable that three identified a rate of important errors of between 1.1% and 1.4%.

Many histopathology departments in Britain now operate internal audit systems to detect diagnostic errors. The Southampton system has been running since 1988, and our error rates to the end of 1995 remain comparable with the published results.³ The emerging consensus is that in routine diagnostic pathology some form of error will occur in roughly 3-4% of cases and an error that is likely to affect the patient's management will occur in 1.0-1.5%. In this light, Dr Kiberu's error rates of 14% and 9%¹ certainly seem to be high.

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Adulterants of herbal products can cause poisoning

EDITOR,—Podophyllum poisoning has developed into a mini-epidemic in Hong Kong. Since Hong Kong is a major trading centre for Chinese medicines it is relevant to alert the international medical community to this problem.

The poisoning is caused by ingestion of the herb known in Cantonese as Gwai-Kou, which is derived from the roots and rhizomes of *Podophyllum hexandrum* (also known as *P. emodi*; podophyllum). The herb appeared in Hong Kong in 1989 as an adulterant of Lung-Dam-Cho (*Gentiana* sp) and led to two cases of neuropathy and encephalopathy.¹ Around the same period, this herb was found in Taipei and Kuala Lumpur as an adulterant of another herb, Wai-Ling-Sin, which is the root of several species of clematis.² In Hong Kong, in 1995 and 1996 respectively, three and nine cases of neuropathy have been reported after consumption of the adulterant mixed with Wai-Ling-Sin. The Department of Health searched for Wai-Ling-Sin in 55 importers and 867 retail outlets and found podophyllum in 22 of the 234 samples analysed. The adulterated samples were imported by five importers and distributed to the retailers by 14 distributors. The department then publicly requested all shops to stop selling Wai-Ling-Sin.

The patients with podophyllum poisoning first developed serious vomiting and diarrhoea. In cases of mild toxicity (after ingestion of 2-8 g) neuropathy became manifest in one to two days. Patients complained of numbness of the arms and legs and difficulty in walking, and clinical findings included an absence of jerks, reduced plantar responses, lack of coordination of the fingers, ataxic and unsteady gait, poor standing balance, and impaired proprioception and vibration sense. Sensory responses and motor coordination returned partially over months. In the two cases that occurred in 1989, after ingestion of a high dose of podophyllum (probably >20 g), encephalopathy was still present five months after the incident.¹ Podophyllotoxin and related lignans in podophyllum have damaging effects on dorsal ganglion neurones and nerve fibres in the central and peripheral nervous system.^{3,4} No specific antidote is known.

Clinicians and herbal practitioners should be alerted about this adulterant in samples of Wai-Ling-Sin, which may have been re-exported to other countries.

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Unicef should do more in Sri Lanka

EDITOR,—The objective of Unicef is to safeguard the health and welfare of women and children. To do this it must work among those who are downtrodden by social inequalities, state neglect, and oppression and where health indices are low.

Sri Lanka has been engaged in a civil war for the past 15 years. The war mainly occurs in the North-Eastern Province, where over three million Tamils live. A military operation in Jaffna last October displaced 500 000 people; there were already over 350 000 refugees in the Northern Province.¹ These refugees have moved into a drought stricken area where the state has imposed restrictions on the supply of food and medicines and where more than three quarters of the households do not have toilet facilities.

P C Gunasekera and colleagues recently reported health indicators in Sri Lanka.² In most instances the mortality and morbidity statistics for Sri Lanka published by the state "exclude data from North-Eastern Province." This is given as a footnote in some government publications and is never mentioned in data provided for international use.³

Before the recent military operation, maternal mortality in Jaffna District was 220/100 000 live births, while the figure for Sri Lanka is 60/100 000.³ Similarly, infant mortality for Jaffna District was 430/10 000 live births, while the figure for Sri Lanka is 150/10 000. The rates are now said to be rising with the influx of refugees.

The prevalence of acute malnutrition among children in Jaffna has increased from 3.7% in 1975-6 to 18.9% in 1993.⁴ A slight reduction seemed to occur in early 1995, but this is being reversed with the recent displacement. Estimates in Jaffna showed that 60-100% of the mothers attending clinics were anaemic.⁵

Transport of vaccine is irregular and storage unsatisfactory. With a little effort this could be rectified. But little action has been taken to provide immunisation appropriate to age.

Of the 160 218 students studying in 454 schools in Jaffna District, 66.2% are unable to continue their education because their schools are damaged or used as refugee camps. Unicef is concerned about the increasing number of child combatants. Most of these children will be recruited to the ranks of child combatants unless they restart their education. Are we to wait until they become combatants to act?

Unicef works in close collaboration with the government. The population has a right to health, and the government and other authorities (including Unicef) have an obligation to ensure that health care is made available to civilian populations during armed conflicts. Should not Unicef influence the government to look into the plight of women and children in the war-torn areas?

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