
**Safety concerns about kava**

Sir—Kava (Piper methysticum) is marketed as a dietary supplement in the UK and USA, and is an effective herbal anxiolytic.1 In the USA, kava sales totalled about US$15 million in 2000, and it ranks ninth in the sales of all herbal remedies.2 European regulatory authorities have become aware of 30 adverse-event reports of hepatotoxic effects and liver failure associated with kava intake, including one death and five patients who required liver transplants.3 A draft document from the European Agency for the Evaluation on Medicinal Products mentions 30 cases of hepatotoxic effects including six patients with liver failure.4 The German and other authorities are presently considering a ban on all kava products.2

Kava has a long medicinal history in the South Pacific, where its rhizome is used to produce a beverage used in ceremonial rituals. The traditional medicinal uses of kava include treatment of gonorrhoea, syphilis, and cystitis, and induction of muscle relaxation and sleep.4 Kava contains six major kavalactones: kawain, dihydrokawain, methysticin, dihydromethysticin, yang-onin, and demethoxyyangonin. They are thought to mediate effects on GABA, receptors, particularly in the hippocampus and amygdala complex.4 The safety record of kava supplements has hitherto been encouraging; gastrointestinal complaints, restless-ness, mydriasis, allergic skin reactions, and dermatomyositis were reported, but these adverse effects were generally mild and reversible.4 Kava supplements are produced through aethanolic or acetonic extraction. Five of the nine patients who had liver failure had used the aethanolic extract.5 Patients had taken no other agents at all concomitantly (one patient with known hepatotoxic effects (four)).4 Onset of symptoms occurred after 2 weeks to 2 years of kava intake. The precise mechanism or mechanisms through which kava might induce liver damage is unknown. Whether kava is more hepatotoxic than conventional anxiolytic drugs is unclear. The incidence of hepatotoxic adverse events seems to be less than one case per 1 million daily doses.6 Most UK retailers have voluntarily taken kava products off their shelves. The US Food and Drug Administration is presently asking doctors to review their cases of liver toxic effects for kava use. In the UK, the Food Standards Agency is advising consumers to avoid kava.

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**Occupational medicine at stake in Italy**

Sir—Legislation voted in by the Italian Parliament has extended to specialists in hygiene and in forensic medicine the licence to practice health surveillance in the workplace, an undertaking so far reserved to specialists in occupational medicine.

The change, which consists of a two-line amendment in a new law dealing with a different issue—the shortage of nurses in Italian hospitals—has been approved without consulting the relevant scientific and professional associations.

In the schools of hygiene and forensic medicine, education and training in occupational and clinical medicine are negligible, being limited to a few dozen hours of formal teaching and no practical training. As such, they do not meet the current standards of medical surveillance and biological monitoring of workers, let alone the complexity of industrial toxicology and risk assessment. To become a specialist in occupational medicine, postgraduates need to do a full-time 4-year course, with more than 800 h of formal teaching and about twice as many hours of practical training.

The professional associations of occupational medicine in Italy are concerned that the new law may lead to lower occupational health standards, potentially endangering workers’ health. Resentment has also arisen among the Italian academic occupational medicine community. Italian occupational physicians believe their current international image has been outraged by the new legislation.

The impact of the new law, however, in terms of prevention and protection of workers’ health, is likely to be overwhelmed by another piece of legislation, approved on March 8, 2002, in which a European Union directive was approved on the protection of the health and safety of workers from risks related to chemical agents at work. The directive established that where there is only a slight risk to the safety and health of workers, and if the measures taken are sufficient to reduce that risk, the protection and prevention measures, arrangements to deal with accidents, incidents, and emergencies, and health surveillance shall not apply.

The term “slight” has been translated into Italian as moderato—moderate, not extreme, not more than 800 h. Therefore, the intervention of an occupational physician is not required, nor are the other procedures indicated, in the presence of a notable but not extreme risk to workers. This interpretation contradicts the precautionary principle, the much disputed but still widely used approach to risk management adopted in the European Union. Moreover, it would violate the rule that national legislation implementing European directives must not be more permissive than the original directive.

The new regulations seem set to lower standards and devalue professional skills in occupational health. The potential outcome may be the substantial reduction, or even the abolition, of the presence of occupational physicians in many Italian chemical industries.

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