

Use of Imported Folk Remedies and Medications in the Wisconsin Hmong Community

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ABSTRACT

The Marathon County Health Department and the Wisconsin Division of Public Health evaluated several imported drugs and folk remedies that were being used by 2 Hmong families. These included a powdered blend of folk remedies that had been purchased in California and 5 packets of medication that had been imported from Thailand. The powdered folk remedy contained arsenic sulfide as a principal ingredient. The drug packets contained acetyl aspirin, acetaminophen and chloramphenicol. The purity of these drugs was not assessed, and their dates of manufacture could not be determined. To discourage use of folk remedies and imported drugs, the county health department issued a press release that was published in a Hmong community newsletter. Despite these efforts, many Asian immigrants may continue to use these products.

INTRODUCTION

During the past 25 years, tens of thousands of Hmong refugees have immigrated to Wisconsin. As with other immigrant groups, the adjustment of Hmong immigrants to life in Western society may be hampered by language and cultural differences. Today, most Hmong families continue to observe many of the religious and cultural traditions of their native lands in the mountainous regions of Cambodia and Laos. Accordingly, many Hmong families still use Asian folk remedies and traditional healing methods, and are reluctant to seek out conventional health care providers for their medical needs.

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Over the past decade, the Wisconsin Division of Public Health has investigated several incidents involving the use of Asian medicines and folk remedies by Hmong families. Some of these investigations have identified high levels of inorganic lead and arsenic in imported products. State and county health officials have issued public health warnings to discourage the use of Asian medicines. Despite these efforts, many families continue to use imported drugs and folk remedies. This article details 2 cases in which samples of Asian medicines and folk remedies used by Hmong families were provided to health officials in Marathon County. It describes some of the potential health risks posed by these products and encourages health providers to discuss the use of Asian medicines with their Hmong patients.

CASE DESCRIPTIONS

Case #1

A Marathon County public health nurse visited a residence after being notified of elevated blood lead concentrations in two children, ages 2 and 1. The test results showed blood lead concentrations of 26 and 11 µg Pb/dL blood, both above the US Centers for Disease Control poisoning prevention goal of 10 µg/dL. The family had moved to Wausau from Thailand in the early 1990s. After several consultations with the nurse, the family gave her a sample of a reddish-brown powder that they had been using for medicinal purposes. The powder was submitted to the Wisconsin State Laboratory of Hygiene, where it was analyzed for inorganic elements. The powder was found to consist of 36% arsenic and trace amounts of barium (0.29%), cadmium (0.15%), iron (0.15%) and lead (0.81%). The sample was then sent for mineral identification to a laboratory at the University of Wisconsin-Madison Geology Department, which identified the bulk of the material as arsenic sulfide, or realgar.

As a result of these findings, Marathon County public health staff met with the family again to get

more information about this powder and its use as a medicine. The family reported that the medicine was purchased at a store in California by a relative, and was used to treat chicken pox, flu-like symptoms and nasal congestion. In using the powder, one half teaspoon of the powder (about 500 mg arsenic) was dissolved in hot water and taken 2 to 3 times per day. The family stated that the powder is usually effective 1 to 2 days after treatment is begun. They reported commonly using the folk medicine simultaneously with both prescription and non-prescription medications.

The family declined a request to submit samples of hair, urine or blood for arsenic analysis, and was advised to stop using the powder immediately.

Case #2

In consulting with another Hmong family during a well child visit, a Marathon County public health nurse obtained 5 packets of pharmaceutical preparations. According to the labels, 2 packets contained acetaminophen (300 mg), 2 contained acetylsalicylic acid (aspirin, 300 mg) and 1 contained chloramphenicol (325 mg), an antibiotic which is not commonly used today because of potentially serious side effects and the current availability of more effective and less toxic formulations. The packaging included illustrations of women and infants, and indicated that they were manufactured in Thailand. The family reported using the packets in treating minor illnesses. The public health nurse collected the packets and instructed the family not to use such packets in the future. The packets' contents were submitted for analysis to the Wisconsin State Laboratory of Hygiene for inorganic elemental content and were found to be free of heavy metal contamination.

DISCUSSION

These case studies indicate that traditional and imported medicines continue to be used in Wisconsin's Hmong community, and they serve to illustrate the difficulty that many recent immigrants experience in adapting to Western health care delivery models. In addition, they demonstrate that public health staff can be effective in implementing intervention strategies. However, the literature suggests that patients who use traditional medicines and have not developed an understanding or trust of western health care professionals are unlikely to volunteer information about their use of traditional medicines to care providers.¹⁻² The need for providers to be able to gain the confidence of patients about the use of traditional medicines is especially acute when the substances may pose a health hazard.

In the first case described, the medicine used by the family contained high levels of inorganic arsenic. While intervention was initiated because of elevated blood lead levels, it is more likely that this elevation was due to the presence of lead-containing paint in the home rather than the lead contained in the imported powder. According to the information provided by the family, administration of one half teaspoon per day would result in a daily intake of about 1 gram of arsenic. The US Environmental Protection Agency has established 0.0003 mg/kg/day as its reference dose for arsenic, set to represent the maximum daily intake level considered safe for chronic oral exposure. For a 20-kg child, this allows a maximum daily dose of 0.006 mg arsenic per day; this dose is greatly exceeded by the 500 mg estimated from one half teaspoon of the mineral powder. While the children had no observable symptoms that could be attributed to arsenic exposure, the use of this powder clearly represents a serious health risk.

Chronic use of arsenic-containing folk remedies has been associated with a variety of serious health problems ranging from skin disorders to renal damage and cancer.³ The severity of an individual's exposure to arsenic can be effectively gauged by measuring arsenic levels in hair, nails or urine. Measurement of arsenic by one of these means is indicated when exposure to arsenic from a traditional medicine or another source is suspected. When obtaining a sample of a traditional medicine is possible, testing for metals such as arsenic, lead and mercury is useful. This may also aid in determining if an elevated biological level can be attributed to the use of a traditional medicine or if another environmental factor should be considered, such as residential sources of lead.

The second case deals with the use of medications of unknown purity and age that were imported from Asia. The availability of chloramphenicol, a prescription medication, from non-Western sources is of particular concern. Chloramphenicol is an antibiotic that can cause serious blood dyscrasias such as aplastic anemia and thrombocytopenia, and its use is contraindicated in infants, as well as during pregnancy and lactation.⁴ The use of acetylsalicylic acid to treat varicella and influenza in young children has been associated with Reye syndrome, a potentially fatal condition.⁵ Furthermore, the presence of an illustration of a small child on the packaging may erroneously suggest to caregivers that the medication may be freely administered to a child. The packaging offers no information about safe dosage levels or potentially serious side effects. The serious nature of the effects that may result from the unmonitored use of chlo-

ramphenicol in particular underscores the need for physicians to be aware that such medications may be available.

CONCLUSIONS

It is clear that awareness of the availability of potentially toxic medicines in recent immigrant communities represents an important step in addressing health care needs in these communities. However, many recent immigrants are hesitant to disclose information about the use of traditional medicines because of distrust of physicians and the desire to maintain intrafamily customs.⁶ Efforts aimed at changing health practices in these communities can only be as successful as the abilities of physicians and other health care providers to establish relationships with patients that are characterized by trust and an understanding of the cultures in which these issues arise.

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