A SMOKE ALARM CAMPAIGN IN ARABIC, CHINESE AND VIETNAMESE COMMUNITIES

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In 1997, the NSW Department of Health approached the NSW Multicultural Health Communication Service to develop and implement a campaign to increase the use of smoke alarms by the Arabic-, Chinese- (Mandarin and Cantonese) and Vietnamese-speaking communities in NSW. This report describes the research conducted to determine community attitudes to smoke alarms and obstacles to using them. It also describes the campaign strategies that were subsequently developed to increase the use of smoke alarms by these communities.

HOUSE FIRES, INJURY AND SMOKE ALARMS

Of the 133 deaths due to burns in Australia in 1995, 69 per cent were the result of house-fires.1 Australian and international studies have provided strong evidence demonstrating the effectiveness of smoke alarms in preventing house fires, with a recent case-control study showing that houses without smoke alarms have more than five times the risk of fatal or injurious fires than homes with smoke alarms.2,3 The decision to target Arabic, Chinese and Vietnamese communities was prompted by preliminary data provided by the 1997 NSW Health Survey. These data showed that, while 58 per cent of households surveyed in NSW had a smoke alarm, only 39, 30, and 32 per cent respectively had smoke alarms in Arabic-, Chinese- and Vietnamese-speaking communities.4

COMMUNITY RESEARCH

Methodology

Questionnaires to identify the barriers to and reasons for purchasing alarms were administered at smoke alarm promotions held at major festivals specific to each of these three communities. Purchasers of alarms were followed up by telephone to monitor installation rates and the barriers to installation. Focus groups were then held to explore the community members’ perceptions of smoke alarms and barriers to their purchase. Using the information gained, strategies were developed and implemented over an eight-week period in mid-1998.

Smoke alarm promotions

Stalls selling smoke alarms discounted by 30 per cent were set up at a festival day in each community. Bilingual community education workers provided fire safety information, alarm demonstrations and written instructions describing how to install the alarms in Arabic, Chinese and Vietnamese. They also surveyed people at these festivals using a convenience-sampling method. The surveys aimed to identify barriers to purchasing and installing alarms. Two groups were surveyed:

- those who purchased a smoke alarm
- those who did not purchase a smoke alarm.

Barriers to purchasing smoke alarms

Two key barriers to purchase were identified across the language groups:

- a lack of awareness of the need for smoke alarms
- living in rental premises where the landlord was thought to be unsympathetic to the need for alarms.

These issues were explored further through focus groups with non-purchasers.

Focus groups exploring barriers

Subsequently, focus groups were held to explore community members’ perceptions of smoke alarms and reasons for not purchasing one, and to canvas campaign strategies. Two groups each were held in Arabic, Vietnamese and Cantonese, and one was held in Mandarin. In line with the survey findings, the main issues to emerge in the focus groups were:

- a lack of awareness of the importance or need for alarms;
- living in rental accommodation;
- a tendency towards overestimating the cost of installing an alarm;
- fire not being seen as a serious risk;
- being unaware of the danger of smoke itself;
- a perception that fire is a hazard exclusively for wooden homes;
- not relating any benefits from smoke alarms to their personal circumstances. The older Chinese-speaking participants in particular believed they were better protected by being vigilant than by using a smoke alarm.

Concerns expressed in regard to rental accommodation included:

- being held liable by landlords for damage incurred during installation;
- frequent moving meant it was too difficult to keep installing an alarm;
- the alarm is a fixture and therefore should not be removed, and would be lost when they moved;
- landlords not providing permission for installation;
- the process of applying to real estate agents being too difficult or uncomfortable.
Installation rates

A follow-up survey of those who had purchased alarms was undertaken 10 to 15 days after the festivals. Purchasers were questioned about whether they had installed the alarm and, if so, if they had used the instructions that were provided in their language. Attempts were made to contact all Arabic and Vietnamese purchasers. However, only 65 per cent of Chinese purchasers were selected randomly for the follow-up because of the large number of Chinese purchasers (235, compared with 50 Arabic and 147 Vietnamese) and the need to allocate resources evenly across the three groups. Participation rates were high, with more than 92 per cent of those contacted (for all communities) agreeing to take part in the follow-up survey.

Installation rates varied between communities, from 65 per cent of the purchasers among the Vietnamese speakers to 52 per cent of the Arabic speakers and 35 per cent of the Chinese speakers reporting that they had installed their alarms. At least 52 per cent of the Arabic- and Chinese-speaking purchasers and at least 60 per cent of the Vietnamese purchasers indicated that they had used the instructions provided in their own language. The main reason given by all language speakers for not having installed the alarm was lack of time.

Chinese-speaking purchasers contacted in the follow-up survey were contacted again two months after the festival. By this time, the proportion of alarms installed had increased from 35 per cent to 50 per cent. In the NSW community in general, eight per cent of households have purchased but not installed a smoke alarm.5

DISCUSSION

This research demonstrated that the community was unaware of the importance of smoke alarms. This suggested a need for an advertising campaign to raise the communities’ awareness of alarms and their importance in saving lives (Table 2).

Although the strategy, which involved both speaking directly to the community and selling the smoke alarms, was resource intensive, it appears to have been successful in terms of raising the communities’ interest and generating a number of sales. This was particularly so for the Vietnamese community. The campaign addressed the purchase, installation and maintenance of alarms; however, a longer time frame is necessary for strategies to support both the installation and maintenance of alarms.

The campaign was not subject to a formal evaluation, but the NSW Health Survey will monitor smoke alarm installation rates among these communities. Living in rental accommodation appears to be a barrier across communities in NSW and it can be expected that communication strategies will only have a limited effect on this. Therefore, the installation of smoke alarms in rental accommodation in NSW needs to be addressed within a wider public health policy framework.

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**TABLE 2**

CAMPAIGN STRATEGIES DEVELOPED TO ADDRESS IDENTIFIED BARRIERS

<table>
<thead>
<tr>
<th>Barrier</th>
<th>Strategy</th>
</tr>
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<tbody>
<tr>
<td>Lack of awareness of importance lives</td>
<td>• Slogan: ‘Smoke alarms wake you up if there is a fire’</td>
</tr>
<tr>
<td></td>
<td>• Television advertisement illustrating function of smoke alarms in saving</td>
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<td></td>
<td>• Direct community talks</td>
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<tr>
<td></td>
<td>• Sales promotions (alarm sales with discount pricing)</td>
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<tr>
<td></td>
<td>• Promotional products (refrigerator magnets and posters)</td>
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<tr>
<td></td>
<td>• Cash incentives to ethno-specific retailers to sell alarms</td>
</tr>
<tr>
<td></td>
<td>• Bilingual workers and inquiry line</td>
</tr>
<tr>
<td>Renting</td>
<td>• 822 letters sent to real estate agents in areas of large of Arabic-, Chinese- and Vietnamese-speaking population from the NSW Fire Brigades Commissioner</td>
</tr>
<tr>
<td></td>
<td>• Forms in Arabic, Chinese and Vietnamese giving permission from the landlord and encouragement to the tenant to install smoke alarms sent to 822 real estate agents</td>
</tr>
<tr>
<td>Installation</td>
<td>• Television segment demonstrating ease of installation</td>
</tr>
<tr>
<td></td>
<td>• Free installation service, developed in partnership with ethnic organisations and existing installation service offered by NSW Fire Brigades Service</td>
</tr>
<tr>
<td></td>
<td>• Multilingual instruction sheets</td>
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</tbody>
</table>
This article reports the results of two surveys of supermarkets in the Hunter area to determine whether poisonous products or products labelled ‘keep out of reach of children’ were displayed for sale within the stores in a location accessible to children.

BACKGROUND
The first survey in 1994 followed an incident in which a 21-month-old child, riding in a supermarket trolley, was able to take a bottle of insecticidal dog wash from a shelf, remove the child-resistant lid, and drink a quantity of the contents of the bottle. Active constituents of the dog wash were 50g/L diazinon (organophosphate insecticide) and 69g/L solvent (liquid hydrocarbon). The child was admitted into intensive care at a local hospital because of this life-threatening poisoning incident.

The aim of the survey was to determine if poisonous products, or products labelled ‘keep out of reach of children’, were displayed for sale in retail outlets in locations easily accessed by young children.

METHODS
A sample of convenience of 16 supermarkets stores in the Lower Hunter area was selected. All major supermarket chains were included. For the purpose of this survey, it was considered that products stored less than one metre from the floor were accessible to young children, either walking within the aisles of the store or being pushed in a shopping trolley or pram. The location of products with label warnings such as ‘poison’ or ‘keep out of reach of children’ was noted in each store. The products surveyed were limited to the following categories:

- household cleaners and solvents (caustic substances, methylated spirits, disinfectants, household cleansers, stain removers)
- household pesticides (fly sprays, surface sprays, cockroach baits, rat poisons)
- gardening pesticides (snail baits, insecticide powders and sprays, fungicides, herbicides)
- veterinary products (dog wash, kennel wash, insecticide sprays, and veterinary medication).

Packages of all these products were examined to see if they were fitted with child-resistant lids, caps or enclosures. Where possible, child-resistant lids or caps were checked to see if they were properly engaged or operating as designed.

RESULTS
All stores surveyed had products labelled ‘poison’ or ‘keep out of reach of children’ on shelves less than one metre from the floor.

In the store where the poisoning incident that prompted this survey occurred, the screw-down plastic child-resistant locking lids on two out of five 200mL bottles of diazinon (organophosphate) insecticidal dog wash were not engaged. This was the same product consumed by the child in the poisoning incident.

The survey demonstrated that all supermarkets had poisonous products or products labelled ‘keep out of reach of children’ displayed for sale in locations that were within easy reach of children. The survey also showed that not all products labelled ‘keep out of reach of children’ had child-resistant packaging and, in some instances, child-resistant packaging was defective. In particular, poisons packaged in 250mL metal containers with screw-down plastic child-resistant lids were faulty and would not engage.

REFERENCES
4. NSW Health Department. NSW Health Survey 1997 Data (Preliminary). Sydney: Epidemiology and Surveillance Branch, NSW Department of Health.