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Background

Drowning prevention has been recognised as a priority area in health by state and federal governments in Australia. However, generating change in water safety through education, marketing, policy and advocacy to reduce the drowning toll remains a challenge to all water safety, public health and community organisations. Play It Safe by the Water (PISBTW) is a state-wide initiative that aims to promote safe participation in aquatics throughout the community in Victoria, Australia. From the beach to inland waterways, the pool and in the home, this major water safety initiative combines public awareness campaigns, targeted education programs, lifesaving service development, policy and advocacy. The PISBTW network comprises various water safety and aquatics sporting organisations, industry, government and the community.

Methods

Campaigns

Campaigns targeted different audiences depending on the drowning trends. Due to young children (aged 0-4 years) having the highest age-specific drowning rate a consistent focus throughout was on the prevention of drowning of this age group, targeting parents/carers of young children. Additional work was done in order to generate change in policy and legislation particularly regarding barriers around home swimming pools.

Data analysis

Data were collected on drowning incidents across Victoria from 1997/1998 to 2016/2017. Public awareness of and attitudes to water safety and related advertising was assessed pre- and post-campaign across campaign seasons from 2004-2017. Telephone or online surveys were conducted with a random sample of 400-600 Victorians on each occasion.

Findings

Since the inception of the PISBTW campaign the unintentional drowning rate in Victoria decreased by 46.4% (from 1.27/100,000 at the baseline 3 year average 1996/97 to 1998/98 to 0.68/100,000 at follow-up 3 year average 2015/16 to 2017/18). Recall of water safety advertising was 41.0% at baseline in 2004/05 (Figure 1). The highest proportion of recall of any water safety advertising by Victorian respondents was 77.0%. Throughout the study period recall and awareness differed across demographic segments; age and geographical variation, and to a lesser extent gender differences were found. An example of the toddler campaign is provided in Figure 2.

Shifts in the drowning rate particularly in children aged 0-4 years were identified (Figure 3), with a 78.6% decrease in the drowning rate (from 3.46/100,000 at the baseline 3 year average 1996/97 to 1998/98 to 0.68/100,000 at follow-up 3 year average 2015/16 to 2017/18). Figure 3 shows the drowning rate in children 0-4 years along with campaign implementation and policy and legislative changes made relating to this group.

Discussion & Conclusions

To our knowledge this is the only major public awareness campaign relating to water safety that has been formally evaluated with pre and post campaign assessment of recall, awareness and self-reported behaviour change.

Whilst the direct impact of public awareness campaigns is difficult to measure, evidence from the PISBTW campaign indicates a significant impact relating to drowning prevention for young children (aged 0-4 years). In addition, it reinforces the need for both awareness raising, legislation and enforcement in order to generate long-term behavioural change. Further research is recommended to measure the impact of water safety campaigns at local and national levels.

PISBTW provides an example of a multi-focussed, multi-sectoral approach to drowning prevention and the way in which epidemiological drowning data is utilised to inform the direction for future drowning prevention strategies.