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New settlers, old problem: Facilitating water safety education for new residents in aquatically oriented New Zealand

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Abstract

Globally, the Asia-Pacific region has been one of the more dynamic regions for people movement in recent years and evidence of this in contemporary New Zealand society abounds. This paper focuses on community education programmes that prevent the incidence of drowning among new settlers in an aquatically oriented island nation through water safety education. National and regional policy documents that set the framework for targeted community water safety education are discussed in relation to interventions put in place in the culturally and linguistically metropolitan region of greater Auckland. Three case studies of new settler water safety initiatives and evaluations of their impact are presented. They include: the *West Coast Rock Fishing Safety Project*, the *New Zealand Olympic Committee (NZOC) Refugee Youth Water Safety Programme*, and the *Auckland Muslim Women's Swimming Project*. Gaps in the current provision of community education water safety programmes are identified and ways to address shortcoming are recommended.

Key words: water safety, drowning prevention, new migrants, immigrants health, CALD

Introduction

A recent international report entitled *World Migration 2010* states that, because of growing demographic disparities, environmental change, new political and economic dynamics, technological revolutions and social networks, the number of migrants globally has grown to 214 million, and could rise to 405 million by 2050 (Koser & Laczko, 2010). The Asia-Pacific region has been one of the more dynamic regions for people movement in recent years and evidence of this in contemporary New Zealand society abounds. The transformative power of this trend is one that offers increased opportunities for economic growth, and social and cultural innovation. However, it also has the potential to exacerbate existing problems and generate new challenges within society. This paper focuses on one such challenge: that of preventing the incidence of drowning among new settlers in an aquatically oriented island nation through water safety education.

Historically, demands for greater emphasis on water safety education have been consonant with rising fatalities from drowning incidents, a phenomenon that so characterised early European colonisation of the country in the nineteenth century, that drowning was referred to throughout the British Empire as the 'New Zealand Death' (Pascoe, 1971). While high rates of drowning among new settlers in the colonial period were attributable to vicarious modes of transport, poor swimming skills, and unintentional immersion, recent concerns about high rates of drowning incidence among new settlers appear to be more firmly grounded in mishaps during aquatic recreation. Participation in recreational aquatic activity is generally perceived as a positive indicator of a healthy New Zealand lifestyle. However, it does have attendant negative consequences, especially for those not familiar with potential aquatic dangers or the ability to cope with the inherent risk of drowning associated with aquatic activity.

Concerns have been expressed that some new settler groups are over-represented in New Zealand's drowning statistics. For example, Asian peoples represent 8% of the annual drowning toll yet comprise only 6% of the national population. From 2005 to 2009, 25 Asian New Zealanders died from drowning, 14 (56%) of those in the Auckland region and 72% of these drowning fatalities were associated with recreational activity (Water Safety New Zealand [WSNZ], 2010). Changing demographics can partially explain these statistics. In the past decade, New Zealand, in general, and Auckland, in particular, has become very culturally and linguistically diverse. In 2006, 23% of people usually living in New Zealand were born overseas, compared with 17% in 1996 (Statistics New Zealand, 2010). More than one-third (37%) of people who lived in the Auckland Region were born overseas, compared with the Southland Region, where around 1 in 13 people (7.6 %) were born overseas. Comparisons of census data from 2001-2006 suggests the rapidity of ethnic change, the number of Chinese having increased by 41%, Indian by 68%, Korean by 62%, and Filipino by 53%. Furthermore, two-thirds of New Zealand's Pacific people lived in the Auckland region and they, like Asian New Zealanders, were predominantly young adults. Significantly, the number of multilingual people in New Zealand increased by 20% from the 1996 Census to 562,113 or nearly 1 in 6 in 2006 (Statistics New Zealand, 2010).

Such a culturally and linguistically diverse population presents unique challenges to those such as educators who play a major role in facilitating new settlers into New Zealand society. While health promotion among new settlers has been the focus of some studies, for example, swimming skills and fitness among Somali women in Seattle (Moore, Ali, Graham & Quan 2010), Somali refugees exercise programmes in Hamilton, New Zealand (Guerin, Diiriye, Corrigan, & Guerin, 2003), targeted messages about second hand smoke for recent Asian immigrants (Brugge et al., 2002), and cancer screening initiatives among Vietnamese-American women (Jenkins et al., 1999), little is known about the health risks associated with aquatic recreation among new settlers or what they bring to that participation in terms of their understanding of water safety.

The evidence base for action

Drowning statistics provide some indication of the risk of drowning with over a quarter (26%) of all Asian drowning fatalities fishing-related (Water Safety New Zealand, 2010).

A survey of Auckland's west coast rock-based fishers in 2006 reported that almost half (42%) of fishers surveyed at high risk sites were of recent residency (<4 years), and half (49%) self-identified as of Asian ethnicity (Moran, 2008). New Zealand is not alone in its high fatal drowning toll as a consequence of fishing from rocks. Australia has recently reported similar incidents and concerns with almost half of the victims in 101 recreational fishing fatalities from 2000-2007 being described as of Asian ethnicity (Crosariol, Vasica, & Franklin, 2010).

One study has identified at-risk beliefs among new settlers with regards to supervision around water. In a focus group study of Vietnamese immigrants, parents defined supervision of children as "watching", but parents and teenagers agreed that supervision is unnecessary if a child is old enough to be home alone, knows how to swim, and that children can "take care of each other" (Quan, Crispin, Bennett, & Gomez, 2006, p. 428). Other studies have suggested that young immigrant populations are at greater risk of drowning than long-term residents (for example, Smith & Brenner, 1995 in the United States; Nixon & Pearn, 1978 in Australia; Verweij & Bierens, 2002 in Holland; Lindholm & Steensberg, 2000 in Denmark).

A national survey entitled the *New Zealand Youth Water Safety* (Moran, 2003) provides some insight into the nature of aquatic recreation and understanding of water safety among youth. For example, Pasifika students were less likely than European/Pakeha and Maori students, but more likely than Asian students, to have participated in swimming, surfing, paddling, and boating recreation (Moran, 2007). Pasifika students estimated lower levels of swimming ability than non-Pasifika students, with more than one quarter (27%) believing that they were unable to swim 25 metres or less and almost three quarters (73%) unable to swim more than 100 metres. In contrast to this, fewer non-Pasifika students thought they could swim 25 metres or less (12% vs. 27%) and more thought they could swim more than 100 metres (48% vs. 28%).

While newness to New Zealand society may help explain a lack of water safety skills and knowledge among a small proportion of Pasifika youth of recent New Zealand residency, most 15-19-year-old Pasifika youth (70%) were New Zealand born (2001 Census, Statistics New Zealand). Poor socio-economic background, as indicated by the high proportion of Pasifika compared to non-Pasifika students (70% vs. 30%) that attended low-decile schools, is a more likely reason for limited water safety skills and abilities (Moran, 2007). The lack of opportunity to acquire water safety skills and experiences such as swimming ability and surf safety education, in the home, at school, or in the community at large is likely to be greater among the Pasifika community because of the costs often associated with the acquisition of such skills.

Moran (2006) reported that Asian youth did not participate in as much aquatic activity (with the exception of land-based fishing) as non-Asian youth. They held more positive attitudes towards water safety than their non-Asian counterparts, as well as reporting a lower incidence of self-reported at-risk behaviours during swimming and other aquatic activities. However, their self-reported swimming survival skills and understanding of water safety were poor and unlikely to provide an element of protection in intentional or unintentional submersion incidents.

In response to drowning statistics and descriptive studies such as the national

survey reported above, many regional and national non-government organisations (NGOs) have set in place educational initiatives that address the lack of water safety knowledge among new residents. It is the purpose of this paper therefore, to examine educational interventions targeted at reducing risk of drowning among new settlers in New Zealand, with particular reference to community-based initiatives in the culturally and linguistically diverse metropolitan region of greater Auckland.

From policy to practice

The *Drowning Prevention Strategy: Towards a Water Safe New Zealand 2005-2015* envisages a water safe New Zealand, free from drowning (Accident Compensation Corporation [ACC], 2005). It recognises that drowning is a risk to all New Zealanders, whether participating in planned and organised aquatic activities or unintentionally being in the water, for example, slipping on the poolside or falling off the rocks. The Strategy provides a framework to promote water safety skills, knowledge and behaviour to all people in New Zealand. Objective eight of the Strategy specifically highlights the importance of engaging with all communities to promote water safety awareness by “engaging with Maori, Pacific people, Asian people and new settlers, tourists, refugees and their families/whanau in water safety initiatives” (p. 29).

In response to these policies, several national and regional water safety organizations have put into place plans to address new migrants’ water safety needs. At a national level, the New Zealand Water Safety Education Framework (Water Safety New Zealand, n.d.) suggests that water safety education programmes and campaigns need to be inclusive of all cultures and states that “different approaches may be needed to ensure messages and initiatives are accurate, relevant and effective for all the cultural groups represented in New Zealand” (p. 9). At a regional level, WaterSafe Auckland’s Education Strategy and Action Plan identify ethnically diverse populations as a priority area (WaterSafe Auckland, 2009). Under regional priorities for 2009-2011, new settlers and refugee communities are acknowledged, with strategies identified for increasing the knowledge and skills in, on, and around water for these populations. Targeted interventions include: community and school learn to swim/water safety lessons, programmes for international school students and refugee groups, and water safety promotion at community events.

For some communities, traditional methods of delivering water safety and swimming lessons are not effective, and participation in swimming and aquatic activity have conflicted with cultural values, religious beliefs, family commitments and other more pragmatic concerns such as cost and transport issues. Consequently, alternative approaches have been developed in consultation with the community to ensure engagement and participation. Such programmes in New Zealand and Australia have considered cultural values, religious beliefs, family commitments, accessibility issues when introducing swimming to women from Middle-Eastern backgrounds (Lawrence, 2005; Di Franceseco & Hansen, 2002; Islamic Women’s Association of Queensland Inc, 2003). Similarly, previous studies (Coxon & Taufe’ulungaki, 2003; Fusitu’a & Coxon, 1998; Koki & Lee, 1998; Man’uata, 2000; Mara, 1998) have suggested that building school-community-parent relationships is particularly valuable in the context

of Pasifika education. Water safety programmes that address recognised barriers to learning by using language, protocols and communication modes that are culturally appropriate, embrace parent and community perceptions of water safety, and facilitate ownership of the programmes within the Pasifika community have been recommended (Moran, 2007).

Promoting water safety education in a culturally and linguistically diverse community presents several unique challenges. First, many new settlers are unaware of what their new home offers at an institutional level, in terms of both government and non-government organisations (NGOs). Second, transmission of new knowledge is often family- and local community-based. Third, language barriers often make conveyance of information via the dominant language problematic. Fourth, New Zealand's new settlers include a wide range of incomes from low income refugees to high income business entrepreneurs so economic barriers to participation vary greatly.

To coordinate water safety education among new settlers in the home and via community groups and workshops, WaterSafe Auckland established a *New Settlers Water Safety Reference Group* in 2005 that included representatives of primary health care providers (e.g. East Health), local council, ACC injury prevention networks, the Auckland Regional Migrant Service, and migrant organisations (e.g. the Asian Network Incorporated). One outcome of the collective debate among network partners was the development of a series of resources that included a *New Settler Water Safety* DVD, covering swimming pool, boating, beach and rock fishing safety, available in Mandarin, Cantonese, and Korean. Supplementary *Be Water Safe* booklets covering the same topics, as well as water safety in the home, have also been translated into eight different languages including Arabic, Somali, Farsi and Hindi. Water Safety teaching kits have been developed specifically for international schools and those working with ESOL students, and water safety sessions are available upon request for international/ESOL students.

In response to the increasing numbers of Chinese people participating in boating activity, WaterSafe Auckland and Coastguard Boating Education developed a VHF marine radio course in Mandarin that included a Chinese marine broker delivering the course and the course manual being translated into Mandarin (Mills, 2008a). The course proved very popular and, of 25 initial enrolments, 17 (68%) successfully completed the course and can now legally operate a marine VHF radio. Half of the participants had been in New Zealand for less than five years so gaining this boating knowledge and qualification facilitates safety boating practices not only for themselves, but also their families, and their communities (Mills, 2008a).

From evidence to action

Three projects that promote water safety and aquatic participation to new settler communities are the *West Coast Rock Fishing Safety Project*, the *New Zealand Olympic Committee (NZOC) Refugee Youth Water Safety Programme*, and the *Muslim Women's Swimming Programme*. These projects are presented as prime examples of targeted community-based education programmes.

West Coast Rock Fishing Safety Project

The *West Coast Rock Fishing Safety Project* is an on-going intervention designed to influence the knowledge, behaviour, and attitudes for safer rock fishing on Auckland's West Coast. This project was established in direct response to a spate of five rock fishing deaths in a four month period in 2005. Success factors to the project include having rock fishing safety advisors employed over the summer to talk to the fishers in their own languages (Chinese, Korean, Samoan, and Tongan). Use of inflatable life jackets is promoted, in addition to discount vouchers, visual and written resources, and most recently the installation of 'angel rings' in high risk areas. Doing surveys with the fishers each year has enabled the partner organisations to gain a true picture of the safety knowledge and perceptions of the fishers. Successful outcomes over the last five years include more rock fishers now wearing life jackets *often or always* (2010, 31%; 2008, 22%; 2006, 4%); fewer rock fishers *never* wear a life jacket (2010, 35%; 2008, 52%; 2006, 72%); from 2007, slight improvements were reported by fishers of their personal safety knowledge (2010, 66%; 2007, 63%), safety attitudes (2010, 62%; 2007, 61%), and safety behavior (2010, 62%; 2007, 53%). Most importantly, fewer rock fishing deaths have occurred since the inception of the project in 2006, with only six deaths over five years (Moran, in press).

NZOC Refugee Youth Water Safety Programme

In April 2008, a learn-to-swim and water safety holiday programme was run for youth from refugee backgrounds. WaterSafe Auckland led this initiative, in partnership with Auckland Regional Public Health Service, Refugees as Survivors, Refugee Services Aotearoa, and Swimming New Zealand. Ninety-four youth from refugee backgrounds (59 males/34 females) aging from 5 years to 18 years old participated in the programme (Mills, 2008b). The programme consisted of 10 one-hour swimming lessons, first aid, and physical activity sessions. Limited swimming experience of the participants meant that the lessons concentrated on water confidence, water familiarisation, and water safety and introduced basic swimming skills of floating, kicking and breathing. Prior to the programme, 91.4% of the participants indicated that they could not swim over 25 metres. After the programme, 92% of participants rated that they had exceeded their expectations in progressing their swimming skills. Wearing a lifejacket (26%) was the most commonly cited water safety skill learnt. All respondents reported that they thought they would be safer in the water as a result of the programme; 96% of participants believed that programme increased their water safety knowledge beyond their expectations. The most recalled water safety message was to swim between the flags (66.7%). This lack of understanding of the meaning of the flags was indicated by a comment from a participant saying "*before I didn't know to swim between the flags*" (Mills, 2008b).

Auckland Muslim Women's Swimming Project

The Muslim Women's Swimming Project, established in Auckland in 2005 primarily focuses on the health benefits of swimming for Muslim women and women from Middle-Eastern and African backgrounds. WaterSafe Auckland is a partner on this project, and

it is lead by the ProCare Network (PHO). The women are offered a private space for swimming every Sunday evening throughout the year (with the exception of Ramadan), and women can do aqua aerobics, swimming lessons, and use the gym facilities. One of the conditions of attending is the women must do an hour of exercise before they can use the steam room, sauna, and spa facilities. The health benefits of exercise programmes have been previously reported (for example, Moore, Ali, Graham, & Quan 2010; Guerin, Diiriye, Corrigan, & Guerin, 2003), but the swimming lessons are also an important component of a water safety programme. An evaluation in 2007 reported that 58% of the 72 women that responded to the survey had learned to swim a length of the pool without stopping (Marshall, 2007). When asked, the participants stated that the main strength of the programme was that it offered exercise and learn to swim opportunities within a comfortable, women only environment. In a previous evaluation in 2005, participants identified other wider benefits of the programme beyond health and wellbeing issues, and that learning to swim had given them more confidence and a sense of security, particularly given the frequency that their children go swimming (Lawrence, 2005). Participant feedback from both evaluations suggests that this programme continues to meet a strongly felt need for culturally appropriate, accessible, and affordable physical activity (Marshall, 2007; Lawrence, 2005). Feedback from similar aquatic programmes in Australia, offer strong support for continuing gender specific, practical water safety education on the basis that such programmes improved women's skills and confidence in the water and enhanced feelings of self-worth and belonging in their new home (Islamic Women's Association of Queensland Inc., 2003; Di Francesco & Hansen, 2002; Migrant Information Centre, 2001).

The way ahead

Gaps in the provision of new settler water safety education still exist. A tendency for some government and non-government organisations to promote homogenous water safety programmes contradicts the cultural and linguistic diversity dynamic that is very much part of the current metropolitan Auckland region. For example, the Indian community and the Chinese community have quite different needs, including language, religious, cultural beliefs, and levels of community capacity, yet both groups are often collectively grouped as 'Asian' (Statistics New Zealand, 2010). Water safety education programmes are available to the 'Asian' community, yet are these interventions appropriate for all people who come under this umbrella? The Islamic Women's Association of Queensland (2003) has advised best-practice criteria when working with culturally and linguistically diverse women should include appropriate delivery (considering use of translators), accessibility to transport and child care, and using a suitable venue that meets the safety and privacy needs of women. These guidelines could be used with mixed-gender groups, as some cultures require males and females to be separated when participating in aquatic programmes.

In addition, interventions and research for refugees should not be subsumed within larger immigrant populations since their prior experiences and socioeconomic circumstances are likely to be much different from other immigrants (Barnes, Harrison, & Heneghan, 2004). Currently, the health and water safety needs of refugee groups

in New Zealand are understudied. Further research and studies of culturally effective interventions among the refugee population are needed.

Furthermore, not all new settlers are permanent settlers. New Zealand, like many other countries, has experienced significant growth in temporary migration (Koser & Laczko, 2010). Many young people, especially from Asia, now attend international schools in New Zealand and during their residency experience much of the aquatic lifestyle that is readily accessible and attractive to newcomers. Long stay tourists are also likely to be temporarily involved in things aquatic while on holiday. Yet little is known what these long- and short-term visitors bring to that aquatic activity in terms of water safety knowledge and skills. Some overseas evidence suggests that non-residents are at greater risk of drowning than residents. For example, proportionally more United States tourists drown overseas than at home, the consequence of increased exposure to risk through participation in aquatic recreation such as swimming, snorkeling, and diving (Guse, Cortes, Hargarten, & Hennes, 2007). Mackie (1999) reported that 88 tourists from 12 countries had drowned in Australia during 1992-1997 (age range, 3-78 years; 16 female). The author concluded that tourists and new migrants must be provided with suitable information and perhaps increased supervision when near the ocean. A more recent study has reported that international tourists were the victims in one quarter (25%; n=32) of all surf-related drowning in Australia in 2005 (Morgan, Ozanne-Smith, & Triggs, 2008). Further research is required to determine how best to inform temporary residents about staying safe in and around New Zealand waters.

The evaluation of programmes for culturally and linguistically diverse groups presents challenges. Even after providing programmes suitable for ethnically diverse communities, alternative evaluation practices may have to be implemented. During the evaluation process of the swimming programme for Afghani women in Perth, participants declined to have their focus groups audio-recorded (both pre- and post-intervention) for reasons unknown (Di Francesco & Hansen, 2002). This may be a legacy of the environment and attitude in their home country, inexperience of being interviewed, or concern about anonymity and confidentiality (Islamic Women's Association of Queensland Inc, 2003). Further research is required to find culturally appropriate yet valid ways of evaluating such programmes.

Conclusion

International migration has transformed New Zealand society in the past decade and this has precipitated the need for a more comprehensive approach to capacity-building for new settlers than has previously been adopted. This paper has focused on one aspect of this phenomenon: current new settler water safety education policy and ways in which it has been implemented via community-based education programmes. Cultural and linguistic diversity presents unique challenges to educators across a wide spectrum of social and health settings. The need for safety promotion in and around water and during activities that may be unfamiliar to new settlers is paramount in an aquatically oriented society such as New Zealand. Our new peoples, who are likely to be underserved by health promotion and unaware of what their new home can offer by way of education, deserve nothing less.

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