A CROSS COUNTRY ANALYSIS OF DROWNING IN SRI LANKA: 2001 TO 2006 AND 2009

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Introduction

Drowning is a major cause of death and injury in Sri Lanka and world-wide. However, until 2014 the full extent of the burden of drowning in Sri Lanka was unknown with a paucity of published data on the number and causes of drowning incidents across Sri Lanka. The Life Saving Association of Sri Lanka and Life Saving Victoria, with the support of the World Health Organization, coordinated development of The Drowning Prevention Report; the first report detailing the extent of the drowning problem in Sri Lanka. Using the available data, national statistics were broken down by province to describe variation in the burden of drowning in Sri Lanka at a localised level.

Methods

Data from the inaugural Drowning Prevention Report - Sri Lanka, published in December 2014 by the Life Saving Association of Sri Lanka and Life Saving Victoria were used in this analysis. This report includes unintentional drowning deaths reported in Sri Lanka from 2001–2006 and 2009.

Qualitative evidence on the location or type of waterbody where people drowned as well as the activity just prior to drowning was sought from Sri Lanka Police, Sri Lanka Coast Guard and Sri Lanka Navy personnel as well as swimming teachers and community groups working in lifesaving and water safety.

Results

Sri Lanka consists of nine provinces, with the largest being North Central province (16% of total area) and Western province the smallest (5.6% of total area). The highest proportion of the population lives in Western province (28.6%) and the smallest in Northern province (5.6%).

Breaking down the available drowning data by province highlighted the variability in drowning trends across Sri Lanka (Figure 1). Each year an estimated 236 people die in the Western province from drowning, compared to 41 in Northern province. When accounting for population size the highest drowning rate was 6.3 deaths per 100,000 population in North Western province, and the lowest was 3.4 deaths per 100,000 population in Central province. North Western (6.3) and North Central (5.4) provinces had a higher fatal drowning rate than the national average (4.4 per 100,000).

Males are at greatest risk of drowning, having a consistently higher drowning rate ratio than females nationwide; ranging from 6.5 in Western province to 2.5 in Uva province. Variation was also observed in the reported common aquatic activities, drowning locations and factors that contribute to drowning in each province (Figure 1). Age was the only consistent factor, with people aged 25-44 years the most commonly represented in drowning incidents in every province. This differs from many other countries with the highest drowning rates in young children aged 0-4 years. Further work is required to determine the reasons for these differences.

Conclusions

Significant cross country differences identified in this analysis should be used to inform government, industry, non-profit organisations, lifesaving organisations and the whole community in drowning prevention efforts across Sri Lanka.