"MERIT MAKER" ("MERIT MAKER" is stand for Management, Environment, Resuscitation, Information, Trainning (survivals-wimming), Media, Advocacy/policy, Kindergarten, Education and Research) MERIT MAKER were cover every district in Surin Province

Conclusions Now, we have the best practice in school and set a leader student to be a coach helper and also help friends in survival swimming program. Moreover, we have developed a survival swimming program for 900 trainers from every district, cooperate in school program. In community have prevent on risk resources, have poster and equipment to halp people who wsa drowning. All of this is a concrete success that all school can apply, teach in the process of teamwork and to solve the problem of drowning in Surin. The 7 years of success, between 2010–2015, is our proud. Everyone voluntarily helps children from drowning. The goal is to reduce death rate of drowning lower than 6.5 per 100,000 childrens below 15 years old within 2018. Children can learn survival swimming in primary school, can float in water, and know how to help people who drowning.

### 1013

# PROBABILITY OF DROWNING DURING CHILDHOOD IN BANGLADESH

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Introduction There are many drowning studies in children that have the potential to allow calculation of the risk or probability of drowning during specific periods of childhood. However, almost none of them include a nationally representative population of children and are large enough to contain enough drowning deaths to have statistical precision in estimating the per-year-of childhood risk of drowning. The Bangladesh Health and Injury Survey (BHIS) allows just such an estimate to be calculated, which puts an actual probability of drowning by year of childhood for children in Bangladesh.

Methods The mortality experience from the child sample from BHIS was examined. A life table was constructed from the child dataset which showed the probability of survival by each year of childhood according to cause of mortality.

Results 169 deaths from drowning occurred in children in BHIS. The multiple decrement life-table analysis which shows age specific probabilities of drowning for children in Bangladesh will be presented at WCDP.

Conclusions The annual risk of dying for children in Bangladesh is already known from the census and other surveys and is high compared with high income countries. The cause-specific mortality risk calculated from the BHIS survey dataset shows that drowning is the largest risk of death from a single cause to children who survive infancy in Bangladesh through their 18th birthday, when they become adults.

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#### 1014

## RESCUE AND EMERGENCY MANAGEMENT OF A WATER RELATED DISASTER: EXPERIENCE FROM BANGLADESH

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Background The Padma is one of the largest rivers where thousands of people cross this river every day using boats, launches and ferries. However, the numbers of launce and ferry are insufficient than required. In maximum cases the launches are overloaded with passengers. The authorities do not strictly maintain the rules. A tragic disaster occurred on 22 February 2015 when a cargo vessel hit the launch in the Padma near Paturia launch terminal of Manikganj in Bangladesh and at least 79 people, including 14 children and 28 women, died and over 50 went missing with over 200 passengers on board. The study expresses the practice of rescue process and emergency management services provided in the event.

**Methods** Qualitative methods including in-depth interviews and a focus group discussion was used to collect data. The daily newspaper reports and related documents were reviewed.

Results On 11:40 am the launch sank in mid-river within 15 minutes after it left the terminal and collided with a cargo vessel. The launch was carrying 200 passengers though its capacity was 140. Around 100 passengers were either rescued or swam around half kilometre to reach the shore. The local people started rescuing passengers immediately after the accident with the help of boats and trawlers from both side. Around 150 members of different government rescue agencies participated in the rescue operation from 12:00 noon to mid night. A rescue vessel reached the spot from Mawa terminal around 11.00 pm after 12 hours to salvage the sunken vessel. After 24 hours of rescue operation 70 bodies were handed over to the family members.

Conclusion The emergency management was inadequate and the authorities in the launches were irresponsible to take appropriate measures to rescue the passengers from drowning. Mass public awareness is essential to follow the rules for safe crossing the river. A national level policy is required for mass rescuing of people during water related disaster.

#### 1015

### DESIGN AND EVALUATION OF NOVEL IRISH DROWNING DATA TAXONOMIES FOR A FATALITIES DATABASE

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Background In the Republic of Ireland (ROI) 135 people drown annually, the majority of which are preventable deaths. Currently, substantial opportunities exist to develop upon the existing methods of managing fatality data in the ROI. The current study thus aimed to develop and evaluate a set of novel drowning data taxonomies, to better record drowning deaths in Irish waters. Improvements to this fatalities taxonomy will enhance accurate incident recording, and benefit subsequent intervention design.

Methods Development of the ROI taxonomies was fourfold. First, member groups of the International Life Saving Federation (ILSF) were contacted for access to any drowning related data taxonomies available to them. A comparison study of the different taxonomies accessed through the email campaign was then conducted. Analyses involved contrasting and comparing items from the selected taxonomies and identifying valuable details for inclusion in the ROI set. Materials relevant to an Irish context were then adapted, and the taxonomies created. Last, a host of ROI-based water safety experts reviewed the proposed taxonomies during an interactive stakeholder workshop. This was conducted using the Interactive Management (IM) methodology, and yielded valuable recommendations, which were then incorporated to produce the definitive set of drowning data taxonomies. Results A novel set of drowning data taxonomies were designed and completed. These were evaluated favourably during the stakeholder workshop, with any expert feedback acknowledged and incorporated.

Conclusions The quality of drowning fatality data records in the ROI can be improved by the current project activities. These taxonomies will be used to populate a drowning fatalities database, currently being designed in conjunction with this study. These will ultimately provide a high quality evidence base from which to inform intervention design in the ROI, and prevent further drowning fatalities.

1016

FROM ROLE OF THE SEARCHER DROWNING VICTIMS LEAD TO DROWNING PREVENTING IN THE COMMUNITY, NAKHON RATCHASIMA PROVINCE, THAILAND

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Background Nakhon Ratchasima is on the northeastern of Thailand with a largest area of the country and population, is the 2nd from the capital, Bangkok Metropolitan. Mainly area is the agricultural area, the several rivers flows through includes the canals have many the drilled pools and water wells for the local agricultural. The number of the deaths from 2008-2013 were drowned in a most of the country averaged 200 persons a year (with population rate per a thousand equal to 6.4–9.3) in this number were the children lower aged 15 years, averaged 47 children a year, the underwater rescue of Huk 31 caused gather into a group of volunteers networking with mainly role to seek for the drowning victims and was operated according to seeking for the drowning victims task from 1993 until the current found that more than 1000 victims that was informed and seek in the water have not one to be survival and the crime scene often found that is the nature water will in the community thus was caused of concept to preventing from the origin rather than solve an end up of the problem that is mean have no chance to survive.

Methods To stimulate the participation of the community in the prevention of drowning.

Started operation since 2012 by taught the children and those interested learning about water safety, how to survive by floating in the water and use the easily floating devices (Empty plastic bottles) that assists to buoyancy themselves and how to help the others from drowning in correctly by offered free course 1 time a month and build up the team networking of the community to surveying the risk water wills includes operate to manage the risk

water wills in the community in Loy Krathong Festival and Songkran Festival by installed the warning Signs, fitting drowning rescue instruments too easily finding such as plastic gallons, filing beams, ropes, for the purpose that operating and instruments which using were from corporation of the public in the community and donation from the private sectors.

Results After operated, the student of Primary Education Level 1–6 trained practical part of 6,114 students, to be the instruction volunteers networking of 606 volunteers, offered free survival method from drowning 1 time a month totally of 35 times with the children, the guardians, the interested public of 350 persons, arranged the risk water will by the preventing the children from drowning networking of 90 water wills and operated covers the sub-districts of 32 districts of Nakhon Ratchasima Province furthermore found that notification to seeking the drowning victims was decreased.

Conclusions Drowning is preventable by the role of the searcher drowning victims that lead to drowning preventing in the community with operations in simple measures focused skills training for the children, creating the volunteers networking, manage the risk water wills under participation of the community It increases the chances of survival from drowning for the children in Nakhon Ratchasima Province.

1017

SUCCESS PROJECT ABOUT DROWNING PREVENTION BY VOLUNTEERS IN THE COMMUNITY, NAKHON RATCHASIMA POVINCE, THAILAND

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Background Nakhon Ratchasima province is the largest province of Thailand. It has the second highest number of population (the first highest number of population is Bangkok). Its main areas are agricultural. Its statistical death of drowning, that usually occurs in rural areas and natural water sources, is in the top 10 provinces of Thailand.

Methods This project has been starting since 2012. To reduce The number of dead children from drowning in Nakhon Ratchasima povinces. It has been built by a network of well-promoter team comprising many sectors. This project has been based on the revision of existing experience and the own cost. This project was started from one team in the urban and then was expending to rural areas until it was completely covered the 32 districts in 2015. There are educations about safety on water for communities, skills about helping people from drowning, survival skills on the water when drowning and, skills for CPR. In addition, there are using the resources that are easy to find out in the area, build up communities network team to manage high-risk water sources and, installing warning sign with first aids for helping people from drowning.

Results According to the study, it is found that the number of children, who died from drowning (0–14 years) in Nakhon Ratchasima at the beginning of the year 2012, were 40 children (8.4). In 2013, there were 36 children(7.5) who died from drowning. In 2014, there were 23 children(4.8) who died from drowning. In 2015, there were 21 children(4.4) who died from drowning. The number of dead children from 2012–2015 has been decreasing because of the good cooperation between a network of well-promoter (32 teams of Nakhon Ratchasima) and management 90 places high-risk water sources.