

OT1-07

Demonstrating A Survival Swimming Program in Natural Water Bodies to Prevent Drowning

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Child drowning in Thailand is a leading cause of mortality and is now a major public health priority. Providing children with survival swimming lessons is an effective way of decreasing the risk of drowning. However, conventional swimming lessons have been limited to standard swimming pools which are a limited resource in developing countries like Thailand. Operational research was conducted in the Chaing Rai Province during 2008 which aimed to develop a feasible survival swimming program to be effective in natural bodies of water and increase the survival swimming ability of 60 primary school children (aged 6-12). A cooperative of people from the local administration, health center staff, parents, school teachers, and the research team was formed and initiated the survival swimming program as a community effort. A clean natural water body in the community was chosen as a safe area to swim. Local materials such as bamboo, empty gallon plastic bottles and dry coconuts were utilized during program. The swimming lessons were provided by a trained survival swimming instructor and 60 children from the local school were enrolled and divided into five groups of 12. At the conclusion of 20 swimming lessons, over 80% (83.3%) of the children gained a level of swimming ability which required the physical skills necessary to enter and across at least 20 meters of open water without assistance and floated for 90 seconds. This research demonstrated that with limited resources a survival swimming program in a natural water body is an effective and feasible way to increase swimming abilities of primary school aged children.

OT1-08

Accident Emergency Response of Public Buses at the Daya Automobile Terminal in Makassar- Indonesia

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Bus accidents frequently occurred with fatal injuries and high number of victim. Indonesian government has regulated the accident emergency response that is attitude and action which should be implemented quickly in holding an accident event of motor vehicle. The regulation arranges the safety minimum standard which can give maximum safety protection to bus passengers and crews. This is intended in order the bus crews and passengers can get maximum protection by confirming that the buses have minimum safety requirement which is always in good working condition and the crews of buses know to operate them. Bus is one of land

transportation which is often to get an accident. The most important factor which may minimize the number and fatality of accident are the driver behaviors and emergency response facilities of buses. This study is aimed to identify the accident emergency response of buses in the Daya Regional Terminal, Makassar city, Indonesia. Total 147 of 478 buses and their drivers involved in this study selected by using an accidental sampling method. Results of the study indicated that 42 buses (28.6%) have fully facilitated with emergency tools. Total 129 drivers (87,8%) having high knowledge score, 108 drivers (73,5%) having good attitude score, 15 (10.2 %) drivers having good proactive action score and 6 drivers with good reactive action score. The study suggests to educate the bus company managers and drivers on bus safety regulation followed law enforcement in order they complete and maintain their buses in good and full safety facility.

Oral Track 2- Clinical Research & Public Health

OT2-01

Gender Differences in the Relationship between Depression and Cardiac Autonomic Function among Community Elderly

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Objective: The mechanism underlying the differential effect of depression on morbidity and mortality in men and women remains unknown. This survey was designed to examine gender effects on the relationship between depressive symptoms and cardiac autonomic function among community dwelling elderly.

Methods: Six hundred and six randomly selected community-dwelling elderly men and women ≥ 65 years of age were enrolled. Depressive symptoms were assessed with the Hospital Anxiety and Depression Scale. Cardiac autonomic function was evaluated by measuring heart rate variability parameters. Frequency-domain indices of heart rate variability were obtained.

Results: Among the subjects, 58.4% were male with a mean age of 77.9 years. Stratified analyses by gender revealed a dose-response association between depressive symptoms and lower cardiac vagal control among elderly males ($p=0.003$). Male subjects with mild depressive symptoms (depression scores: 5-6) showed prominent cardiac sympathetic predominance compared with the reference group (depression scores: <5) ($p=0.005$). In contrast, these findings did not exist among elderly females.

Conclusions: The association of depressive symptoms with poor cardiac vagal control and sympathetic predominance was more robust among elderly males than females. This finding may help explain gender differences in the association of depression with morbidity and mortality.