HAVING DIFFICULTIES RAISING FUNDS FOR A DROWNING PREVENTION CAMPAIGN? BUILD YOURSELF A TOOL TO ATTRACT GOVERNMENT SUPPORT!

Organization: Brazilian Lifesaving Society - SOBRASA

Submit for oral presentation

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Abstract

Everyone is greatly impacted by media daily; hearing, seeing or reading about some aquatic tragedy; about a victim who was so young and healthy; and regretting that this was not prevented. Using the media to convey the seriousness of the problem and the need for prevention is how we as lifeguard program managers convince our government to support drowning prevention projects. Has this been working for you? Would you like some new ideas? Prevention is the most powerful tool to reduce aquatic incidents(1) and probably the least expensive. So why is so difficult to convince the government to invest in prevention? First there is a very little information on how many people are at risk, how many drowning incidents (both fatal and nonfatal) occur, what costs there are to society when injury or death occurs, what it takes to prevent a drowning and if the benefits offered by expenditures on prevention outweigh the costs. Second, in Brazil for example, a Governor's main seems to be to please as many voters as possible, especially just before an election, and any drowning prevention campaign proposal needs to address those needs. Third and finally, only some politicians will be interested regardless of the strength of the proposal, so the proposed project, with all the necessary information, must reach, at the right time, the right politician in the right way to get approval. Our purpose is to identify and evaluate the most important variables to consider; and to use them to build a tool that will convince the government that a drowning prevention campaign has favorable and attractive cost/benefits.

Methods: All ICD code W16 (injury from fall, jump or diving into water) and W65-74 (unintentional drowning), from January 2003 to December 2007, in Brazil, were considered using death certificates and epidemiologic morbidity(hospitalization and death) based on Health Ministry - DATASUS - <www.datasus.gov.br>. The framework of five years was chosen, as this is the normal term of a Governor and the project must fit inside the governance period to address the politician's needs. As part of our strategy, we split cost into two categories: Family and government losses. For all death incidents we included costs of funeral services and related expenses, government taxes, and the victim's productivity loss for the next five years, using an average estimate and national per-capita income. Numbers of rescues were not available, so the pre-hospital costs considered were from drowning victims who died or were transported to the hospital (lifeguards plus ambulance service calculated for each

incident). All hospital care costs were estimated in accordance with the public and private hospitals fees charged by the health system. The sum of all these expenses converted to US\$.

Results: 46,095 incidents were evaluated, from which 94% were ICD W65-74. There were a total of 31,053 death (67%) of which 99% were in the pre-hospital setting (lower (67%) for W16). 15.361 patients were hospitalized(82%-W65-74), consuming 75,377 days (average time of 4,91 days), with a cost of US\$ 7,001,586.10. Hospital average mortality was 2.08% (4%-W16 and 1.68%-W65-74). The average risk of injury in the aquatic setting was 5/100.000 inhabitants (4.7-W65-74 and 0.3 W16) and the average risk of death was 3.4/100.000 (3.4-W65-74 and 0.04-W16). Pre-hospital costs were (lifeguards-\$73.86 and ambulance-\$181.82 per one incident) estimate at \$3,927,528.41. Per-capita income(gross) was US\$-7,209.24(2006) and government taxes loss in five years (average of 30% taxes) was \$335,802,995.72. Family losses were estimated by the funeral cost (\$568.18/death) at \$17,643,750.00 and the loss of family member income in five years at \$783,540,323.34. Total family losses were \$801,184,073.34 and Government losses were \$339,730,524.13 over a five year time frame.

Discussion: In Brazil the risk to be injured in the aquatic setting is estimated to be 5.03/100.000 inhabitants. This figure does not include rescues, but only those who died or need to be hospitalized. Many less serious injuries are therefore not counted and the estimate is therefore extremely conservative. As the great majority (99%) of seriously injured victims die before reaching the hospital, we have been wasting extensive resources by being reactive, attending to the patient at the hospital, or following to the morgue, instead of pro-active and investing in prevention. Government is often too concerned with short term results, rather than viewing prevention in a more comprehensive manner which requires a more sustained and consistent approach. We must provide them with good quality information that would make a difference in decision-making regarding government expenditures on drowning prevention. Strategies should focus on increasing the appeal of prevention projects in a national, regional or local environment, but recognize that local strategies can have more impact. Locally, we also can much easier access to decision makers and offer important information not included here (i.e. total expenses with lifeguard service and number of rescues done) which results in a more real cost for government. A five year period seems to be an appropriate timeframe, with the impact campaign focusing on the first two years of governance. Different countries will have different costs and ways to approach this, as so many variables exist to be considered, but the core idea of highlighting cost/benefits still works. Although personal and capital family losses are much higher than those of government, any national prevention campaign(2) can run extremely well with much less than \$339,730,524.13.

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