

Establishing a surveillance system to record drowning incidence in a low income country: A top down–bottom up approach

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Introduction

BBC Kiswahili Radio has recently published the figure of 5000 annual drowning deaths only on Lake Victoria. Logically, one-third to one-half of these are Tanzanians as Tanzania has the longest coastline of the lake. This alone is an incidence of ca 4.4/100,000, or eight times that of the UK. If the other Great Lakes, the long coast line and the major rivers each contribute a similar number, there may be over 8000 drowning deaths annually in Tanzania or 17.6/100,000; three times the number of traffic fatalities and 30–35 times as many drownings as in the UK.

Because the burden is otherwise unknown, there is little interest from the health sector, believing the problem to be minor. Interventions do not exist above the few random local efforts. The single national organization, The Tanzanian Life Saving Society, both young and small, is powerless in the face of the magnitude of this problem.

Aim

This is an ongoing project. The aim is to follow up on the contacts made in late 2009 and early 2010. The project ends only when the system is in place. The long term goal is to put in place a surveillance system which will provide the information to allow planning and carrying out of intervention strategies.

Methods

The top down – bottom up strategy simply refers to starting at the national level and the local level simultaneously. At the national level, the starting point has been the Dept. of Statistics, Ministry of Health. Preliminary discussions have alerted the Ministry to a problem they had greatly underestimated. At the local level potential sources of primary data have been identified and initial contact made. In addition, other surveillance systems are being examined. Lastly, existing local interventions which have succeeded though small, will be strengthened.

Results

As of 2010, there is no national surveillance strategy. Each major cause of death is investigated individually and usually has external financing. Drowning morbidity and mortality has common elements with traffic morbidity and mortality. Patterning surveillance after the existing traffic surveillance system has shown to be promising.

At the local level potential sources of primary data are: a) municipal and district police, b) hospitals, and c) PHC facilities. Lastly, both fourth year MD and MPH students are being recruited to assist in data collection at specific geographical locations most exposed to risk.

Discussion

Establishing surveillance where it has not existed is difficult in resource poor settings. Without information derived in this way, motivation to implement intervention strategies is difficult to generate. The vicious circle is hard to turn. At top and bottom, each bit of information must be exploited and used to influence specific, surveillance friendly individuals. At the same time, all possible media sources must be employed.

Conclusions

While establishing effective surveillance is difficult, the price of not attempting to curb the rising drowning rate is too high to pay.

References

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