Public health intervention needed to curb increase in diarrhoea-related deaths in South Africa

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PUBLIC HEALTH INTERVENTION NEEDED TO CURB INCREASE IN DIARRHOEA-RELATED DEATHS IN SOUTH AFRICA

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INTRODUCTION

Sub-Saharan Africa continues to be the region most affected by the Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome (HIV/AIDS). South Africa alone is home to 14% of the world’s HIV positive population. In 2006, 5.2 million HIV-infected individuals in the country, 1.54 million (28%) are resident in KwaZulu-Natal Province (Dorrington et al., 2006).

While there has been an unprecedented global investment in the roll-out of antiretroviral therapy (ART) for HIV infection since 2003, health care providers and policy makers in South Africa and other parts of sub-Saharan Africa are faced with a profound HIV/AIDS epidemic due to the devastating impact of HIV/AIDS (Lule et al., 2005).

It is by now well established that diarrhoea is a symptom of HIV and AIDS and an important cause of death and disease in HIV-infected people. In South Africa and many other developing countries, especially where the stigma of HIV/AIDS is still very high, the cause of death is often incorrectly classified as diarrhoea or tuberculosis, for example, instead of the true underlying cause, namely HIV (Greenwood et al., 2005). The result of this is statistical data that favours health interventions that are actually not applicable to the true “underlying cause of death.”

Diarrhoea is not a life-threatening disease, yet globally millions of people, mostly children, die from diarrhoea every year. The World Health Organization (2007) estimates that diarrhoea is preventable in 94% of all cases by increasing the availability of clean water, and improving sanitation and hygiene.

Improving water, sanitation and hygiene (Prüss-Üstün et al., 2005) therefore has the potential to prevent at least 6.3% of all deaths worldwide and approximately 9.1% of all DALYs (Disability Adjusted Life Years).

Major improvements have been made in the water and sanitation sector in South Africa since 1994 and few people lack access to improved water supply, even in rural areas. Many, however, still lack access to improved sanitation facilities.

Households affected by HIV and AIDS require greater quantities of water and excellent hygiene to meet the requirements of the chronically ill and to prevent opportunistic infections (Lule et al., 2005). While HIV plays a major role in diarrhoea incidence and deaths, Levin et al. (2007) found that 84% of all diarrhoeal disease in South Africa is attributable to water and sanitation. Clearly, incomplete water and sanitation coverage and the associated levels of morbidity and mortality, are still not widely appreciated or acknowledged.

The aim of this paper was therefore to assess whether these positive improvements in water and sanitation coverage are reflected in the diarrhoea mortality statistics by:

• Examining the diarrhoea mortality statistics for South Africa over a ten year period (1997 to 2006).
• Studying the mortality trends for the different age groups and provinces.

METHODOLOGY

The study used available cause-of-death data from Statistics South Africa classified under Intestinal Infectious Disease to examine the mortality trends of diarrhoea over the period 1997 – 2006. Diarrhoea mortality data categorised under the ten leading natural causes of death for South Africa were used for each of the nine provinces. The available data was grouped into four age groups (Stats SA 2005, 2006, 2007, 2008).

The broad group ‘Intestinal Infectious Disease’ death statistics were used to graphically depict the changes in diarrhoea deaths over the ten year period. In addition, the study assessed the diarrhoea death Trends in the provinces for the different age groups, to identify changes in patterns over time within and between age groups and provinces.

RESULTS

The H1N1 virus has killed at least 18,300 people with the latest epidemic. During the same time, diarrhoea has killed about 2 million people. This indicates that the diarrhoea morbidity threat cannot be underestimated.