Climate change as the biggest threat to public health in southern Africa and measures to reduce its impacts

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Introduction

The southern African region is defined in political terms as those countries that are members of the Southern African Development Community (SADC). Currently there are fifteen member states of the SADC: Angola, Botswana, the Democratic Republic of Congo (DRC), Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, the Seychelles, South Africa, Swaziland, Tanzania, Zambia, and Zimbabwe.

The Lancet has declared climate change and its impact on health as the biggest global health threat of the 21st century. Currently, there are few options for mitigating the effects of climate change, but it is widely recognised as one of the most vulnerable regions to climate change because of low levels of adaptive capacity, combined with a high dependence on rain-fed agriculture.

Against this background, this essay presents climate change as the biggest threat to public health in the region. Potential options to mitigate the effects of this threat are also presented in the article.

Identifying the biggest threat to public health in southern Africa

Public health threats are events with potential to adversely affect the health of human populations, especially those that may spread internationally or present a serious and direct danger. Literature shows a vast range of often interconnected issues identified as threats to public health in southern Africa, and it is difficult to do them all justice here. However, on the basis of the definition of public health threats above and from what literature reveals about the current state of public health in southern Africa, HIV/AIDS and climate change stand out in this essay, with the latter being the biggest threat.

The epicenter of the global HIV/AIDS epidemic is southern Africa. However, there are encouraging signs that the impact of the epidemic in the region is slowing, evidenced by declining new infection rates. On the other hand, while the entire world is struggling with the challenges presented by the changing global climate, southern Africa is uniquely susceptible to the impacts of climate change. The region is a predominantly semi-arid region with high rainfall variability, characterised by frequent droughts and floods. Climate change refers to a change in the average weather experienced in a particular region or location. Temperatures in southern Africa have increased and rainfall patterns have changed, with some parts receiving little to no rain and others experiencing intense daily rainfall. El Niño events have also been observed in the region. With projected trends, the region's warming is likely to exceed average global warming. There will be drier conditions over a large part of the region, severe droughts, and intense flooding.

Climate change and natural disasters in southern Africa

The heavy seasonal rainfall of December 2014 caused flooding in southern Africa. As of 16 Jan 2015, 135,000 people had been affected in Malawi, Mozambique, Madagascar, and Zimbabwe. With 638,000 people affected by floods, Malawi declared a state of disaster on 13 January 2015. On 12 January 2015, an institutional red alert was declared in Mozambique after a period of heavy rainfall causing severe flooding across central and northern Mozambique, with 373,026 people being affected. In Zimbabwe, approximately 6000 people (1200 households) were affected by widespread floods, of which 2500 people (500 households) were in urgent need of assistance. In Madagascar, the flooding in the greater Antananarivo worsened, and on 27 February 2015, a red alert was declared in Mozambique after a period of heavy rainfall causing severe flooding across central and northern Mozambique, with 373,026 people being affected. In Zimbabwe, approximately 6000 people (1200 households) were affected by widespread floods, of which 2500 people (500 households) were in urgent need of assistance. In Madagascar, the flooding in the greater Antananarivo worsened, and on 27 February 2015, a red alert was declared in Mozambique after a period of heavy rainfall causing severe flooding across central and northern Mozambique, with 373,026 people being affected. In Zimbabwe, approximately 6000 people (1200 households) were affected by widespread floods, of which 2500 people (500 households) were in urgent need of assistance.

Climate change, food insecurity, and malnutrition in southern Africa

Agriculture is the backbone of southern Africa in sustaining livelihoods and food security, and climate change is its major threat. Currently, southern Africa is in the grip of an intense drought that has expanded and strengthened since the earliest stages of the 2015-2016 agricultural season,
Climate change as a threat to public health

Addressing impacts of climate change on public health in southern Africa

Mitigation: Reducing the cause

Adaptation: Reducing the risk

Conclusion and recommendations

References


