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Changes in Malaria Prevention and Incidence Due to Political Restructuring of Mozambique and South Africa

Nirmala K. Shivakumar Virginia Commonwealth University

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Introduction

In 1998 the World Health Organization (WHO) unveiled the Roll Back Malaria (RBM) partnership with the United Nations Children's Fund (UNICEF), United Nations Development Programme (UNDP), and the World Bank to establish and promote malaria elimination as an international high priority (WHO 3). There has been a steady increase in malaria transmission and incidence in South Africa and Mozambique since the mid 1990s; however, the two countries have been affected differently. Mozambique has constant malaria rates all year with a peak in the rainy season (Cliff et al. 374). South Africa, on the other hand, is malaria free in many areas, but has high malaria rates in provinces bordering Mozambique and Swaziland (Cliff et al. 374). In this study, the current systems of malaria care, current resources, and the feasibility of cooperation between South Africa and Mozambique are analyzed in order to address the potential of international cooperation between the two countries.

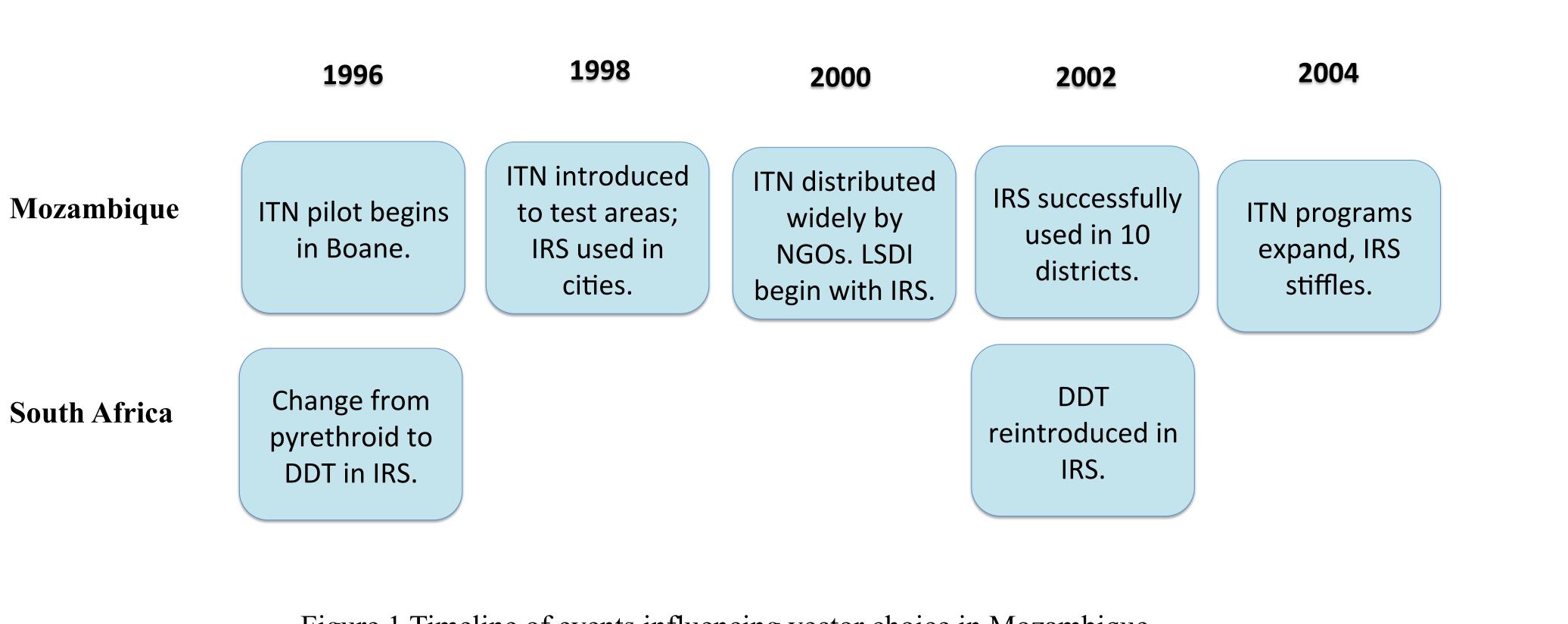


Figure 1 Timeline of events influencing vector choice in Mozambique and South Africa from 1996 to 1998. (Cliff et al.)

Results

- Prevention Methods: Mozambique utilizes inse Africa uses indoor residual spraying (Coetzee et
- Treatment Cost: In Mozambique, it costs patier and per each prescription, whereas in South Afri 110)
- **Research**: Mozambique has more partnerships communities and has collected up-to-date vector South Africa last collected vector data in 2001.
- Healthcare Model: Mozambique depends on in organizations (NGOs) to heavily supplement the system (Sherr 2-3, Mussa 4). South Africa's has barely relies on external aid (Castillo-Riquelme
- **Community Understanding:** Mozambique's at reversed due to citizens not fully understanding stop malaria transmission. South Africa has not communities undermining malaria prevention implementations (Montgomery, Munguambe, Pool 1695).

CHANGES IN MALARIA PREVENTION AND INCIDENCE DUE TO POLITICAL RESTRUCTURING OF MOZAMBIQUE AND SOUTH AFRICA Nirmala Shivakumar Mentored by Professor Mary Boyes, Honors College

ecticide treated nets, while South et al. 775).
ents US\$0.02 per each consultation
rica it is free (Castillo-Riquelme
with international research
or data, compared to South Africa.
(Cliff et al. 377)
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Table 2: Partnerships and Conflicts between Mozambique and South Africa in the Last 40 years.

A cooperation program between South Africa and Mozambique could utilize similar resources and create a flow of research, advice, and aid that would allow the two countries to actually eliminate malaria and complete the UN's goals. A successful program would combine IRS and ITN malaria prevention methods to create a more effective manner of preventing and treating malaria in all endemic areas. The program would create new ways of educating the community on malaria prevention and handling aid from NGOs and international aid organizations by combining the previous experience of the two countries. The program not only has the potential to eliminate malaria, but it could help the two governments to cut their dependence on international NGOs and external aid in healthcare and other industries. When developing a cooperation program, bordering countries such as Swaziland and Zimbabwe, that also have high malaria incidence, must be evaluated for their effects on malaria incidence in South Africa and Mozambique (Cliff et al. 274). A more localized cooperation program could be used to eliminate other diseases more efficiently all around the world.

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Inadequate Numb and High Border
Mozambique stro strong IRS (Cliff

Conclusions

Works Cited

Conflicts

h Africa Interference Stop Cliff et al. 378)

nber of Temporary Visas r Duties (Peberdy 373)

ong ITN vs South Africa f et al. 379)

Castillo-Riquelme, Marianela, Diane McIntyre, and Karen Barnes. "Household Burden of Malaria in South Africa and Mozambique: Is There a Catastrophic Impact?" Tropical Medicine and International Health 13.1 (2008): 108-122. EBSCOHost. Academic Search Complete. Web. 4 Oct. 2014. Cliff, Julie, et al. "Policy Development in Malaria Vector Management in Mozambique, South Africa and Zimbabwe." Health Policy and Planning 25.3 (2010): 372-383. Oxford Journals. Academic Search Complete. Web. 1 Sept. 2014.

Knijn, Trudie, and Mariette Slabbert. "Transferring HIV/AIDS Related Healthcare from Non-governmental Organizations to the Public Healthcare System in South Africa: Opportunities and Challenges." Social Policy & Administration 46.6 (2012): 636-653. EBSCOHost. Academic Search Complete. Web. 8 Oct. 2014. Maharaj, Rajendra et al. "The Feasibility of Malaria Elimination in South Africa." Malaria Journal 11.1 (2012): 1-10. EBSCOHost. Academic Search Complete. Web. 19 Oct. 2014.

Montgomery, Catherine M, Khatia Munguambe, and Robert Pool. "Group-based Citizenship in the Acceptance of Indoor Residual Spraying (IRS) for Malaria Control in Mozambique." Social Science & Medicine 70.10 (2010): 1648-1655. Elsevier. Academic Search Complete. Web. 12 Oct. 2014. Peberdy, Sally Ann. "Border Crossings: Small Entrepreneurs and Cross-Border Trade Between South Africa and Mozambique." Journal of Economic & Social Geography 91.4 (2000): 361-378. EBSCOHost. Academic Search Complete. Web. 1 Dec. 2014. Sherr, Kenneth, et al. "Strengthening Integrated Primary Health Care in Sofala, Mozambique." BMC Health Services Research 13.1 (2013): 1-12. EBSCOHost. Academic Search

Complete. Web. 14 Oct. 2014. United Nations. Millennium Development Goals and Beyond 2015. 2013. Web. 30 Nov. 2014.

World Health Organization. Scaling Up Insecticide-Treated Netting Programmes in Africa: A Strategic Framework for Coordinated National Action. Geneva: WHO, 2005. Web.