Outreach to Africa: Utilizing an NPF Model of Videoconferencing to Provide Parkinson's Care to Africa

M Guttman MD, FRCPC, Jonathan Carr MD, FCP(SA)Neurology Centre for Movement Disorders, Markham Ontario Canada Tygerberg Hospital & University of Stellenbosch



Introduction

There are significant but not insurmountable problems with the delivery of medical services to Africa. The problems are due to a combination of political and economic issues: a lack of trained medical professionals in many areas, subsequently a lack of access to treatment. Care delivery is a systemic problem in Africa and affects medical care for all conditions.

There is little information about delivery of health care to patients with Parkinson's disease (PD) throughout Africa. It is likely that many patients and their families are suffering because of lack of access to treatment.

With NPF support, the Centre for Movement Disorders has pioneered videoconferencing to provide medical care to PD patients in remote areas in Ontario, Canada who do not have access to neurologists. PD patients and their families have been satisfied with this service. We plan to use this experience to explore offering care to PD patients in Africa through videoconferencing.

NPF has funded a pilot project as a "proof of concept" program to assess the potential for videoconferencing for patient care in Africa.

This pilot study has the potential for creating exciting opportunities not only for PD patients but for patients with other movement disorders. The success of this pilot project could have an international impact on health care delivery for Africa and could be a model for other disease foundations outside of PD.

Progress

Collaboration with Neurologists in Africa

South Africa was chosen as the initial target country for this pilot project. South Africa has well-trained neurologists, a publicly funded health care system, and is one of the most advanced countries on the continent.

Dr.Guttman initially presented the concept to the annual conference of the Neurological Association of South Africa in 2008, the World Federation of Neurology Task Force on Africa and its advisory committee. Dr. Johan Aarli president of the WFN has endorsed the program.

Dr. Guttman met with Prof. Carr in Cape Town in March 2009 to initiate the project. Meetings took place with the Vice Dean of the University of Stellenbosch (US), key personnel of the Medical Research Council of South Africa, neurologists from the University of Cape Town (UCT), and local experts on broadband communication. Prof. Carr and Dr. Guttman were able to meet delegates of a meeting sponsored by International Development Research Centre, a Canadian government agency focusing on new systems for health care delivery in Africa. They met local South African experts in videoconferencing as well as Canadian experts in African health projects.

The Medical Research Council has promised support for the project including videoconferencing equipment for Prof. Carr, US and UCT.

Objectives

The project proposes to:

Establish videoconference programs to deliver:

- 1. Patient care that would link
- US with outreach centres in Worcester, Paarl and Ceres.
- UCT with George and other centres for patient care.
- 2. Medical education linking UCT with US.
- 3. Mentorship between US and Namibia to support a new neurologist with Prof. Carr.

Challenges and Limitations

We have identified a number of issues that have created specific challenges

- Broadband limitations (we are currently using expensive, poor quality dial up connections that needs to be improved).
- 2. Delays delivering equipment from South Africa MRC and the quality of equipment is below acceptable standards.
- 3. Compatibility of equipment
- 4. Lack of dedicated support for videoconference system
- 5. Funding

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Successes

- 1. Parkinson's disease patients visits successfully performed in Worcester.
- 2. Positive collaborations made.
- 3. Promise of broadband enhancement with fibre-optic lines becoming available in 2010 with World Cup
- 4. Support from WFN
- 5. Initial discussions to expand to training networks for neurologists in other parts of Africa
- 6. Grant written for partnerships with Kenya