Cataract is the leading cause of blindness in Swaziland, as elsewhere in Africa. Although Swaziland has no published studies, it is likely to be similar to Malawi and Tanzania, where rates of bilateral blindness are 3.3% and 2.4%, with cataracts contributing 48.2% and 52.4% of cases, respectively.1,2 Swaziland struggles to manage an HIV epidemic affecting 26% of adults, the highest prevalence in the world.3 In 2007 it was estimated that 56 000 Swazi children had been orphaned due to HIV.4 The United Nations Children’s Fund (UNICEF) predicted that this would increase to 120 000 orphaned children by 2010, representing 13% of Swaziland’s population.5 Grandparents have a growing role as primary caregivers of AIDS orphans in sub-Saharan Africa,6-14 and in Swaziland elderly people are their main caregivers.15 In nearby Zimbabwe approximately 71% of grandparents older than 60 years have responsibilities for children orphaned by HIV/AIDS,16 and in neighbouring South Africa each elderly caregiver looks after an estimated average of 4.6 children.7 While it is universally agreed that the elderly are essential for mitigating the effects of the AIDS epidemic on orphaned children, their needs are rarely addressed by governmental or non-governmental organisations.17 The World Health Organization has therefore called for practical and sustainable programmes to improve the capacity of older people to provide care for their orphaned dependants.

This original research is published by three generations of UCT graduates. Dr Cook trained Dr Pons in ophthalmology and Dr Pons trained Dr Mapham in ophthalmology.

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Discussion

Swaziland has the highest documented prevalence of HIV in the world, resulting in a large number of orphans whose grandparents provide care for them. In this study, half the subjects reported being the primary caregiver for the child(ren) living in their homes, despite being visually impaired from their cataract. Visual acuities and the range of activities they were able to perform, including child care activities and income-generating activities, significantly improved following surgery.

This study has weaknesses. Patients are generally only able to afford a single postoperative visit, which is routinely scheduled after 2 weeks. However, 2 weeks was considered to be too soon to reasonably ask about any improvement in activities after surgery. While we would have liked to have visited all the patients in their homes to interview them after 4 weeks, for geographical, logistical and financial reasons this was not possible and only 37 patients were visited. Although it was possible to measure the visual acuities more objectively before and after surgery, the reported range of pre- and postoperative activities is more subjective.

Notwithstanding these weaknesses, cataract surgery resulted in a significant improvement in visual acuity and activities of daily living in these patients. Cataract surgery in this setting improves the income-generating capacity of affected families and the care of orphans and vulnerable children living in those families.

Table 1. Pre-operative and postoperative visual acuities

<table>
<thead>
<tr>
<th>Pre-operative visual acuity</th>
<th>Postoperative visual acuity</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Normal (6/6 - 6/18)</td>
<td>42</td>
</tr>
<tr>
<td>Visual impairment (6/24 - 6/60)</td>
<td>47</td>
</tr>
<tr>
<td>Severe visual impairment (5/60 - 3/60)</td>
<td>11</td>
</tr>
<tr>
<td>Blind (&lt;3/60)</td>
<td>31</td>
</tr>
<tr>
<td>Total</td>
<td>131</td>
</tr>
</tbody>
</table>

No correlation was present between change in visual acuity and age or patient gender.

Table 2. Reported improvements in activities of 37 patients interviewed before surgery and 4 weeks after surgery

<table>
<thead>
<tr>
<th>Activity</th>
<th>N</th>
<th>%</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No improvement</td>
<td>2</td>
<td>5.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improved self-care</td>
<td>20</td>
<td>54.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improved activities of daily living</td>
<td>23</td>
<td>62.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improved direct care of children</td>
<td>17</td>
<td>54.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improved economic activities</td>
<td>10</td>
<td>27.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*N* Number and percentage of patients reporting an improvement; patients could report more than one improvement.

References


15. Makadzange K, Dolamo BL. Care of HIV-positive orphans by elderly people in Swaziland. CME 2011;29(2):60-64.


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