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To cite this article: Nathan Congdon & Ravi Thomas (2014) How Can We Solve the Problem of Low Uptake of Cataract Surgery?, Ophthalmic Epidemiology, 21:3, 135-137, DOI: [10.3109/09286586.2014.912333](https://doi.org/10.3109/09286586.2014.912333)

To link to this article: <https://doi.org/10.3109/09286586.2014.912333>



Published online: 15 May 2014.



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EDITORIAL

How Can We Solve the Problem of Low Uptake of Cataract Surgery?

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Well into the twenty-first century, and despite the availability of a relatively straightforward surgical solution, it is unfortunate that unoperated cataract remains the leading cause of blindness worldwide.^{1–6} In the hands of a capable surgeon, cataract surgery can result in good vision^{7–9} and patient satisfaction¹⁰ at least 90% of the time, and recent studies have shown that these operations can transform the economic outlook of patients and families.^{10–13} It is thus particularly disturbing that patients with visually significant cataract refuse free or low-cost surgery in some 80% of cases, as documented in papers by Kovai and co-workers¹⁴ and Zhang and co-workers¹⁵ in the current issue.

These papers document a variety of reasons for refusal: fear of bad results, lack of a perceived need and absence of family support.^{14,15} Another paper in the current issue by Li and colleagues¹⁶ reporting population-based cataract surgical outcomes in China suggests fear over bad results may be justified: only a third of patients had postoperative visual acuity >6/18, and nearly a third had <6/60. Despite some trends towards improvement with wide adoption of intraocular lens surgery, larger population-based studies in China¹⁷ and those from elsewhere in Asia^{18,19} report similar results. It is not surprising when relatively permissive vision cutoffs are used (<6/18 in either eye in the Zhang paper¹⁵) to hear patients say that they feel no need for surgery. However, it is startling to learn that more than three-quarters of bilaterally blind patients in the study by Kovai and colleagues felt that

they could “see well and (had) no serious vision problem.”¹⁴ Further probing revealed that many of these patients were afraid of a bad surgical result. Also interesting is the fact that, although <10% of participants in the studies by Kovai and Zhang identified financial barriers as important in refusing surgery, having a low income was in fact an important risk factor for refusal in India.^{14,15}

In another article in the current issue, Schulze Schwering and co-authors²⁰ highlight that economic barriers remain important in the uptake of pediatric cataract surgery in Malawi. Though uptake was generally high (>60%), other reports have shown that delays in surgery and poor follow-up, also potentially caused by economic barriers, can prevent good outcomes even where surgery is done well.²¹

All the barriers reported in this issue^{14–16,20} have been well-studied, and inarguably play a role in persistently low surgical rates. However, it would seem that the time for studying barriers to cataract surgery is past, and that our attention should now be turned to improving surgical quality, and testing interventions to improve uptake. To date, the results of studies focusing on the latter have not been encouraging. Though a Chinese two-center, population-based study of barriers to cataract surgery identified lack of knowledge as an important factor,²² a recent randomized trial in rural China of educational interventions failed to improve uptake of surgery.²³ Similarly, a Chinese randomized trial of free cataract surgery also failed to increase uptake beyond

that among controls, with only 30% of both groups accepting surgery.²⁴

Perhaps it is appropriate to take a lesson from other fields. Conditional cash transfers (CCT) have been studied as a means to promote usage of a variety of health services. These cash payments in return for acceptance of care acknowledge the fact that eliminating user fees for service may not be enough to promote use, in part because of additional indirect costs such as loss of work time for patients and family members. Perhaps the closest analogy to acceptance of cataract surgery is the successful use of CCTs to promote in-hospital childbirth in India and elsewhere.²⁵ This approach has not yet been widely used in eye care, but in view of the mounting evidence of the economic benefits of cataract surgery to patients and their families, modest CCTs to promote uptake of cataract operations may be an attractive proposition to governments and other stakeholders. This is especially true of congenital cataract. Given the evidence of the very high cost of a lifetime of childhood blindness (nearly US\$200,000),²⁶ CCTs to promote early surgery and good post-operative follow-up for pediatric cataract should be highly appealing.

High-quality studies, ideally randomized trials of CCTs and other interventions to promote cataract surgery in both children and adults, are needed to create the evidence base necessary to advocate successfully for government and other programs that can sustain such interventions. These should be undertaken as a priority.

However, we must remember that CCTs to promote cataract surgery uptake will only improve vision where surgical quality is good. While CCT's have been shown to increase the number of mothers opting for institutional childbirth, a recent review²⁷ questions whether the maternal mortality rate has fallen as a result, concluding that improved quality of care may still be needed. Similarly, the primary objective of cataract surgery is the restoration of good quality vision, and outcomes in a cataract program should, generally, be at least as good as those recommended by the World Health Organization,²⁸ or evidence-based standards²⁹ selected by the program itself. Unless a program achieves such results, efforts to increase uptake in those whose vision is only modestly impaired, and who are satisfied with their eyesight, may not be justified. Providing access to care is important, but must be balanced with efforts to improve the quality of that care.

DECLARATION OF INTEREST

The authors report no conflicts of interest. The authors alone are responsible for the content and writing of the paper.

Dr Congdon is supported by a Thousand Man Plan grant from the Chinese government.

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