PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (<u>see an example</u>) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below. Some articles will have been accepted based in part or entirely on reviews undertaken for other BMJ Group journals. These will be reproduced where possible.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Barriers to Utilisation of Refraction Services in South India: Rapid Assessment of Refractive Errors (RARE) Study
AUTHORS	Marmamula, Srinivas; Keeffe, Jill; Raman, Usha; Rao, Gullapalli

VERSION 1 - REVIEW

REVIEWER	Robert P. Finger
	Department of Ophthalmology
	University of Bonn
	Germany
REVIEW RETURNED	15-May-2011

CENERAL COMMENTS	The outborn are to be congretulated on their quite substantial effect
GENERAL COMMENTS	The authors are to be congratulated on their quite substantial effort to depict barriers to the uptake of refractive correction services in India. Uncorrected refractive error constitutes the largest proportion of unmeet need in avoidable visual impairment, and studies trying to alleviate this burden are absolutely necessary.
	There are only a few minor comments, which – if addressed – will improve the manuscript.
	Were reported barriers different between urban and rural clusters? If so, please add as this would impact service delivery.
	Groups of barriers: There are two categories which have been repeatedly shown to be important in particular in relation to barriers to the uptake of offered cataract surgery, which are an unsupportive family and gender issues which may be the underlying reasons for inaffordability/no access. Both are largely determined by family members willing to pay/invest resources into obtaining health services for the visually impaired person. Was any information collected on these barriers, or may be inferred from reported barriers?
	Education: Does "School Education" mean some school education (including drop outs) or completed school education?
	In the discussion, the authors state that barriers difficult to change may require more and sustained efforts on the individual level and by the service provider. The immense role of the family, in particular in elderly patients, and the complex decision making process related to spending (or not spending) resources on obtaining health care, should be discussed. Several providers of outreach services in India, for example, encourage attendees to bring the person who is most likely to ultimately decide whether to accept offered services or not to the outreach clinic. This may even apply more so to the elderly who unfortunately were excluded in this study.

The authors suggest correcting targets for refraction & spectacle provision programmes, so as to account for the large proportion of unfelt need. Considering the large impact a hearsay outcome has on communities, unfelt need may decrease as more people access services and talk to their neighbors about the positive impact and (ideally) affordability of their new spectacles (a domino effect). This may be added to the discussion if the authors think it worth it.
A few typos need correction throughout the manuscript.

REVIEWER	Parikshit Gogate MS DNB FRCSEd MSc IPS	
	Pediatric Ophthalmologist &	
	Community Eye care Consultant	
	Dr. Gogate's Eye Clinic,	
	102, Kumar garima, tadiwala road,	
	Pune 411001. India	
REVIEW RETURNED	03-Jun-2011	

GENERAL COMMENTS	This is a good study with fairly large sample size.
	Discussion:
	Page 13/22: Last para is not relevant to this specific discussion.
	PAGE 14/22: First para - If the patient does not 'feel any need', why are we insisting on calling his/ her presbyopia a 'disability' and insisting on treating it? What benefit does that bring to the patient?
	Page 14/22: last two paragraphs should be shortened and results should not be repeated.
	Page 15/22: para 2, lines 10-40: Could be shortened.
	Page 16/22: The last paragraph, the conclusion, should be more specific and not general platitudes. The authors should mention vision centres earlier, how they help to address refractive errors rather than adding a single line about them being a panacea for refractive errors in the conclusion.
	The names of authors in the references have been written dissimilarly, sometimes the initials coming before and at times after the family name.

VERSION 1 – AUTHOR RESPONSE

Reviewer 1

The authors are to be congratulated on their quite substantial effort to depict barriers to the uptake of refractive correction services in India. Uncorrected refractive error constitutes the largest proportion of unmeet need in avoidable visual impairment, and studies trying to alleviate this burden are absolutely necessary.

There are only a few minor comments, which if addressed will improve the manuscript.

1) Were reported barriers different between urban and rural clusters? If so, please add as this would impact service delivery.

The study was conducted in rural areas in Mahbubnagar district. No urban areas are included.

2) Groups of barriers: There are two categories which have been repeatedly shown to be important in particular in relation to barriers to the uptake of offered cataract surgery, which are an unsupportive family and gender issues which may be the underlying reasons for inaffordability/no access. Both are largely determined by family members willing to pay/invest resources into obtaining health services for the visually impaired person. Was any information collected on these barriers, or may be inferred from reported barriers?

As we have used individuals aged 15 to 49 years of age and cost and demand for support are not very high for spectacles unlike for cataract surgery. However these barriers may be intermingled in personal barriers. Changes are made in the text to illustrate this point.

Lines 27 to 35 on page 12

Lines 17 to 25 on page 16

3) Education: Does School Education mean some school education (including drop outs) or completed school education?

Only those who have completed school education are included in 'School education'.

4) In the discussion, the authors state that barriers difficult to change may require more and sustained efforts on the individual level and by the service provider. The immense role of the family, in particular in elderly patients, and the complex decision making process related to spending (or not spending) resources on obtaining health care, should be discussed. Several providers of outreach services in India, for example, encourage attendees to bring the person who is most likely to ultimately decide whether to accept offered services or not to the outreach clinic. This may even apply more so to the elderly who unfortunately were excluded in this study.

As reviewer has mentioned, this study did not include elderly population. And also barriers for refractive error correction may be different to that of cataract. Please refer to our response to the second comment.

- 5) The authors suggest correcting targets for refraction & spectacle provision programmes, so as to account for the large proportion of unfelt need. Considering the large impact a hearsay outcome has on communities, unfelt need may decrease as more people access services and talk to their neighbors about the positive impact and (ideally) affordability of their new spectacles (a domino effect). This may be added to the discussion if the authors think it worth it.

 Point added as suggested. Please refer to Lines 27 to 33 on page 14
- 6) A few typos need correction throughout the manuscript. Manuscript is proof read and all the typos are now corrected

Reviewer:2

This is a good study with fairly large sample size.

Discussion:

Page 13/22: Last para is not relevant to this specific discussion.

This paragraph now on page 16 even though does not directly related to barriers from the patient point of view, they are issues that need to be considered by service provider and has implications of planning services.

PAGE 14/22: First para - If the patient does not 'feel any need', why are we insisting on calling his/her presbyopia a 'disability' and insisting on treating it? What benefit does that bring to the patient? This is point is noted and word 'disability' is now deleted

Page 14/22: last two paragraphs should be shortened and results should not be repeated. Change is made as suggested

Page 15/22: para 2, lines 10-40: Could be shortened. Change is made as suggested

Page 16/22: The last paragraph, the conclusion, should be more specific and not general platitudes. The authors should mention vision centres earlier, how they help to address refractive errors rather than adding a single line about them being a panacea for refractive errors in the conclusion.

Conclusion is now made specific to this study. Lines 2 to 11 on page 17 Issue related to vision centres not addressed. Lines 33 to 45 on page 16

VERSION 2 - REVIEW

REVIEWER	Parikshit Gogate
REVIEW RETURNED	13-Jun-2011

GENERAL COMMENTS	Reviewer completed checklist only. No further comments were
	made.

REVIEWER	Robert Finger
REVIEW RETURNED	14-Jun-2011

GENERAL COMMENTS	Reviewer completed checklist only. No further comments were
	made.