

The utilization of eye care services by persons with glaucoma in rural south India

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PURPOSE: To determine utilisation of eye care services, in particular those relating to glaucoma, in a rural population of southern India aged 40 years or older.

METHODS: A total of 5,150 subjects aged 40 years or older selected through a random cluster sampling technique from three districts in southern India underwent detailed ocular examinations for vision impairment, blindness, and ocular morbidity. Information regarding previous use of eye care services was collected from this population through a questionnaire administered by trained social workers prior to ocular examinations. **RESULTS:** One thousand eight hundred and twenty-seven persons (35.5%) gave a history of prior eye examinations, primarily from a general hospital ($n = 1,073$, 58.7%). Increasing age and education were associated with increased utilization of eye care services. Among the 3,323 persons who had never sought eye care, 912 (27.4%) had felt the need to have an eye examination but did not do so. Only one third of persons with vision impairment, cataracts, refractive errors, and glaucoma had previously utilized services. Of the 64 subjects diagnosed as having primary open-angle glaucoma, 32 (50%) had previously seen an ophthalmologist, but none had had an eye examination within 1 year before the study. Only six (19%) of the 32 had been diagnosed as having glaucoma (9% of all subjects found to have glaucoma in the survey). Thirteen (20.3%) of the 64 subjects were blind in either eye due to glaucoma, including one person who was bilaterally blind. **CONCLUSIONS:** A large proportion of persons in a rural population of southern India who require eye care are currently not utilizing existing eye care services. Strategies to improve the uptake of services are required to reduce the burden of blindness due to glaucoma in southern India.

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Analysis of costs and benefits of the Gambian Eye Care Program

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OBJECTIVE: To estimate the net benefit of the Gambian Eye Care Program (GECF) using a limited definition of benefits from a societal perspective. **METHODS:** The number of cases of blindness avoided was modelled using population projections, population-based blindness survey estimates from 1986 and 1996, and reported blindness-related mortality differences. Benefits were measured as lifetime productivity gains that resulted from the cases of blindness avoided between the surveys. Costs included all contributions to GECF between the surveys.

RESULTS: In 1996, 1658 fewer individuals were blind than would have been without GECF. The present value of costs was 1.28 US million dollars (1995 dollars). Although the net benefit between the blindness surveys was negative, the net lifetime benefit was 1.01 US million dollars (1995 dollars), yielding an internal rate of return of 10%. In the primary sensitivity analysis, assuming similar benefits to Senegalese citizens, who accounted for 30% of patients, the internal rate of return was 19%. Upper bound sensitivity analyses result in internal rates of return higher than 20%.

CONCLUSION: In one sub-Saharan African country with avoidable blindness due to cataract and eye infections, the internal rate of return of a national eye care program was substantial when using a limited definition of benefit.

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The impact of vitamin A supplementation on mortality inequalities among children in Nepal

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OBJECTIVE: This paper examines gender, caste and economic differentials in child mortality in the context of a cluster-randomized trial of vitamin A distribution, in order to determine whether or not the intervention narrowed these differentials.

DESIGN: The study involved secondary analysis of data from a placebo-controlled randomized field trial of vitamin A supplements. The study took place between 1989-1991 in rural Sarlahi District of Nepal, with 30,059 children age 6 to 60 months. The main outcome measures were differences in mortality between boys and girls, between highest Hindu castes and others, and between the poorest quintile and the four other quintiles.

RESULTS: Without vitamin A, girls in rural Nepal experience 26.1 deaths per 1000, which is 8.3 deaths more than the comparison population of boys. With vitamin A the mortality disadvantage of girls is nearly completely attenuated, at only 1.41 additional deaths per 1000 relative to boys. Vitamin A supplementation also narrowed mortality differentials among Hindu castes, but did not lower the concentration of mortality across quintiles of asset ownership. The vitamin A-related attenuation in mortality disadvantage from gender and caste is statistically significant.

CONCLUSIONS: We conclude that universal supplementation with vitamin A narrowed differentials in child death across gender and caste in rural Nepal. Assuring high-coverage vitamin A distribution throughout Nepal could help reduce inequalities in child survival in this population.

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Retinopathy of prematurity in South Africans at a tertiary hospital: a prospective study

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BACKGROUND AND OBJECTIVES: World Health Organization's VISION 2020 programme has recognized retinopathy of prematurity (ROP) as an important cause of childhood blindness in industrialized and middle-income countries. While ROP is virtually nonexistent in many African countries, ROP is seen in urban areas where facilities for neonatal care exist. The aim of this study is to establish the frequency of ROP in a cohort of patients screened for ROP and to establish if current screening criteria apply to our patients.

PATIENTS AND METHODS: Infants with birth weight (BW) of 1500 g or less and/or gestational age of 32 weeks or less were screened for ROP over a 2(1/2)-period by a single examiner.

RESULTS: ROP was observed in 84 of 514 (16.3%) of infants included for analysis.

Threshold disease (tROP) was noted in 1.6% of the total cohort although 41/84 babies with ROP were lost prior to regression or progression to tROP. Of the 43/84 adequately followed up, eight (18.6%) developed tROP. An estimated frequency of tROP was more likely to be 2.9%. There was no tROP noted in babies of BW greater than 1250 g. Gestational age was an unreliable risk parameter in our population.

CONCLUSION: The projected occurrence rate of tROP is similar to that found in black population in the Multicentre Cryotherapy for ROP Trial. Our data suggest that the screening criterion based on BW can safely be lowered to 1250 g in our population.

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Submissions to Exchange

Community Eye Health Journal invites readers to exchange views and experiences. In the Exchange section we include letters to the editor and short reports about prevention of blindness activities, achievements and lessons from different countries. Examples of reports considered for publication include outstanding achievements of eye care programmes, interesting insights from eye care work, and summaries of research projects. Reports will normally be between 200 – 300 words, but submissions of up to 500 words will be considered. Please send your contributions to The Editor at the address on page 86, or email Victoria.Francis@Lshstm.ac.uk mentioning Exchange in your title.