Cataract Surgical Coverage in Kurdistan, Iran

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Dear Editor,

This is an appendix of previously published paper: Rapid Assessment of Avoidable Blindness in Kurdistan, Iran.¹

Despite a widely distributed access to cataract surgery in Iran, we face populations in remote and marginal areas who have been left behind and/or are unaware of the need for surgery.²⁻⁵

This report assesses surgical coverage and visual outcome of cataract surgery and the self-reported barriers of surgery among subjects aged 50 years or more in Kurdistan Province of Iran. Of the 3465 eligible persons who were invited to Kurdistan Rapid Assessment of Available Blindness-Diabetic Retinopathy (RAAB-DR) study, 3203 participated (response rate: 92.4%). Among the participants, 1,546 (44.6%) were males and 1,657 (55.4%) were females. The mean age of the participants was 62.7 ± 10.1 (range, 50–99) years. Of these, 12% (384 participants) had cataract surgery. Cataract surgery coverage was 90% in males and 89% in females (P = 0.91). The corresponding coverage for rural versus urban participants were 91% and 89% (P = 0.83). Among the operated patients, 84.2% underwent cataract surgery in public hospitals, 14.5% in private hospitals, 0.8% in charity hospitals, and 0.5% in eye camps. Cataract surgery was performed free or partially free of charge for 77% of participants.

Cataract surgical coverage (CSC) for the presenting visual acuity (PVA) of <3/60 was 95.0% (males 95.7%, females 94.1%), for the PVA of <6/60 was 89.9% (males 91.7%, females 88.0%), and for the PVA of <6/18 was 75.4% (males 75.5%, females 75.3%). The coverage difference between the two genders was not significant.

Information about barriers of surgery was obtained in 40 participants with bilateral visual acuity (VA) < 6/60 (18 males and 23 females) and 111 participants with unilateral VA < 6/60 due to cataract. “Need not felt” was reported remarkably as the commonest barrier in 75% of bilateral and 83.5% unilateral PVA < 6/60 due to cataract. It was followed by cost; 7.5% in bilateral and 8.7% in unilateral PVA < 6/60 due to cataract.

None of the patients complained about “treatment denied by the provider” and “cannot

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access treatment”. “Need not felt” was comparable in both genders ($P = 0.8$) and rural versus urban residence ($P = 0.79$). Women were more likely to report “fear” as a barrier rather than men ($P = 0.05$). Fear and cost were more significantly reported in rural areas than in urban population ($P = 0.05$ and $P = 0.04$, respectively).

Of those who underwent cataract surgery with an intraocular lens (IOL) implantation, 71.5%, 17.3%, and 11.1% had good, borderline, and poor outcomes, respectively. Poor outcomes in females and rural residents were 13.1% and 12.4%, respectively. There was no significant difference between the two genders and the place of residence in terms of rural versus urban areas in this regard. Patient’s selection (75%) was the primary reason for the poor outcome and it resulted from the concurrent eye problems (e.g., glaucoma, optic atrophy). Meanwhile, spectacles unmet need (49.2%) comprised most of the patients who had a borderline outcome. Posterior capsule opacification in 1.4% and aphakia in 1.2% were other reasons of poor outcome.

Our CSC at visual acuities $<3/60$, $<6/60$, and $<6/18$ were 94.9%, 89.9%, and 75.4%, respectively and this rate was remarkably high for all cut-off levels.

In conclusion, the current RAAB survey in Kurdistan demonstrated that CSC at PVA $< 6/60$ was 90% and was higher than similar studies. Of note, we did not observe a significant gender gap with respect to cataract surgery service. Different patterns of CSC barriers were observed which were not similar to low-income countries where cost and unavailable resources are the main barriers.

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**Conflicts of Interest**

None of the authors have any proprietary interests or conflicts of interest related to this submission.

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