

Barriers to free cataract surgery in Yaoundé

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Abstract

Purpose; To identifying barriers to massive turnout for free cataract surgery campaigns in Yaoundé

Methods: We prospectively interviewed 68 patients who radically refused free cataract surgery at the University Teaching hospital (UTH) Yaoundé between January 2008 and December 2010. The questionnaire aimed at addressing: the knowledge of the cataract and its surgical treatment, the awareness of government's subvention for free cataract operation, the reasons for refusal. Patient demographic data were also analyzed.

Results: A total of 68 patients (41 males and 27 females), mean age was 57.20 ± 11 years were enrolled in this study. Forty three patients (63.23%) were civil servants with fixed salaries, 25 (36.77%) were workers in the informal sector. 80% of the participants had a good knowledge of cataract and its surgical treatment. 58,82 % of the patients were aware of the ongoing government subsidized campaign. Refusal reasons included: fear 38 (55.88%), awaiting of foreign NGO campaign 20 (29.42%), religious convictions 6(8.82%) wish for surgery abroad 4 (5.58%)

Conclusion: Fear and awaiting for foreign NGO surgery campaign were the main barriers for free cataract surgery in Yaoundé. Therefore, sporadic free cataract campaigns organized by foreign NGO appear to become a new barrier to cataract surgery.

Keywords: Free cataract surgery, barriers,

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42 **Introduction**

43 Cataract remains the most common treatable cause of blindness. In sub saharan countries the
44 cataract surgical coverage is low and the outcome of cataract surgery is poor because of
45 inadequate human and material resources[1].To increase the cataract surgery rate (CSR) in
46 Cameroon, the government took some measures such as the subvention of surgical fees in
47 some hospitals; modernisation of equipment in the ophthalmology unit of the Yaoundé
48 Central Hospital; as well as the opening of a specialisation cycle for ophthalmology in the
49 Faculty of Medicine and Biomedical Sciences of the Yaoundé I University. Despite the fact
50 that surgery was free, some patients still declined the offer. The aim of this study was to
51 identify barriers to free cataract surgery in an urban setting and to propose practical solutions
52 to this.

53 **Patients and methods**

54 This was a hospital-based prospective study which spanned January 2008 to December 2010
55 in the ophthalmology unit of the University Teaching hospital in Yaoundé and included all
56 patients who presented with operable cataracts and turned down the offer for free surgery.
57 Written informed consent was obtained from all patients. A simple questionnaire (Table 1),
58 was administered. Brevity was the principal objective, since peoples would not will to
59 complete a long questionnaire about something that they don't accept. Moreover, socio-
60 demographic data (age, sex, profession, educational level) and clinical data (ophthalmic
61 history, visual acuity) were also analyzed.

62 Data were analyzed using Epi-Info 3.5.1. Qualitative variables were presented as percentages
63 (%) while quantitative ones as mean $\pm$ standard deviation.

64 **Results**

65 Of 756 patients to who free cataract surgery was proposed 68 turned down the offer, giving a
66 refusal rate of 8.99 % and were enrolled in this study. Patient characteristics are presented in
67 Table 2. Our sample consisted of 41 males (60.3%) and 27 females (39.7%). Mean age was
68 57.20 ± 11.44 and ranged from 12 to 68 years. Forty three patients (63.23%) were civil
69 servants with fixed salaries, 25 (36.77%) were workers in the informal sector. The mean
70 visual acuity in the eye to be operated was Log MAR 1.15±0.21. Three patients (4.41%) had
71 complications from previous cataract surgery in the other eye. One was a case of aphakic
72 retinal detachment and the two others were pseudophakic bullous keratopathy secondary to
73 anterior chamber lens implantation. Fifty five patients (80%) had the right knowledge about
74 cataract. The idea of cataract surgery subvention by the state was known by 40 patients
75 (58.82%). The main reasons of refusal of free cataract surgery included: fear 38 (55.88%),
76 awaiting of foreign nongovernmental organizations (NGOs) campagne 20 (29.42%), religious
77 convictions 6(8.82%) wish for surgery abroad 4 (5.58%)

78 **Discussion**

79 The cataract surgery rate (CSR) is defined as total number of cataract surgeries performed /
80 Total population × 1,000,000. [2]. Knowledge on the barriers of cataract surgery is important
81 in any particular setting, as it can be used to devise strategies to increase the CSR. The lack of
82 financial resources, difficult access to eye care service[3] and ignorance [4] are known to be
83 main barriers to cataract surgery in developing word. Government action has led to the
84 removal of such barriers. This study included an urban population, most of them salary-
85 workers, with easy access to eye health care but who refused free surgery, despite low visual
86 acuities. In Nepal, Snellingen et al [5] reported an acceptance rate to free surgery of less than
87 60%. In the current study as well as in the series of Ojabo CO et al in Nigeria [6] the majority
88 of the patients have an adequate knowledge on cataract and were also aware that surgery was
89 the answer to their visual dysfunction. This can be explain in our milieu by the numerous
90 mediatised explanation campaigns organised in some institutions to explain the subvention
91 strategy of the ministry of public health and the arrival of foreign NGO and also the easy
92 access to the internet. In Malawi, Schulze et al [7] reported that patients who generally
93 refused surgery did not have adequate knowledge about cataract. This difference can be
94 explained by the residence of the study population. More males refused free cataract surgery
95 in the curent series, a similar finding reported by Chang et al [8]. On the contrary, Athanasiov

et al [9] reported a higher acceptance rate for surgery in men. Courtright P al [10] found in their study that men with lower socioeconomic status were more likely to accept surgery than men with higher socioeconomic status.

Fear is the most frequent reason for refusal of free cataract surgery in Yaoundé. This reason has been reported in several studies [11]. The origin of fear is multi factorial: the fear of losing the second eye after the loss of vision in the previously operated eye; the fear of blindness following surgery as may have been experienced by a family member or friend. This can be explained by the fact that the techniques of cataract surgery used had not been improved. Intra capsular cataract extraction (ICCE) without implantation or with anterior chamber lens implantation is still the method of choice of most ophthalmologists in Yaoundé. The many complications linked to this technique as seen in three patients in our series have contributed to creating the phobia of cataract surgery in the population. The negative testimony given by past operated patients constitute a great barrier to the acceptance of cataract surgery in our setting. The desire to be operated during eye camps organised by foreign NGOs is the second most frequent reason for refusal of cataract free surgery. The ministry of public health has signed conventions with some foreign NGOs who organise free cataract surgery camps sporadically in Yaoundé and other towns within the country. Their presence is always highly mediatised and thus has a positive effect in that people are more aware of cataract, its surgical treatment and the expected results. However, these sporadic eye camps pose serious problems: 1) problem of post operative follow up. With most of the camps lasting a week, only immediate post operative follow up is possible. The average and long term post operative complications are not managed. If these complications lead to poor visual outcome, then the euphoria of the first days quickly give rise to phobia of surgery; and these eye camps become a barrier to cataract surgery. 2) These NGOs programme progressively become the reason for increasing cataract backlog. A few of the study population wish to be operated abroad. In most cases, these are high civil servants who know about the outcome of the modern cataract and who can obtain the sponsorship from the state.

To increase the CSR in Yaoundé, local ophthalmologists should conquer the confidence of the population by increasing their surgical success rates According to Yin Q et al [12], the lack of knowledge about the quality of local services appear to be one of the principal barriers to cataract surgery in rural China. This is only possible through the vulgarisation of newer techniques such as small incision cataract surgery (SICS), an alternative surgical technique which has been shown to yield similar surgical outcomes as phaco emulsification. The

adoption of SICS, a cost-effective cataract surgery technique had permitted an exponential increase of CSR in India [13]. This requires political will power with the creation of training and/or reconversion centres. Sensitisation through the media is essential. Programmes should be designed to receive direct testimonies from operated patients and their family members. According to Sapkota et al [14] in Nepal, good local results lead to a decrease in the demand for surgery abroad.

Conclusion

In sub Saharan Africa, cataract is a known public health problem. The reduction of the burden of cataract blindness requires effective and sustainable actions. It is therefore important for health policy makers and medical authorities to improve the skills of local ophthalmologists and the quality of ophthalmic services in order to provide cataract patients with the best, most accessible and least expensive services possible. More interesting would be the redrawn of plan of action foreign NGO by putting more emphasis on training with transfer of technology instead of mass surgery on patients.

CONSENT

Written informed consent was obtained from all participants.

ETHICAL APPROVAL

The study was approved by the national ethics committee

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Table 1 : Questionnaire

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Q01	In your opinion, what is cataract	
Q01a	A disease of eye causing progressive blindness 1=Yes 2= No	☐
Q01b	A disease of eye causing severe pain 1=Yes 2= No	☐
Q02	In your opinion what is the best treatment of cataract 1= Eye drop; 2= Spectacles; 3= Surgery	☐
Q03	Are you aware of government's subvention for free cataract operation in our hospital? 1=Yes 2= No	☐

Q04	Can you please tell us your reasons for refusing the surgery
	1. _____
	2. _____
	3. _____

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Table 2 : Demographic and interview data of all study participants

Characteristic

Number of patients included (%) **68 (100)**

Age in years (SD) 57.20 (11.44)

Gender

- Male (%) 41 (60.3%)

-female(%) 27 (39.7%)

Occupation

- Civil servants with fixed salary (%) 43 (63.23)

- Workers in informal sectors (%) 25 (36.77)

Right knowledge about cataract and it's surgical treatment (%) 55 (80)

Right knowledge about the government subvention (%) 40 (58.82).

Reasons of refusal of free cataract surgery

- Fear (%) 38(55.88)

- Awaiting of foreign NGO champagne (%) 20(29.42)

- Religious convictions (%) 6(8.82)

-Wish for surgery abroad (%) 4(5.58)

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