



Research Article

# Factors Determining Late Presentation Among Patients with Blinding Total Senile Cataract

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## Abstract

**Introduction:** Senile cataract is a frequent cause of blindness in our regions due to lack of or delayed access to care.

**Objective:** The objective of our study was to identify factors associated with delayed consultation among patients presenting with blinding total senile cataract at the Adzopé Regional Hospital Center.

**Materials and Methods:** This was a prospective, longitudinal, descriptive study conducted over a 6-month period in the Ophthalmology Department of the Adzopé Regional Hospital Center, involving patients diagnosed with total senile cataract in at least one eye.

**Results:** Fifty patients met the inclusion criteria. Female patients predominated, with a male-to-female ratio of 0.78. The majority (64%) were aged between 60 and 70 years. Thirty percent of patients resided more than 40 km from the hospital center. Disease duration was 3 to 4 years in the majority of cases (56%). Cultural factors and lack of awareness about the disease accounted for delayed consultation in 42% and 30% of cases, respectively.

**Conclusion:** Several barriers to early management of senile cataract exist in our regions, highlighting the urgent need for public education and awareness campaigns regarding eye diseases and their treatment.

**Keywords:** Factors; Late Consultation; Senile Cataract; Côte d'Ivoire

## Introduction

Cataract is the opacification of the lens, leading to a progressive decline in visual performance. Globally, it is the leading cause of avoidable blindness and remains a significant public health issue [1]. In developing countries, cataract accounts for 50% of all cases of avoidable blindness [2]. In sub-Saharan Africa, it represents 35% of blindness cases among adults over 50 years of age [3]. Senile cataract refers to cataract occurring in individuals aged 65 years or older. In France, senile cataract affects more than 20% of the population after age 65 and over 60% after age 85 [4]. According to Afetane, et al., Cameroon reported a cataract prevalence of 5.14% in the general population, with a mean patient age of 70 years [5]. In Côte d'Ivoire, hospital-based prevalence was estimated at 16.63% in Bouaké [6].

Cataract treatment is exclusively surgical. Surgical techniques have evolved considerably over the decades, progressing from intracapsular extraction to modern phacoemulsification. Despite these significant advances, the rate of cataract surgery remains low across African regions. For instance, in developing countries, only about 200 cataract surgeries are performed per million inhabitants annually, compared to 5,000 in developed countries [7]. Furthermore, lack of awareness and widespread misconceptions about cataract often lead patients to seek ophthalmological care only at an advanced stage of the disease.

Numerous studies conducted in Africa have shown that cataract surgery is frequently delayed for various reasons, including financial constraints, fear of surgery, geographic inaccessibility and a shortage of ophthalmic surgeons [8,9]. In Cameroon, Nomo's study revealed that only 26.8% of patients with operable cataract had undergone surgery [10]. Thus, ensuring universal access to cataract surgery remains a major challenge. Beyond structural barriers to care, cultural influences and insufficient health education also contribute to delayed management in our regions.

Similar to other areas in Côte d'Ivoire, the majority of visual impairment cases seen at the Adzopé Regional Hospital Center are attributable to cataract.

The aim of our study was to identify factors contributing to delayed consultation among patients with blinding total senile cataract at the Adzopé Regional Hospital Center and to gather their suggestions for addressing this issue.

### **Material and Methods**

This was a prospective, cross-sectional, descriptive study conducted in the Ophthalmology Department of the Adzopé Regional Hospital Center from August 26, 2024, to December 26, 2024—a period of four months. The study population consisted of patients diagnosed with blinding total senile cataract who presented to the Ophthalmology Department during the study period.

*Inclusion Criteria:* Patients with blinding total senile cataract in at least one eye, seen in consultation at the Ophthalmology Department of the Adzopé Regional Hospital Center during the study period.

*Exclusion Criteria:* Patients with non-total or non-blinding senile cataract in both eyes, as well as those with blinding total senile cataract who declined to participate in the study.

Sampling was non-probabilistic. Data were collected using an anonymous interview guide administered to patients. All participants were informed about the study's purpose and verbal consent was obtained prior to each interview. Interviews took place in a private room within the Ophthalmology Department on scheduled consultation days. Before each interview, the study objective was clearly explained in a confidential setting to reassure participants. They were also informed that participation was entirely voluntary and that refusal would entail no negative consequences whatsoever. Thus, based on free and informed consent, each patient voluntarily and without coercion answered the study questions. Interviews were conducted immediately following the patient's ophthalmological consultation.

Parameters studied included:

- Sociodemographic data (age, gender, occupation)
- Distance traveled by the patient to access care
- Duration of symptom progression
- Patient's initial response upon symptom onset
- Factors contributing to delayed consultation
- Patient suggestions to promote earlier consultation

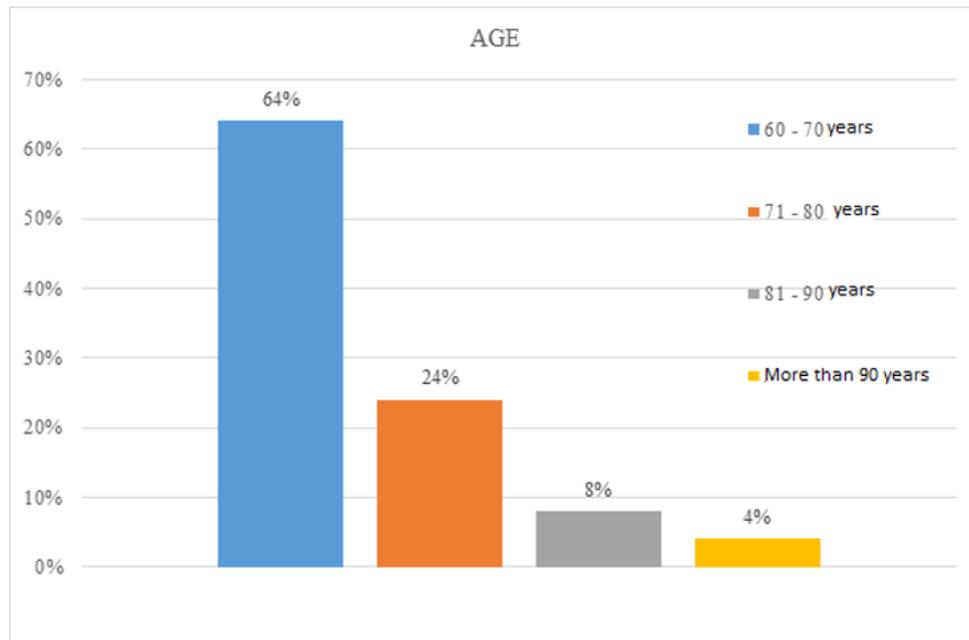
Data were processed and analyzed using Microsoft Word and Microsoft Excel software.

### *Sample Size*

50 patients

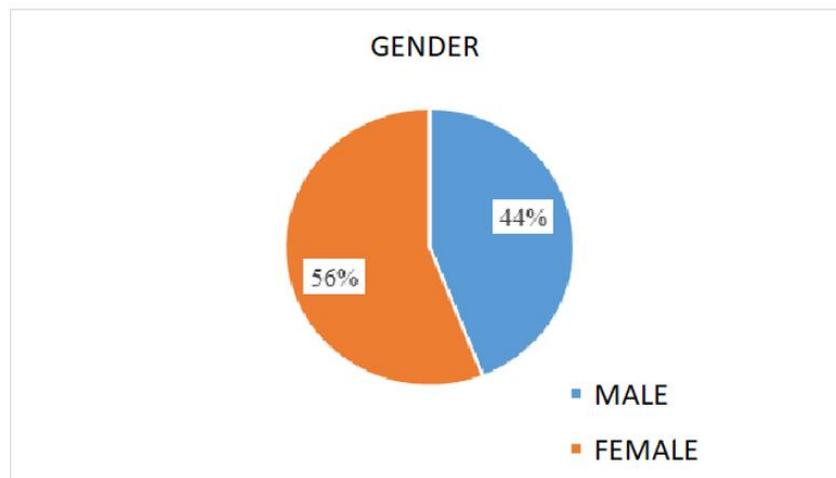
### **Ethical and Regulatory Considerations**

Authorization was obtained from the Ministry of Health, Public Hygiene and Universal Health Coverage through the Directorate of Public Health Establishments and Health Professions (DEPPS), under reference number 01985 METFPA/CAB/DGAF/DAIP. Additionally, formal approval to conduct the study was granted by the Director of the Adzopé Regional Hospital Center (Fig. 1).



**Figure 1:** Distribution of patients according to age.

Patients aged between 60 and 70 years were the most represented group, accounting for 64%. The mean age was 96.5 years (Fig. 2).



**Figure 2:** Distribution of patients according to sex.

A female predominance was observed, with a sex ratio of 0.78 (Table 1).

Occupation	Number	Frequency (%)
Farmers	14	28
Housewives	20	40
Traders	02	04
Civil servants	02	04
Self-employed workers	05	10
Reterees	07	14
<b>Total</b>	<b>50</b>	<b>100</b>

**Table 1:** Distribution of patients according to their occupation.

Housewives were the most represented group, accounting for 40% of the study population (Table 2).

Distance Traveled	Number	Frequency (%)
≤ 20 Km	22	44
[20-40 Km]	13	26
[40-60 Km]	09	18
More than 60 Km	06	12
<b>Total</b>	<b>50</b>	<b>100</b>

**Table 2:** Distribution of patients according to the distance traveled to receive care.

It emerges that 30% of patients had to travel more than 40 km to access eye care (Table 3).

Duration of Symptom Progression	Number	Frequency (%)
< 1 year	02	4
[1 - 2 years]	08	16
[3 - 4 years]	28	56
5 years and more	12	14
<b>Total</b>	<b>50</b>	<b>100</b>

**Table 3:** Distribution of patients according to the duration of symptom progression.

The majority of patients (56%) had symptoms that had been evolving for a duration of 3 to 4 years (Table 4).

Initial Reaction at Symptom Onset	Number	Frequency (%)
Traditional therapy	30	60
Advice from relatives/friends	05	10
Prayer group	03	06
None	12	24
<b>Total</b>	<b>50</b>	<b>100</b>

**Table 4:** Distribution of patients according to their initial reaction at the onset of symptoms.

The majority of patients had systematically resorted to traditional medicine as soon as their symptoms first appeared (Table 5).

Main Factor Determining Delay in Consultation	Number	Frequency (%)
Cultural factors	21	42
Lack of information	15	30
Waiting for the result of traditional therapy	05	10
Lack of financial means	04	8
Long distance from the health center	02	4
Other reasons not clearly defined	03	6
<b>Total</b>	<b>50</b>	<b>100</b>

**Table 5:** Distribution of patients according to the main factor determining delay in consultation.

Cultural factors and lack of information were the main determinants of delayed consultation, accounting for 42% and 30% of cases, respectively (Table 6).

Patients' Suggestions to Encourage Early Consultations	Number	Frequency (%)
Reduction of costs	26	52
Bringing health centers closer to communities	16	32
Free surgical care	20	40
Awareness campaigns in local languages	35	70
Ban on channels spreading false information	03	6
Improvement of reception in health centers	10	20

**Table 6:** Distribution of patients according to their suggestions to promote earlier consultations.

The reduction of healthcare costs and the organization of awareness sessions in local languages were the most frequently suggested measures by patients to promote early consultations.

### Discussion

In our study, patients aged 60 to 70 years constituted the majority (64% of the sample), with a mean age of 69.5 years. This finding is consistent with the definition of senile cataract, which typically occurs after the age of 65. Our results align closely with those reported by Sovogui and Djiguimbé, who found mean ages of 65.53 years and 62.47 years, respectively [11,12]. Similarly, in Côte d'Ivoire, Diomandé, et al., observed that individuals aged 60-65 years represented the largest group affected by cataract [13]. Collectively, these findings confirm that advanced age remains the primary etiological factor for cataract development.

A female predominance was observed in our cohort, with a male-to-female ratio of 0.78. This trend is consistent with studies conducted by Ebana, in Cameroon and Amedome in Togo, which reported sex ratios of 0.77 and 0.4, respectively [14,15]. Conversely, other studies-such as that of Okundo in Nigeria-found a male predominance [16]. To date, no study has demonstrated a direct biological correlation between sex and cataract incidence, suggesting that observed differences likely stem from sociocultural or economic factors rather than pathophysiological ones. In our context, the higher representation of women among late presenters may be attributed to their limited financial autonomy, as most are homemakers without independent income, making it difficult to afford consultation fees and related expenses.

Our study revealed that 30% of patients traveled more than 40 km to access ophthalmological care. This considerable distance likely contributes to delayed consultation, particularly given that most senile cataract patients are elderly and often suffer from comorbidities and reduced mobility. In Cameroon, Afetane noted that 61.37% of patients with unoperated cataract in his series resided outside Yaoundé and distance was cited as a barrier to care for many [5]. Similarly, in Ethiopia, patients attributed delays in cataract management to the remoteness of healthcare facilities [17].

The majority of our patients (56%) reported a symptom duration of 3 to 4 years before seeking care. This finding is comparable to Okundo's study in Nigeria, where 49.1% of patients had experienced symptoms for approximately 3 years prior to consultation [16]. Likewise, in India, Priyadharshini, et al., found that 35.4% of patients endured visual symptoms for up to 5 years before their first eye was treated [18]. These data, including our own, clearly indicate that patients have ample time to notice the progressive decline in their vision yet still delay seeking professional care=demonstrating that the delay cannot be attributed to a lack of time or sudden onset of symptoms.

Notably, 60% of patients in our study initially turned to traditional medicine upon symptom onset. This tendency reflects a broader cultural context in which visual impairment is often attributed to non-medical causes. For instance, Diabaté reported that 22.22% of blind patients in his study attributed their condition to mystical or supernatural forces [19]. Generally, in our setting, individuals are more likely to consult traditional healers before considering hospital-based care.

Cultural beliefs emerged as the most frequently cited reason for delayed consultation, followed by a lack of information about the disease. It is widely recognized that cultural factors significantly influence healthcare-seeking behavior. Culture, alongside other social determinants, shapes how individuals perceive health, illness and appropriate treatment pathways. As Kodjo,

observed, some communities lack familiarity with germ theory and instead strongly believe in fatalism, witchcraft or demonic influence as explanations for disease [20]. Under such belief systems, accepting a medical diagnosis becomes challenging. In certain traditions, disability is even viewed as a shameful condition or as divine punishment for violating social or spiritual taboos. Fainzang documented that, in some cultures, visual impairment is interpreted as a sanction for transgressing ancestral or communal norms [21]. Others believe blindness results from ancestral retribution for serious familial wrongdoing [22]. Such deeply rooted beliefs inevitably delay timely access to ophthalmic care.

Additionally, insufficient public knowledge about eye health and widespread misinformation or rumors regarding cataract surgery in hospitals further contribute to late presentation. In rural China, Yin, identified lack of awareness as the primary barrier to cataract treatment [23].

When asked for suggestions to encourage earlier consultation, patients overwhelmingly emphasized two key measures: reducing or eliminating the cost of eye care and bringing ophthalmic services closer to local communities. These recommendations highlight the critical need for both financial accessibility and improved geographic availability of eye care services to address the persistent problem of late presentation in cataract management.

### **Conclusion**

Several barriers hinder the early management of blinding senile cataract in our region. This situation underscores the critical role healthcare providers must play in raising awareness to eliminate obstacles that contribute to delayed consultation among individuals suffering from blinding total senile cataract in the Adzopé area. There is a clear need to address the cost of ophthalmological care, promote free cataract surgery campaigns and strengthen community education about eye diseases and their treatment-while taking into account local cultural beliefs and practices.

### **Conflict of Interest**

The author declares no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

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### **Author's Contributions**

All authors have contributed equally to this work and have reviewed and approved the final manuscript for publication.

### **Consent For Publication**

Not applicable.

### **Ethical Statement**

The study abided by the tenets of declaration of Helsinki for studies involving human subjects, human material and data.

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