

## Factors Affecting Compliance to Glaucoma Medications in a Tertiary Hospital in Nigeria

Akinsola Aina,<sup>1</sup> Olusola Olawoye<sup>2</sup> and Tunji Oluleye<sup>2</sup>

Ophthalmology Unit, Department of Surgery, Bowen University Teaching Hospital, Ogbomoso, Oyo-State.

<sup>2</sup>Department of Ophthalmology, University College Hospital, Ibadan, Oyo-State.

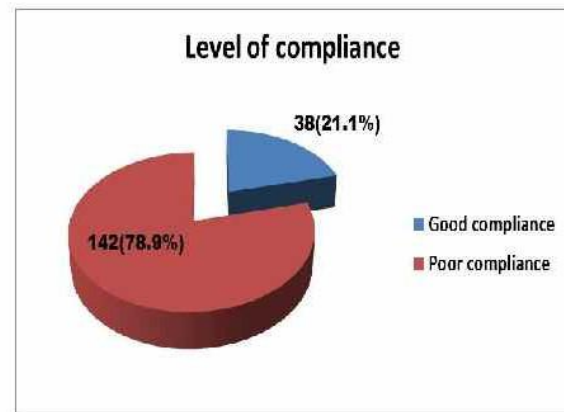
**Corresponding author:** Akinsola Aina,

Email: solarhema2013@yahoo.com

**Introduction:** Glaucoma is a chronic, progressive optic neuropathy with a characteristic optic disc change (structural) and corresponding visual field defects of which raised intraocular pressure is the most consistent and only modifiable risk factor<sup>1-5</sup>. Compliance with medical therapy is important for lowering intraocular pressure, prevention of disease progression and proper disease management<sup>5-7</sup>. Non-compliance with glaucoma medications has been estimated to range from 5 to 80%<sup>2, 8, 9</sup>. This study aims to assess the level and determinants of compliance with medical therapy in glaucoma patients attending Bowen University Teaching Hospital (BUTH) Ogbomoso Oyo State.

**Methods:** This study was a descriptive hospital-based cross-sectional study which was conducted at the eye clinic of BUTH Ogbomoso. One hundred and eighty primary open angle glaucoma patients aged 40 years and above were recruited into this study. Semi-structured questionnaire was used to obtain socio-demographic data, self-reported level of compliance and factors affecting compliance. Compliance level was determined by the patient's own estimate on a scale of 1 to 10 (maximum point is 10). Participants with a score of  $\geq 7.5$  were referred to as having good compliance while a score below 7.5 was poor compliance<sup>10</sup>.

**Results:** The mean age of the patients was  $67.9 \pm 10.5$  years. The median age was 69years (range 40 to 85years). About 37% of the patients were between the ages of 60 – 69 years. They comprised of 98 (54.4%) males and 82 (45.6%) females with male to female ratio of 1.2: 1.



**Fig. 1:** Level of compliance with anti-glaucoma medications

About one-fifth of the patients 38 (21.1%) reported good compliance with their anti-glaucoma medications as shown in Figure 1.

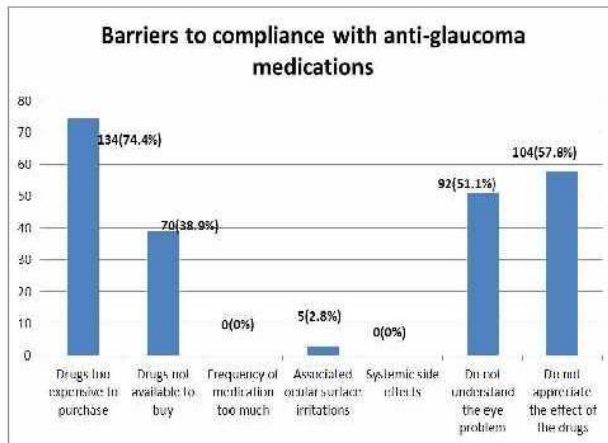
On multivariate logistic regression, older patients had greater odds of not been compliant with anti-glaucoma medications compared with younger patients. Likewise, patients that had been on glaucoma treatment for greater than one year had greater odds of not complying with their anti-glaucoma medications.

### Barriers to compliance with anti-glaucoma medications

The most common barrier to compliance noted by the patients was 'Drugs too expensive to purchase' occurring in 134 (74.4%) patients. This was followed by 'Do not appreciate the effect of the drugs' occurring in 104 (57.8%) of patients as shown in figure 2.

**Discussion:** Compliance to anti-glaucoma medications was low (21.1%) in this study compared to other studies done in Nigeria which reported 66%<sup>11</sup> and 72%<sup>12</sup> compliance level. The low level of compliance in this study compared to earlier studies may be due to the present economic recession in Nigeria affecting patient's compliance to medications negatively. This study found out that there was low level of compliance among POAG patients attending BUTH Ogbomoso Oyo-state. Factors associated with poor level of compliance were increasing age, longer duration of anti-glaucoma use and expensive drugs. Since





\* Multiple responses allowed.

**Fig. 2:** Barriers to compliance with anti-glaucoma medications

glaucoma is a chronic and lifelong disease, there is the need to establish support groups for glaucoma patients.

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