RESEARCH ARTICLE

Towards The Reduction of The National Impact of Blindness Due to Glaucoma- A National Glaucoma Summit

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Abstract

Glaucoma is a serious condition that involves elevation in pressure inside the eye caused by build-up of excess fluid. Though there are several varieties of the disease that do not show elevation of pressure inside the eyes, generally, glaucoma in whatever form, if left untreated would lead to impairment in vision by causing irreversible damage to the optic nerve and eventually blindness. Between 2005 and 2007 the National Programme for the Prevention of Blindness (NPPB), now known as National Eye Care Programme, in collaboration with states, local government and FCT embarked on National Blindness and low vision survey. The survey revealed that glaucoma, an unavoidable cause of blindness constitutes 16% of all blindness in the country. There are global initiatives that work to eradicate blindness in National communities in the developed and developing world. The major one being the Vision 2020 - the right to sight. Nigeria endorsed the initiative. This initiative is complacent on glaucoma as it is unavoidable, incurable and not within the targeted disease conditions of vision 2020. Elimination of blindness due to glaucoma in our communities, therefore calls for a National action. This paper is an advocacy for a National Summit on Glaucoma that would produce a National Glaucoma Eradication document; implementation of which would lead to reduction and elimination of the National impact of blindness due to glaucoma.

1 | INTRODUCTION

Glaucoma is a serious condition that involves elevation in pressure inside the eye caused by build-up of excess fluid. Though there are several varieties of the disease that do not involve elevation of pressure inside the eyes, generally, glaucoma in whatever form, if left untreated would lead to impairment in vision by causing damage to the optic nerve and eventually blindness. The danger in glaucoma is that it starts and progresses without obvious symptoms. Although there is treatment for glaucoma, there is no cure, this is because any damage done to the optic nerve from glaucoma cannot be reversed.

The prevalence of glaucoma is approximately 6.5 million worldwide with about 7.5 million blind from the disease. It is expected that the prevalence of the
disease would reach 79.5 million in 2020 (1). Glaucoma is the highest cause of unavoidable blindness in Nigeria. Figures on the prevalence of glaucoma in Nigeria are currently not available, however survey results show that it constitute 16% (2) of all causes of blindness. It is the leading cause of blindness and highest cause of irreversible visual impairment and low vision in Nigeria (3).

The major causes of blindness in Nigeria as revealed from the National Survey of Blindness and low vision are cataract, glaucoma, corneal opacity, optic atrophy, refractive error, macular degeneration and others (2) (trachoma and onchocerchiasis (River blindness). Before the results of the survey (which was conducted between 2005-2007) district surveys carried out between 1990-96 showed that the causes of blindness in the country are cataract (45%) Glaucoma (16%) Trachoma (11.9%) Childhood blindness (4.6%) and Onchocerchiasis (5.1%). The District survey also revealed that the causes of blindness vary across different geopolitical zones in the country. North East and North West have cataract, trachoma and glaucoma whereas North central, South East, South West and South South have cataract, trachoma, glaucoma and onchocerchiasis as causes of blindness (4). Except Glaucoma, the causes of blindness listed above are avoidable and curable. We can see that glaucoma blindness cut across all the geopolitical/ health zones in Nigeria

2 | CURRENT STATE OF DETECTION AND TREATMENT FOR GLAUCOMA IN NIGERIA

The Characteristics, current state of detection and treatment of the disease is as follows:-

a. The disease is caused by elevation of eye pressure also known as intraocular pressure (I.O.P.) beyond tolerable limits. It affects all age groups but mostly people 40 years and above.

b. It involves a damage to the optic nerve (the nerve that connects the eyes to the brain). This damage is irreversible. Optic nerve damage can occur at any level of eye pressure even within the normal range.

c. Detection of the disease involve measurement of I.O.P, assessment of the state of the optic nerve head and measurement of the visual field. These tests are tedious compared with other routine eye tests. The complete detection regimen is always, almost not achievable in most eye centers.

d. Treatment involves lifetime use of drugs, surgery and laser treatment.

e. Cure is not possible as damage done cannot be reversed. Treatment, therefore, is directed at preventing further damage.

f. Loss of vision in Glaucoma would happen even after treatment with medicines or by surgery.

g. The goal of treatment is to reduce visual loss to a rate that is compatible with the patients sighted lifetime.

h. Glaucoma is a leading cause of unavoidable causes of Blindness.

i. It is a serious public health issue in Nigeria and worldwide.

k. The key weapon to fight glaucoma is early detection and treatment to reduce blinding years.

There is an urgent need for National Action Against Glaucoma to reduce blindness in our communities and to avoid the social and economic consequences of sight loss.

3 | CURRENT ACTIONS TO PREVENT BLINDNESS IN NIGERIA

There are global initiatives that work to eradicate blindness in National communities in the developed and developing world. The major one being the Vision 2020 - the right to sight. This is a global initiative to eliminate avoidable causes of Blindness
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worldwide by the year 2020. Recognizing that Blind-
ness is a major cause of unnecessary human suffering
often leading to social exclusion and early death, Nigeria
in the committee of Nations at the World
Health Assembly Supported the resolution WHA
56.26 acknowledging the links between poverty and
blindness and that blindness places a heavy eco-







teconomic burden on families and countries. Nigeria, in
2001, signed the declaration of support for vision
2020- the right to sight initiative in order to eliminate
avoidable blindness which constitutes about 80% of
causes of Blindness in Nigeria.

In 2007 the Nigerian National Programme for the
prevention of Blindness(NPPB), Federal Ministry of
Health, released the vision 2020- the right to sight
strategic plan for Nigeria 2007-2011.

This plan which is in harmony with the global vi-
sion 2020 plan emphasizes 3 essential components
namely: Disease control, Infrastructure and Human
resources development. These 3 components are
known as the pillars of vision 2020. The disease con-
trol component identified the following eye diseases:
cataract, trachoma, childhood blindness, onchocer-
chiasis refractive error and low vision. The inclusion
of glaucoma in this component was late in coming.
This may be attributed to following reasons:

1. Blindness from Glaucoma disease is unavoidable
   - Vision 2020 targets avoidable causes of blindness.
2. It is an incurable eye disease.
3. Detection and treatment methods are tedious,
   expensive and inconclusive. It could be for the
   same reasons that International and local non-
governmental organizations, Governments, WHO
   communities and other partners have policies and
   programmes that target avoidable causes of Blind-
   ness outlined in the disease control component but
   not glaucoma. For example, the African programme
   for onchocerchiasis control (APOC) was undertaken
to control onchocerchiasis (night blindness). The
   trachoma task force was set up in 2001 for control
   of trachoma. Similarly, a number of NGO’s e.g.
   Sight savers International(SSI) Christofell Blinden-
   mission (cbm), government Health ministries are
   engaged in many programmes that led to the setting
   up of cataract camps for the control of cataract. It
   is worthy to note that the targeted eye diseases are
   avoidable, treatable and curable.

The pattern of global blindness is changing due to
the success of vision, 2020. Over the past 20 years
the causes of blindness have changed in proportion
and actual number. The number of people blinded
by trachoma, onchocerchiasis, cataract and vitamin
A deficiency have tended to reduce. This is due to
improvements in nutrition, water supplies, sani-
tation and measles immunization coverage as well
as the provision of certain therapeutic medicines:
Invermectin (Mectizan), vitamin A and antibiotics.
While there is need not to be complacent about the
prevention of avoidable causes of blindness, there is
strong evidence that glaucoma has shown up as a ma-
jor offender in irreversible blindness for which gov-
ernment and partners in blindness prevention must
show a commitment. There is now an urgent need
for government and blindness prevention partners to
express commitment and initiate concrete plans that
would be sensitive to the glaucoma population.

4 | A CALL TO ACTION: ESTABLISHMENT
OF NATIONAL PROGRAMME FOR
GLAUCOMA CONTROL

There is a growing body of evidence about the ef-
effectiveness of glaucoma treatment. Unarguably,
the goal of glaucoma treatment at the moment is the
preservation of sight in the long term. Thus the key
to tackling glaucoma is early detection and inter-
vention. There need to be a search for the n^{th}
(last) glaucoma patient in our communities. Unfortunately,
as I put pen on paper, no simple specific and sensitive
test exists for this condition. Yet, we must search
for the unsuspecting glaucoma patient in our rural
and urban communities. Glaucoma is worse than
HIV AIDS!. It is painless, blindness is silent, dam-
age is irreversible, no known mode of transmission
and it has no cure. The United Kingdom Glaucoma
society lobbied the British Parliament and there is
now funding from the medical research council to
develop the necessary tools for a National glaucoma
screening program. The European glaucoma society
is now planning to lobby the European parliament to
raise the profile of glaucoma\textsuperscript{5}. There is need for the
establishment of National Programme for Glaucoma Control in Nigeria.

5 | THE NATIONAL GLAUCOMA SUMMIT.

This paper is a call for a National glaucoma summit for Nigeria.

An effective service for the prevention of glaucoma blindness requires a developed infrastructure including fully integrated primary, secondary and tertiary eye care services. The various disciplines in eye care service need to develop tools that would lead to development of guidelines for a National programme for glaucoma to function. This requires a National glaucoma summit. Such a summit or workshop would lead to the development of National Action Against Glaucoma (NAAG) document. The NAAG document among others would speak to the problem of identification/detection, treatment and follow-up of the disease in our rural and urban communities. The NAAG document would consists of themes or action points that would:

a. outline the tools and guidelines for detection protocol which would have a high level of sensitivity and impact on the glaucoma population.

b. prescribe a cost effective treatment regimen that meets minimum standard of care for glaucoma.

c. Identify and bridge structures, organization and functions that could key into glaucoma service delivery system.

d. Link and harmonize programmes and/or initiatives related or unrelated to blindness prevention and general health care for the benefit of glaucoma prevention.

d. Develop a simple scale for measurement of outcome of glaucoma services.

NAAG summit and document would be owned by the Federal Ministry of Health. The document would provide the road map for a National Glaucoma programme and serve as a tool for advocacy for fight against glaucoma. The execution of the guidelines of the document could be facilitated by a bipartite or tripartite collaboration between government, NGOs, organized private sector and well meaning individuals. It is expected that National glaucoma programme would utilize existing infrastructure and human resources. It would involve the development of human resources through training, acquisition and/or upgrading of glaucoma diagnostic equipment.

6 | CONCLUSION

Between 2005 and 2007 the National Programme for the prevention of Blindness (NPPB) in collaboration with states, local government and FCT embarked on National Blindness and low vision survey. The aim of the survey was to follow-up with the health sector reform which emphasized research and evidence based decision, assessment for optimal planning of health care for Nigerians. The purpose of the survey was to obtain data on the prevalence and causes of visual impairment and blindness across the country and to use the information to estimate the number of Adults who are blind by cause.

The survey revealed that glaucoma, an unavoidable cause of blindness constitutes 16% of all blindness in the country. Unfortunately, glaucoma does not have symptoms. It is painless. Onset of the disease is gradual. It is a silent blinding disease. Damage done cannot be reversed. It has no cure! Early detection and treatment would prolong the sight years of the sufferer. This is the goal of treatment for the condition currently.

The socio-economic implication of blindness is huge. Blindness is both a cause and consequence of poverty. Blindness leads to social exclusion, human indignity poor quality of life, poverty and early death. It is the professional, financial and social responsibilities of eye care professionals, governments, non governmental organizations, organized private sector and well meaning individuals to rid society of blindness.

Existing blindness prevention programmes are not sensitive to the problems of glaucoma particularly its detection in our larger communities. The unsuspecting glaucoma patient is waiting for the unseen hands of fate to detect it at an early stage. There is need for a National Action Against Glaucoma that would address among others, the detection of glaucoma in...
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our communities. NAAG entails a National glau-
coma summit of all disciplines and stakeholder in
eye care. With government ownership it would pro-
duce a National Action against glaucoma document.
The NAAG document would be a reference point
of Advocacy and execution of National glaucoma
programme. The time to take action is now. If not
now, then when? If not by you, then who?
Support the National Action Against glaucoma!

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