SCOPE OF KNOWLEDGE AND INVOLVEMENT OF EYE CARE WORKERS IN 'VISION 2020: THE RIGHT TO SIGHT' IN ILORIN, KWARA STATE, NIGERIA

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SUMMARY

Objective: To assess the level of awareness and the involvement of eye care providers in the global initiative for the elimination of avoidable blindness known as 'Vision 2020' in Ilorin, Kwara State, Nigeria.

Method: A structured questionnaire was administered to 41 eye care providers who practice in public and private eye clinics in Ilorin, Kwara State. The questionnaire sought to know the professional cadre of the respondents, their awareness of the 'Vision 2020: The Right to Sight' programme, their knowledge of the five target eye diseases in the programme, the respondents' involvement in the implementation of the programme, and other issues that relate to the programme.

Results: All the respondents had some information about 'Vision 2020', however, only 4 (9%) (p-value < 0.05) of the respondents could identify all five target eye diseases. This paucity of knowledge about Vision 2020 cut across every cadre of the eye care providers.

Also, 23 (56.1%) of the respondents were neither aware of, nor were involved in any active effort directed towards the implementation of the programme.

Conclusion: The goal of 'Vision 2020: The right to sight' to eliminate avoidable blindness by the year 2020 is a noble one that should be embraced by every eye care provider, by all levels of government and by the society at large. This study shows that four years since the launching of Vision 2020 as a global initiative, eye care workers in Kwara State generally do not have adequate knowledge of the programme and not much has been done to realize the goals of the programme.

Key words: 'Vision 2020: The right to sight', eye care workers, awareness

INTRODUCTION

The importance of good eyesight cannot be overemphasized. Blindness takes its toll, not only on the blind individuals, but also on their families, their communities and the nation at large. It has profound human and socioeconomic consequences in all societies. The cost of lost productivity and rehabilitation of the blind constitutes a significance economic burden, particularly in developing countries. Furthermore, in such settings, blindness is often associated with lower life expectancy, while prevention of blindness leads to higher productivity and income generation, and facilitates socio-economic development.[1]

The number of visually impaired individuals is growing rapidly worldwide mainly as a result of population increase and longevity.[2,3] Other contributory factors to the increasing number of the visually impaired include poverty and uneven distribution of eye care personnel and facilities, especially in developing countries, where nine out of ten of the world's visually impaired people live.[4,5] It is stated that 44 million people were blind worldwide in the year 2000 and that if the trend continues, about 76 million people will be blind by the year 2020.[6] It is important to note that most of the cases of blindness are avoidable since 80% of them are either preventable or curable.[2, 5] Efficient, effective and well-proven interventions which would dramatically reduce this increasing threat are available, however, a concerted effort must be made by all stakeholders involved in blindness prevention.

In order to stem the tide of the increasing number of the visually impaired, the 'Vision 2020: The Right to Sight' initiative was launched. It is a global initiative for the elimination of avoidable blindness. This international partnership involves

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the World Health Organization (WHO), the task force of the International Agency for the Prevention of Blindness (IAPB), international non-government organizations (NGOs), philanthropic institutions, and other bodies and individuals working with national governments. 'Vision 2020: The Right to Sight' was launched in Geneva on February 18, 1999.[7,8]

The strategy for the accomplishment of the goals of the Vision 2020 initiative revolves around three main concepts, namely:

I. *Disease control* with emphasis on cataract, trachoma, onchocerciasis, childhood blindness, refractive errors and low vision
ii. *Human resources development*
iii. *Infrastructure and appropriate technology development* for eye care delivery services[5, 9, 10]

Faithful implementation of the programme is needed to achieve a reduction in the burden of blindness, especially in developing countries where a greater proportion of visually-impaired persons reside.

This study was therefore aimed at finding out how much eye care workers in Ilorin, Kwara State, know about the Vision 2020 initiative and the extent of their involvement as stakeholders in its implementation.

Ilorin is the capital city of Kwara State, in the north central geopolitical zone of Nigeria. The state has a total of 67 eye care providers: 10 ophthalmologists, 9 ophthalmology trainees (residents), 4 optometrists, 40 ophthalmic nurses, 3 opticians and 1 primary eye care worker. Over 62% of the above mentioned personnel practise in Ilorin, the state capital.

METHODS

A structured questionnaire was administered to all eye care providers in active service at clinics/hospitals in Ilorin metropolis in May and June 2003. Each respondent was requested to complete the questionnaire independently within a period of 15 minutes and it was collected immediately.

The questionnaire was designed to obtain information on the subject's professional rank, number of years in eye care service, current employment, class of health institution where the respondent is practising, awareness of 'Vision 2020' initiative, year of awareness, and the medium through which the subject was first informed about the programme. Other information sought was on the respondents' knowledge of the programme. This included its geographical spread, i.e. Nigeria or global; the other professionals (non-eye care workers) involved in the implementation of the programme, and the target population. Respondents were also asked to identify, out of a list of 11 blinding disorders, the five major avoidable blinding disorders which have been targeted for elimination by the Vision 2020 programme. The questionnaire also sought to know whether the respondents were aware of any active effort directed towards the implementation of the programme and whether they played any role. Finally, the respondents were asked whether they thought the Vision 2020 goals were achievable and to state the reason for their response. The data was analysed using the Epi-info 6 statistical package and the results are presented below.

RESULTS

There were 67 eye care providers working in Kwara State during the period of the study. Of this number, 41 were practising in Ilorin, the state capital, and represented 62.1% of the entire eye care workforce in Kwara State. The respondents had between 6 months and 27 years of experience in eye care service delivery, with a mean of 7.12 years. Table 1 shows the professional cadre of the respondents.

Table 1. Professional cadre of respondents

Professional cadre	No.	%
Consultant ophthalmologist	8	19.5
Ophthalmology trainee (resident)	7	17.1
Optometrist	4	9.8
Ophthalmic nurse	20	48.8
Optician	1	2.4
Primary eye care worker	1	2.4
TOTAL	41	100

Thirty-five (85.4%) of the respondents were in government service while 6 (14.6%) were in private employment. Of these, 32 (78%) worked in tertiary health institutions while 7 (17.1%) were in secondary health institutions and 2 (4.9%) were in primary health institutions.

All 41 respondents possessed some knowledge of the Vision 2020 programme. Nine of them became aware of the programme before 1999, 11 became aware in 1999 when it was launched and 21 between the year 2000 and 2003 (table 2).

Table 2. Year of awareness of 'Vision 2020: The right to sight'

Number of respondents (%)	Year of awareness
6 (14.6)	1997
3 (7.3)	1998
11 (26.8)	1999
6 (14.6)	2000
9 (21.9)	2001
5 (12.3)	2002
1 (2.5)	2003

The media, through which the respondents were first informed, included: the newsletter from the National Programme for Prevention of Blindness (NPPB) (20, 48.8%), professional journals/publications (14, 34.1%), scientific conferences (4, 9.8%) and through electronic media (2, 4.9%). Twenty (48.8%) of the respondents were aware that 'Vision 2020' is a global initiative, 18 (43.9%) considered it a national (Nigerian) initiative, while 3 (7.3%) were not sure (p-value < 0.05).

Thirty-eight (92.7%) respondents were aware that Vision 2020 was aimed at eliminating causes of blindness which are either preventable or curable.

Nineteen (46.3%) of the respondents were aware of the fact that part of the implementation strategy is to provide service for every 1 million population which constitute a district.[7] The remaining 22 (53.7%) respondents were not sure (p-value < 0.05). Thirty-four (85.0%) of the respondents were aware that non-eye care professionals were involved in the implementation of the Vision 2020 programme.

Only 4 (9.8%) of the respondents were able to identify the 5 targeted diseases in the Vision 2020 programme namely: cataract, onchocerciasis, trachoma, childhood blindness, and refractive error/low vision (p-value < 0.05).

Table 3 shows the individual diseases identified by the respondents. The target diseases mostly identified were onchocerciasis and trachoma followed by cataract, childhood blindness and refractive error. The non-target diseases mostly identified were eye injury and glaucoma. Others were hypertensive ocular disease, diabetic retinopathy, toxoplasmosis and age-related macular degeneration.

Table 3. Analysis of blinding disorders identified by all respondents as target diseases for elimination in Vision 2020 programme

Blinding disorders	No of respondents	%
1. **Trachoma**	**37**	**90.2**
2. **Onchocerciasis**	**37**	**90.2**
3. **Cataract**	**35**	**85.4**
4. **Childhood blindness**	**33**	**80.5**
5. **Refractive error/low vision**	**29**	**70.7**
6. Eye injury	26	63.4
7. Glaucoma	19	46.3
8. Hypertensive ocular disease	14	34.1
9. Diabetic retinopathy	13	31.7
10. Ocular toxoplasmosis	12	29.3
11. Age related macular degeneration	07	17.1

Note: In bold print are the Vision 2020 target diseases.

Table 4 shows that there were altogether 90 responses for diseases that are not among those targetted for elimination in the Vision 2020 programme. The non target diseases most identified were: glaucoma by consultants, toxoplasmosis by residents, and eye injury by the nurses. Nearly all the optometrists identified non target diseases wrongly as target diseases.

Table 4. Blinding disorders identified by some eye care professional cadres (excluding the only optician and the PECW) as vision 2020 target diseases

Diseases	Consultants N = 8 %	Residents N = 7 %	Optometrists N = 4 %	Nurses N = 20 %
Trachoma	87.5	100	100	80
Onchocerciasis	100	100	75	90
Cataract	87.5	100	75	80
CHB	75	100	100	75
RE/LV	87.5	71.4	75	55
Eye injury	25	14.3	100	85
Glaucoma	37.5	28.6	75	50
HOD	12.5	14.3	75	40
DR	12.5	14.3	50	45
Toxoplasmosis	12.5	42.9	75	25
ARMD	0	0	25	25

Key
CHB: Childhood blindness; RE/LV: Refractive error/Low vision
HOD: Hypertensive ocular disease; DR: Diabetic retinopathy
ARMD: Age-related macular degeneration; PECW: Primary eye care worker

Twenty-three (56.1%) of the respondents were unaware of any active effort towards the implementation of the Vision 2020 programme in the local government or state in which they were practicing (p value < 0.05). Thirteen (31.7%) of the respondents stated that the implementation was in its first stage, but none could state specifically the role he/she was playing in the implementation process. Also, a respondent who is a member of the state committee for the prevention of blindness, admitted that the Vision 2020 programme was yet to take off at the time this study was conducted.

Thirty-eight (92.7%) respondents were of the opinion that the Vision 2020 goal is achievable. The reasons given include the availability of the required personnel and their willingness to support the implementation of the programme whenever it takes off.

DISCUSSION

This study shows that there is some level of awareness about 'Vision 2020: The Right to Sight' among eye care workers in Ilorin, Kwara State, Nigeria.

The fact that 48% of the respondents learnt about the programme through the newsletter of the National Programme for Prevention of Blindness and 34.1% from professional journals suggests that these two media were useful in the dissemination of information about the Vision 2020 programme. Only 4.9% of the respondents attributed their source of information to the electronic

media. This is in contrast to a related study conducted among paediatric resident doctors and 6th year medical students on the Expanded Programme on Immunization (EPI), in which 19.6% of the respondents attributed their first source of information to the mass media.[11] This could be attributed to the adoption of the EPI programme as a national programme which was highly visible in the electronic media (owned mostly by government).

Although, all the respondents (41) admitted that they had some information about Vision 2020, only 4 (9.8%) could identify the five target diseases correctly (p-value < 0.05). The wrong response for the target diseases cut cross the entire cadre of the eye care workers (table 4). This is an indication of the pervasiveness of the deficiency in the knowledge on Vision 2020. This deficiency, if not rectified, could militate against the successful implementation of the programme.[11] However, the actual target diseases were more frequently identified, compared with the non-target diseases. The fact that a large number of the respondents mentioned non-target diseases such as glaucoma and eye injury as target diseases may be because of their prevalence and importance as causes of visual loss in Nigeria. The limitations associated with screening for glaucoma are probably the reason for its exclusion from the Vision 2020 programme.[12] Most cases of eye injury result in uniocular blindness and are largely preventable through health education and the use of protective devices, especially among children and young adults who are the most affected.[13]

The high level of wrong responses among the optometrists shows how limited the information reaching this group of eye care workers has been and this could make their involvement in the implementation of the programme difficult. There is, therefore, the need for harmonization of information dissemination among all stakeholders for successful implementation of the Vision 2020 initiative.

The global initiative for the elimination of avoidable blindness was endorsed by every member state of the World Health Organization (WHO) including Nigeria, and each country is expected to develop a sustainable comprehensive eye care system as an integral part of its national health system. This will ensure that avoidable blindness, as a public health problem, is eliminated in all countries.[8,14] However, as at the time this study was conducted, it was revealed that no active effort had been made to implement the Vision 2020 programme in Kwara State. This should be a cause for concern for all stakeholders involved in blindness prevention.

Presently, the federal, state and local governments fund some health programmes, e.g. the National Action Committee on AIDS (NACA) and the National Programme on Immunization (NPI). 'Vision 2020: the Right to Sight' deserves similar backing considering the importance of good sight and the negative socioeconomic effects of blindness on the affected individuals, their families and the nation as a whole.

CONCLUSION AND RECOMMENDATIONS

The goal of 'Vision 2020: The Right to Sight' – to eliminate avoidable blindness by the year 2020 – is a noble one that should be embraced by every eye care provider, government at all levels, and by the society at large. We therefore, recommend that eye care workers should make a consistent effort to update their knowledge about Vision 2020 through workshops and relevant professional updates. This would enable them to remain constantly aware of their roles and responsibilities with respect to the elimination of avoidable blindness in the society. Also, Nigerian eye care professionals should make a concerted effort to ensure that the federal government, through the Federal Ministry of Health, institutes a national action plan for the implementation of the 'Vision 2020' programme in all three tiers of government.

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