

**FOLLOW UP ASSESSMENT OF STUDENTS WITH VISUAL IMPAIRMENT AT
NSIYALUDZU RESOURCE CENTRE FOR THE VISUALLY IMPAIRED**

**“Improving Eye Health & Educational Services for Blind and Visually Impaired Children
in Central Malawi”**



Date of Assessment....8th and 9th May, 2017



1.0 Introduction

Blantyre Institute for Community Outreach (BICO), through the Ministry of Health and the Ministry of Education, conducted a follow up assessment on students with visual impairment at Nsiyaludzu resource centre for the visually impaired. The exercise took place on 8th and 9th May 2017. This was a follow up activity to the initial low vision assessment which was done earlier on 7th and 8th October, 2016 with subsequent issuing of spectacles and devices on 13th January 2017. Furthermore, it was a teaching process for some optometry technicians from Blantyre Institute for Community Outreach (BICO), on how best they can handle clients with low vision in their respective BICO clinics. In total, 18 students with low vision were assessed. Out of these, 10 were males and 8 were females.

2.0 Follow up team

The team that conducted the follow up activity comprised of:

- i. Christopher Phiri, project officer
- ii. Hendrina Nyondo, optometry technician
- iii. Fanny Mbewe, optometry technician
- iv. Bruno the optometrist/low vision coordinator

3.0 Objectives

The objectives of the exercise were:

- To establish the current level of visual functioning especially for near and distance objects.
- To observe the students' progress in reading and writing print.
- To observe how the students use the devices in class while the lessons are in progress.
- To find out the frequency of using low vision device and spectacle.
- To inspect the condition of the low vision devices and spectacles
- To conduct low vision re-assessment on the students with issues or challenges

4.0 Follow up process

The exercise was divided into three stages:

- Visitation of the students in their respective classrooms and observe their placement, use of the devices etc.
- Interviewing the class teacher about the educational progress of the child and find out if the teacher had done orientation in the basic low vision care.
- Low vision reassessment of students with some challenges or issues.

During the classroom visits the following things were being observed:

- Placement of the student in class and the application of non-optical devices according to the recommendations on the advice form.
- Use of the distance spectacles and telescopes- observed whether the student was using the prescribed spectacle/telescope correctly.
- Use of near devices like magnifiers and whether was using it correctly or not; observed the student reading print school book in class- checked the print size the child read; and observed if student was writing print in class
- Observed teachers on the way they handled the students with low vision in their respective classroom. For example giving them attention, talk-writing, writing in large print etc.
- Observation of the chalkboard contrast, classroom illumination, sharing of the books among the students, interaction of the low vision students with fellow students in classroom as well as outside.

If the student was observed not using the prescribed devices, was asked at the end to explain why (not received? Broken? Discomfort? Does not feel they help? Does not know how to use?)

During the interview of the class teachers the following information was gathered:

- If they have any basic knowledge on how to take care of the student with low vision or if they have ever had special training in low vision.
- They were also asked to give a brief account of the students with low vision in their classes on how they use the devices, the frequency of use, their performance in terms of reading and writing, as well as interaction with other students.
- Any other challenges they face.

During low vision re-assessment, the exercise involved all students who had some issues during class visitation; like having discomfort when using the prescribed devices, those who had lost or broken the devices and some who could not read well with the spectacles or didn't know how to use the devices etc. The process involved a comprehensive low vision assessment in the resource room.

5.0 Results and observations

There were 3 new students who were assessed. They underwent a thorough eye examination process. This included taking history from each child on how the eye condition started, duration of the visual loss, what type of medical intervention was given, if there are any problems associated with reading, mobility, color, activities of daily living. Then visual acuity measurement was done by using the logMAR chart (LVRC) with letters or Tumbling E depending on the literacy level of the child. Physical eye examination was then conducted; assessment of the anterior segment of the eye and funduscopy was carried out to find the cause of the visual impairment. Then an accurate refraction both retinoscopy and subjective was done. Prescriptions to be ordered for the students were recorded.

Table 1: Prescriptions to be ordered for the students

	Name	Age	Sex	Prescription		Reason for Glasses	PD	Type
				RE	LE			
1	Manuel Botoman	8	M	-1.00	-1.00	Lost	56	PGXT
2	Ledder Chiguduli	15	F	-10.00	-10.00	New	58	PGXT
3	Gerladine Makhaula	15	F	-7.00	-3.50	New	56	CR39
4	Shafi Ajusa	9	M	-1.00	-1.00	Broken	56	PGXT
5	Amos James	6	M	-1.00	-1.00	New	54	PGXT
6	Ben Likaya	9	M	+10.00	+10.00	New	56	CR39

7	Patuma Kaliyati	14	F	+5.00	+5.00	New	58	CR39
8	Thomas Nanthowa	12	M	-3.00	-3.00	scratched	58	CR39
9	Grace Kambiri	15	F	+1.00	+1.00	Clear	60	PGXT

Table 2: List of students who needing magnifiers and specific non-optical devices

#	Name	Age	Sex	Type of Magnifier	Non-Optical Device
1	Prisca Kachule	15	F	3X Hand Magnifier	-
2	Ledder Chiguduli	15	F	1.5X Hand magnifier	Reading Stand

Table 3: List of students with their requirements and actions

Name	Sex	Age	Grade	Diagnosis	Action
Leda Chiguduli	Female	13	5	Albinism	needs -10.00 and hand magnifier 1.5x
Prisca Kachule	Female	14	7	albinism	PGXT specs and hand magnifier 2x
Chipangano Batumeyo	Male	13	4	pseudophakia	specs and hand magnifier 1.5x
Gelentina Makhawila	female	14	5	Pseudophakia	awaiting her specs cause not yet made
Chaff Ajusa	Male	8	1	Albinism	clear specs instead of PGXT.
Macdonald Kananji	Male	11	4	retinopathy	specs and hand magnifier 1.5x
Thomas Nanthowa	Male	11	1	pseudophakia	specs and hand magnifier 1.5x
Kelvin Kananji	Male	16	6	hyperopia	specs to be use with own magnifier
Chisomo Chilumpha	female	17	7	retinopathy	magnifier 3x and telescope 2.5x to use without specs
Henderson Binali	Male	19	4	retinitis pigmentosa	specs and stand magnifier follow up on vision
Grace Kambiri	female	14	6	albinism	clear specs (but needs PGXT) and hand magnifier 2x
Kondwani John	Male	12	2	albinism	hand magnifier 1.5x and PGXT specs
Hanna Baxon	female	12	3	aphakia	stand magnifier and specs
Lolana Alfred	female	18	5	albinism	was not present
Patuma Kaliyati	female	13	1	microphthalmia	ordered +5.00 specs and hand magnifier 7x
Manuel Botoman	Male	8	4	albinism	specs(PGXT), follow up needed
Amos James	Male	6	1	albinism	ordered -2.00 PGXT
Ben Likaya	Male	9	1	aphakia	ordered +10.00 for both distance and reading

Finally, teachers who were found teaching during the classroom visitation were interviewed on whether they had done orientation on basic low vision care for the visually impaired students.

Table 4: Teachers done/not done basic low vision care orientation during classroom visit

	Name	Class	Done/not Done basic low vision care orientation
1	Clara Jamu	STD 4	Note done
2	Asiyatu Kapasinje	STD 4	Note done
3	Mphatso Milanzi	STD 4	Note done
4	C.M. Kachingwe	STD 6	Note done
5	Mac Millan Chisuse	STD 8	Done
6	Gracious Mkwapatira	STD 8	Done
7	Charles Sitima	STD 5	Note done
8	Grace Phiri	STD 5	Note done
9	Khwima Mithi	STD 7	Done
10	Paul Chiwambo	STD 6	Done

6.0 Challenges and recommendations

- There was not enough time to conduct full follow up activities together with teaching practices for the optometry Technicians. More time was needed to conduct a proper follow up since it involves a lot of activities that need adequate time like observation in classroom, interviewing the teachers and students; low vision reassessment, teaching and other administrative issues.
- Some children still broke or lost their devices despite of civic education imparted on the teachers, students themselves and some parents. It seems there were no or little control measures by the school administration. To minimize the problem, there is a need to give spectacles with the hard protective cases.
- There are few remaining teachers who were oriented on the basic low vision care of the students with low vision in their respective classes. As a result, majority of the teachers don't know how to handle these students in their classes. Hence, there is need to conduct

a half day low vision care orientation for the selected class teachers so that they would be able to assist students with low vision in their classes.

- Few students were using reading stands. This was due to few reading stands the school had to supply to the students since. The ones which were made were not properly done. Hence more reading stands are required.

7.0 Conclusion

BICO will provide spectacles and other assisting devices to all low vision students who currently do not have these items as prescribed during the follow up. But there is a need for the school administration to set some control measures to minimize the problem of breaking and losing the devices, as it is the case at the school. In addition, there is also a need to train all teachers who are handling children with low vision on how to handle them. This follow up exercise was made possible by the generous support of American people through the United States Agency for International Development (USAID).

Appendices: Photos during a follow up on low vision students at Nsiyaludzu resource centre





