



KENYA SOCIETY FOR THE BLIND REPORT ON SCHOOL SCREENING AND TREATMENT IN MAKUENI COUNTY HELD ON 16 & 17TH OCTOBER 2017

General introduction:

Makueni County is formerly the Eastern province which is made up of 6 Sub constituencies, Mbooni, Kibwezi East, Kibwezi West, Kaiti and Kilome. The County covers of 8,034.7 sq km with a projected population of more than 0.9million people. It geographically borders Kajiado County to the West, Taita Taveta County to the South, Kitui County to the East and Machakos County to the North. The county lies in the arid and semi-arid zones of the Eastern region of the country. Major physical features in the county include the Volcanic Chyulu hills which lie along the South West border of the County in Kibwezi West constituency, Mbooni hills in Mbooni Sub County and Kilungu hills in Kaiti Sub County.

Makueni County experiences harsh weather conditions with High temperatures and low unreliable rainfall. The vegetation is mainly shrubs. The main Economic Activities include subsistence agriculture, beekeeping, small scale trade, dairy farming and limited coffee growing, eco-tourism, commercial Businesses.

Two schools were selected to benefit from eye screening, treatment exercise by Kenya Society for the Blind with support from Jubilee Insurance. These school include Mukuyuni and Umoa Primary school.

The Team that carried out the exercise in Makueni County include, the KSB Director, Ophthalmic Clinical Officer (Makueni County hospital) and 2 EARC Coordinators. The team that was in Kitui County include, the KSB Director, Ophthalmic Clinical Officer (Kitui County hospital), 1 EARC Coordinator and 4 VI teachers.

1. Mukuyuni Primary School (16th Oct 2017).

Mukuyuni Primary school is located approximately 10km from Wote town which is the capital City of Makueni County. The school is in good condition, well planned and classrooms in good habitable condition. The only disadvantage is that the compound has no trees nor grass and therefore very dusty.

Mukuyuni primary school was selected to benefit from eye screening, treatment exercise by Kenya Society for the Blind with support from Jubilee Insurance. The Team that carried out the exercise include, the KSB Director, The Ophthalmic Clinical Officer (Makueni County hospital and 2 EARC Coordinators.

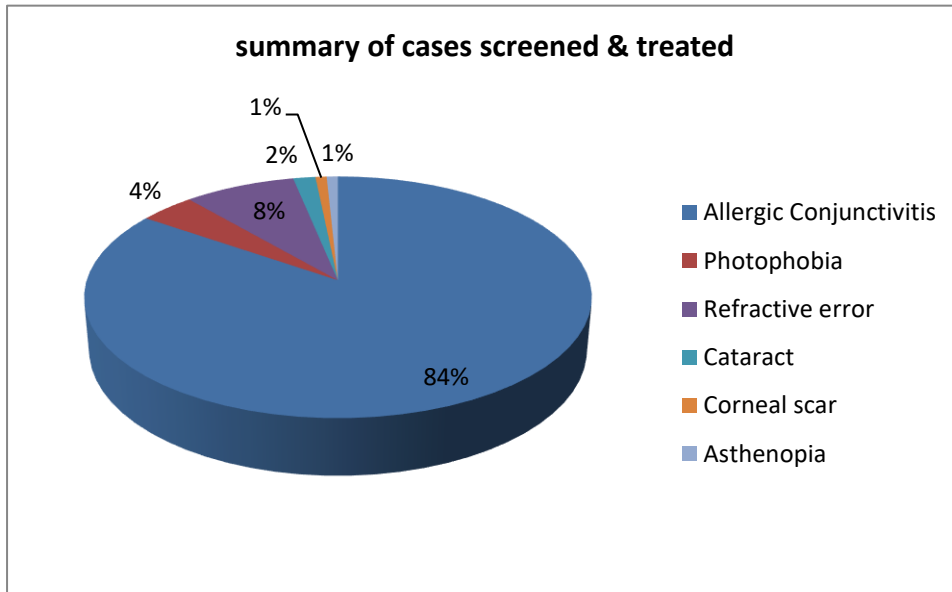
109 Children were screened. The table below reflects the analysis the eye condition identified.

Table 1: Summary of conditions screened and treated.

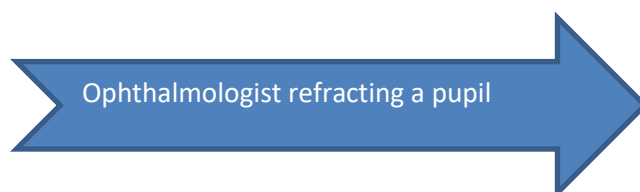
Condition	Number	Treatment
Allergic Conjunctivitis	104	Eye drops given
Photophobia	5	Plano Photo chromatic Lenses
Refractive error	10	Spectacles prescribed
Cataract	2	Referred for surgery
Corneal scar	1	Referred for surgery
Asthenopia	1	Eye drops
Total	<u>109</u>	

Pie Chart 1: Morbidity summary

The pie chart below reflects the eye conditions diagnosed during the screening exercise (according to data in table 1). The highest number of pupils had allergic Conjunctivitis which was treated with eye drops, uncorrected Refractive Errors where spectacles of different powers were prescribed. We also had rare conditions Photopia, Asthenopia and corneal scar. Cataract in children is also a rare condition and was referred for specialized operation.



The pupils screened totaled to 109 not the planned 60. This is because the cases that had been identified by the class teachers were more, the need was big according to the head teacher. The allergies were high and serious and therefore the screening team could not have stopped the exercise after the getting to the planned 60 cases. Some pupils from this school were referred to the eye clinic in Makueni hospital for eye drops since our supplies were not enough.





EARC teacher taking visual acuity

Table 2: Age

The Eye screening cut across different ages. The highest number of pupils screened was between 5 – 15 years and few pupils were below 5 years. This correlates with the information given in table 1 which indicates a higher number of children have allergy related conditions. This condition is worse to those who interact closely with dusty environment and pets. This age is very playful and football is the main game during free time. See the table and pie chart below for the age analysis.

	5 -15 years	Less than 5 years
Age of Pupils	106	3

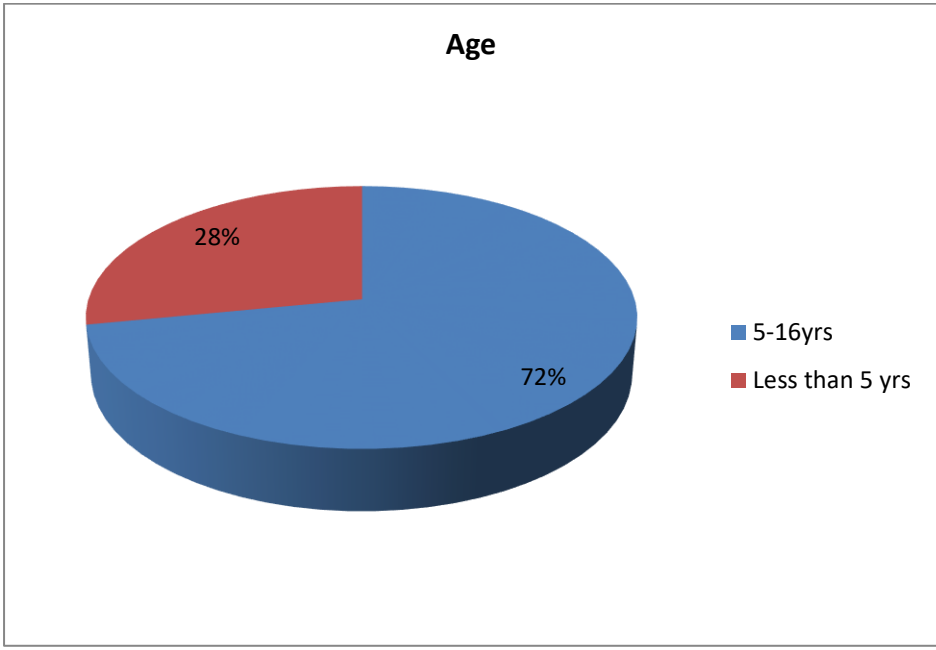
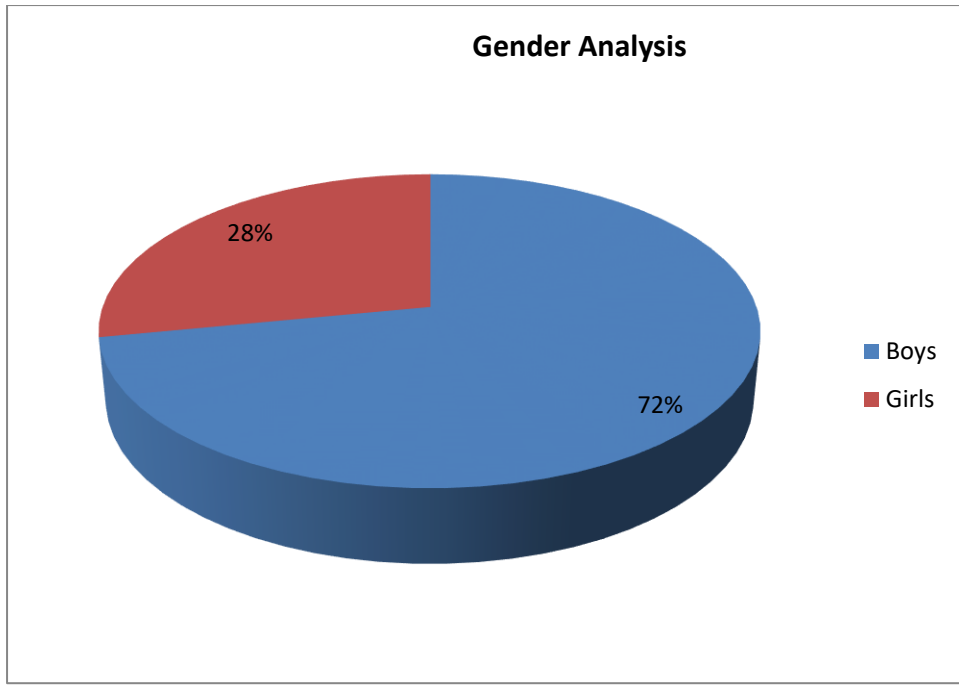


Table 3: Gender Analysis.

The 109 pupils screened were 64 girls and 45 boys as shown below in Table 3 and pie chart.

Gender	No
Girls	64
Boys	45



Successes

- 106 children were screened, treated and referred though the target was 60 children.
- Excellent team work between KSB, the school administration, Ministry of Education and Ministry of Health.
- The Pupils who require further treatment were identified and await the necessary plans.

Challenges:

- More children screened, however there was a challenge of drugs because of the large number. The target for this specific project was 60 children.
- The exercise started late due to the long distance to the school. However we were able to screen all children.

Recommendations:

- There are great issues in schools as concerns Eye health. The hot, dry dusty climatic conditions offers conducive environment for allergy which requires immediate treatment. There is need for awareness creation of the community to embrace eye health good practices.
- The rate of refractive Error is very high because screening of eyes of the children has never happened.
- The cases that require surgery, spectacles need to be undertaken immediately to avoid sight deteriorating.

2. UNOA PRIMARY SCHOOL (17th Oct 2017)

Unoa Primary school is a school that is located about 500m from wote town which is the capital City of Makueni County. The school though near the city is in a pathetic situation, dilapidated, classrooms without windows and a very dusty school compound. The school has a very high population of children of more than 300 children. It accommodates all the children of the government officials in the county and therefore it has multi tribal, Multi religious affiliations.

Unoa primary school was selected to benefit from eye screening, treatment exercise by Kenya Society for the Blind with support from Jubilee Insurance. The Team that carried out the exercise includes, the KSB Director, The Ophthalmic Clinical Officer (Makueni County hospital and 2 EARC Coordinators.

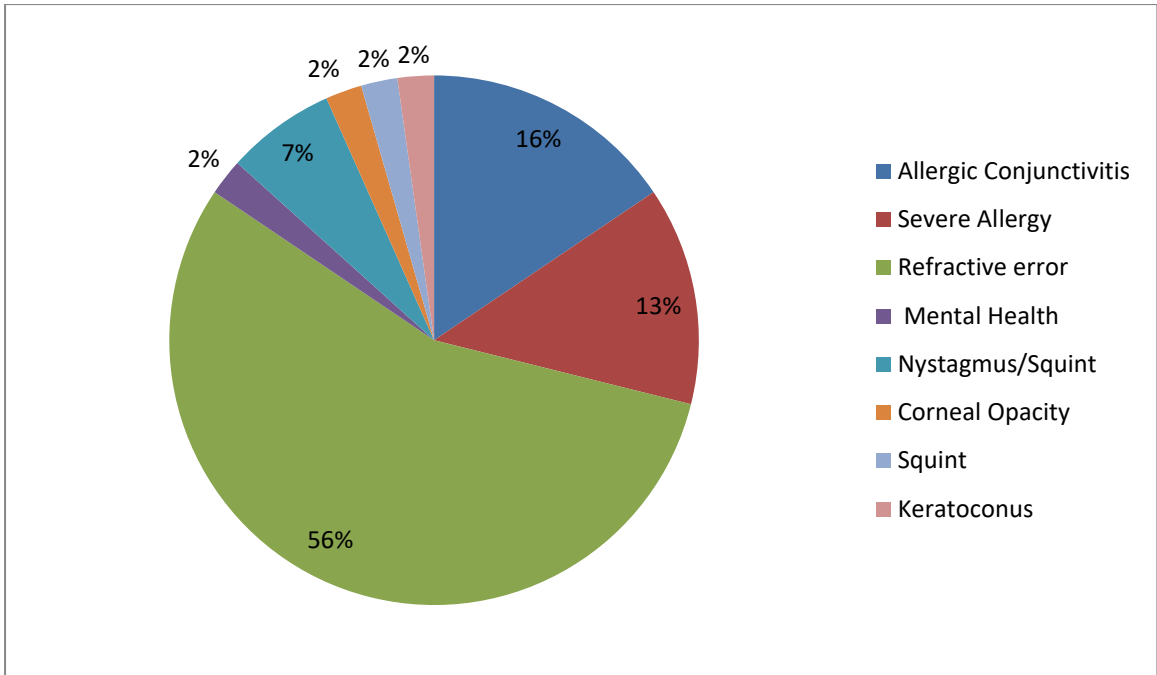
106 children were screened. The table below reflects the analysis the eye condition identified.

Table 1: Summary of conditions screened and treated.

No.	Item Description	Total
1.	Allergic Conjunctivitis	7
2.	Severe Allergy	6
3.	Refractive error	25
4.	Mental Health	1
5.	Nystagmus/Squint	3
6.	Corneal Opacity	1
7.	Squint	1
8.	Keratoconus	1
9.	Total	106

Pie Chart 1: Morbidity summary

The pie chart below reflects the eye conditions diagnosed (according to data in table 1) during the screening exercise. The highest number had uncorrected Refractive Errors. We also got a very rare condition called Keratoconus which is very expensive to manage.



Ophthalmologist screening a pupil



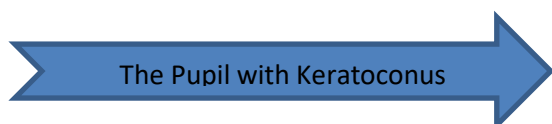

 The Pupil with Keratoconus

Table 2: Age

106 children were screened and received treatment and referrals as necessary. The only Pupils who had eye issues ranged between 5- 16 years only. See below the table and pie chart for the age analysis.

	5 -16 years	Less than 5 years
Male/ Female	106	0

Pie Chart 2: Age

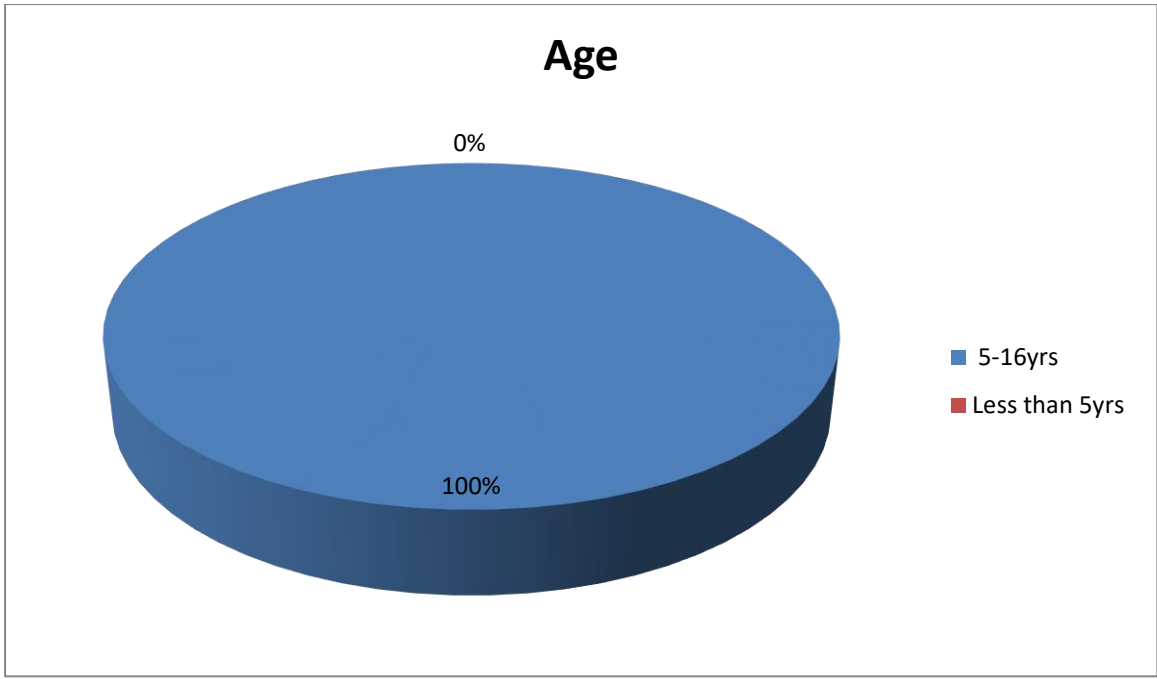
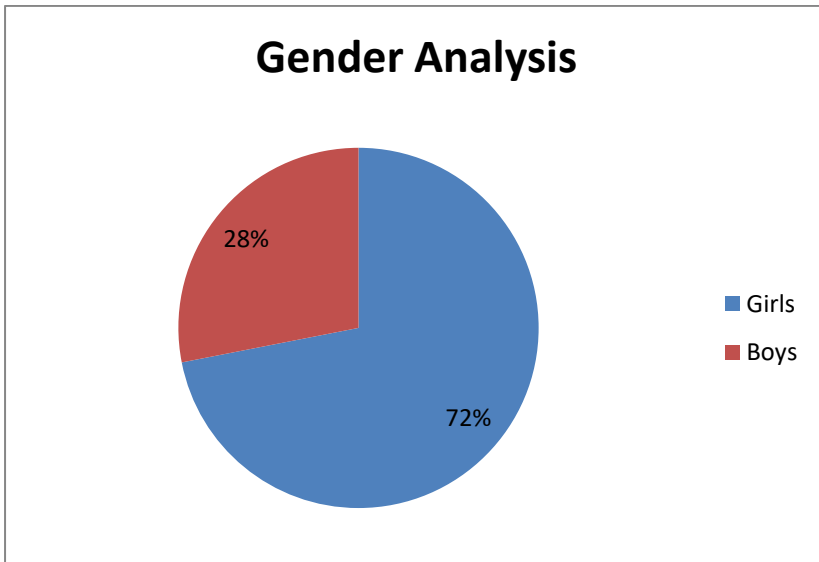


Table 3: Gender Analysis.

Out of the 106 pupils screened 61 were boys while 45 were girls as shown below.

Gender	No
Boys	61
Girls	45



Successes

- 106 children were screened, treated and some referred for further management of the conditions. Surgeries are yet to be undertaken.
- Excellent team work between KSB, the school administration, Ministry of Education and Ministry of Health.
- Rare conditions (Keratoconus) were identified and awaiting further intervention.

Challenges:

- More children needed to be screened; however the target for this specific project was 60 children.
- The eye drops were not adequate and therefore some children were referred to Makueni county district hospital.
- We had to purchase a special eye drop to dilate the eyes of two pupils for in-depth examination.

Recommendations:

- There is need to have another screening session in the same school in future.
- Train teachers on child eye health for identification of children with eye problems and to create awareness to the parents during school forums.