

Medical Checks for Children

Medical Rapport Kenya Nairobi 2023



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Introduction



From March the 13th until March the 19th 2023 a Medical Checks for Children (MCC) team visited locations near Njeri and Nairobi. Free of cost, the MCC team checked and treated 960 children aged newborn until 17 years of age.

After a explorative mission in 2010, MCC visited Kenia West for the elevent time. Again, the medical checks were organized in close cooperation with the Sophia Foundation for Children (SFFC) (www.sophia-foundation.com).

Technical equipment and some of the supplies were brought from Europe by the MCC team members. Most of the medication was ordered through SFFC in Kenia. Additional local medication was purchased from the main pharmacy in Nairobi and taken with us to Kenia West.

Our special thanks go to Nopi, Tazos and Marina for their direct support during our medical camp and their help in all the necessary preparations during the year. Special thanks go to the translators and teachers.

The aim of the mission is to provide basic healthcare on locations of underprivileged children in difficult circumstances with diagnosis and treatment and acute care on the spot and referral with hospital

diagnostics and treatments if necessary for the future health of the children. We monitor the hospitals referrals and the treatment in close cooperation with the Sophia Foundation in the year ahead.

Medical Checks for Children on location:

During the medical checks, the children were checked following the MCC carousel:

1. Registration of the child
2. Measuring height and weight
3. Blood test for haemoglobin
4. Physical examination
5. Giving medication and education about the correct use of it (pharmacy)
6. Education on hygienics and tooth brushing (a tooth brush was given to each child)

Anthropometric measurements were recorded, and a finger prick sample was taken for determination of the haemoglobin (Hb) concentration. Each child was examined by a Medical Doctor. History of illnesses in the preceding four weeks was recorded. Specifically, caretakers were asked if the child had diarrhoea, an upper respiratory infection, vomiting, eating soil (pica), decreased appetite and weight loss.

They were also asked if their child received treatment for any of these, and if so, from where. The data of the children were analysed through the MCC data base.

The medical checks were performed on six days at different locations in Nairobi and in the area around Njeri.

At the different locations we checked beside the schoolchildren some young non-schoolgoing children from the villages.

We analysed the data to make a comparison as a group but we did not make a computer analysis on individual basis (table 1).

During the years the ratio between girls and boys is stable.

Table 1: Total children per location

Grouped locations	14-03-23	15-03-23	16-03-23	17-03-23	18-03-23	19-03-23	Total
St Clements	212	0	0	0	0	0	212
St George	0	134	0	0	0	0	134
Jambo Rescue	0	0	45	0	0	0	45
Ndunduini	0	0	0	214	0	0	214
Makarios Home	0	0	0	0	80	0	80
Makarios school/village	0	0	0	0	148	0	148
Millimani	0	0	0	0	0	108	108
Jami	0	19	0	0	0	0	19
Total	174	191	162	216	88	179	960

Children and caretakers of multiple villages visited the medical camp, which were grouped into 7 locations (details on names of the villages and allocation in groups is given in Annex B).

In the announcement of the medical children of age below 12 years were invited to come with their caretakers. Of the 960 children, 25% was below the age of 5 years, 55% of the children was between 5 and 10 years of age, and 19% was above 10 years old. In this mission we always have a bit of older age group as well due to the children at the Makarios Home and the Rescue home. As these are both orphanages we check all the children in this location if possible without age limitations.

Children below 5 year of age are considered to benefit most from a medical camp, so we try to make an effort that parents or caretakers come with their child (56% of the children was accompanied by a caretaker, 43% with the class teacher.).

The following findings can be highlighted:

- High prevalence of anaemia (27% both for all children and children < 5 years), compared to 43% in Kenya (< 5 years) and 15.5% in the Netherlands (< 5 years) (WHO, 2019).
- Prevalence of malnutrition was lower than previous years but almost ¼ of all malnutrition was found in the agegroup < 1 year. If we compare these numbers with the previous years with the knowledge

of drought and Corona, it almost seems to got to be true. Possible confounders are that we did not see that many baby's with mothers from the village. Also due to Corona and the ecomic situations children might not be sent to school.

All locations	2015	2016	2017	2018	2019	2020	2022	2023
underweight	17%	10%	9%	9%	8%	10%	4%	7%
stunting	20 %	11%	8%	6%	5%	13%	5%	8%
wasting	6%	5%	5%	13%	7%	8%	3%	6%

- Very low prevalence of preventive antiworm treatment compared with 2022. Of the checked children only 2% did receive an antiworm tablet in the 6 month before our visit compared with 60% in 2022!
- High prevalence of caries (16%) and both lower in caries with pain (6%). This is due to underscoring as compared to 2022 we did not have a dentist in the medical camp and we only diagnosed the very serious dental cases which might need referral to a dental clinic for treatment.
- Other frequent diagnoses: pneumonia (15 children), caries (16%), caries with pain (6%), fluosis (12%) and various skin diseases (tinea capitis (2%), dermatomycosis (3%), scabies (2%).
- Three children with severe hearing impairment were referred in 2022 and are being fitted hearing aids with specialized programmes through the Makarios Home. We try to discuss the best treatment for these children with the Sophia Foundation. One of the children went to Cyprus for a Cochlear implant. We still are advising the Sophia for long term monitoring and special attention programmes for these children after being fitted with hearing aids.
- We also found a lot of children with heart murmurs (17 children 2%) in 7 of these children we suspected serious heart disease (VSD, ASD) and these children are being sent to Coptic Hospital in Nairobi for a cardiac ultrasound. We will monitor the results and advice.
- Most frequent treatment given to the children was deworming (80%), iron (22% of the children), multivitamin (14%), scabies treatment and treatment for GE problems, antibiotics and various creams for skin diseases.
- During the medical camps we see a lot of children who are under the care of the Sophia Foundation and live in the home or are being supported in the more remote areas. A lot of these children do have a serious medical problem but we did not diagnose them in our system. This might be due to that they are stable at the moment and the caretakers at the home do not see the need to mention it. Or that we as doctors think that it is not important to register because they are in the picture already. The serious neurological, cardiac and endocrinological kids we have seen in this medical camp are not represented in the numbers.

Corona has had a devastating effect on children and girls especially in low income countries. A whole generation has been lost for future education as they had to stay at home for corona, got pregnant or needed to find jobs to support themselves and their family. In Kenya not only corona has been a challenge but the environment proved maybe an even more challenging factor as the rains did not come and Kenya as well as other regions in Eastern Africa are experiencing the worst drought in centuries.

In some areas, over 90 per cent of water sources have dried up and, as crops fail, and families lose their livestock – which, for many, is their only source of income – more than four million people are grappling with acute hunger. An estimated 134,000 women are currently pregnant or breastfeeding in drought-affected regions of Kenya; many are now malnourished and anaemic, conditions which can be life-threatening.

It is usually women and girls who are sent to fetch water; because of the drought, they have to walk even further, and wait for hours at boreholes.

This puts them at greater risk of violence, at a time when hostilities among communities desperate to secure scarce resources, are mounting.

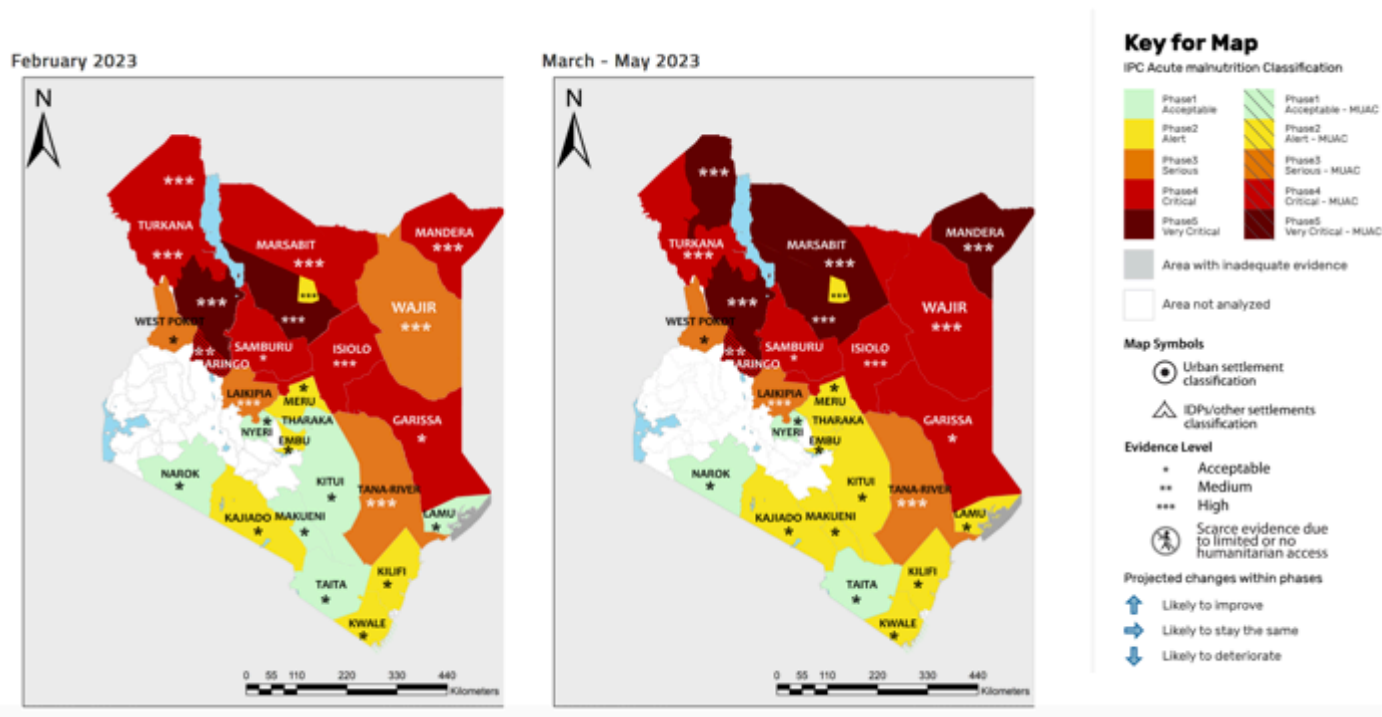
With hundreds of thousands of Kenyans forced to move in search of survival, vulnerable women and girls have little to no access to critical health facilities or protection and support services – at the very time they need them the most.

There is evidence that gender-based violence, female genital mutilation, and child marriage have risen since the drought, as families marry off their girls to pay for food or cattle.

Even in July 2022 we could already see the need in children for food and water and we expect to be more needed the next years than ever before and returning within 1 year showed misery getting worse with rains

that are always expected but never coming. Our data on malnutrition this year and last year is too good to believe.

The analysis by the Integrated Food Security Phase Classification predicted an increase in the 4.4 million Kenyans currently facing high levels of food insecurity in a country with a population of about 47.5 million. The current figure represents a 43% increase compared to the same period last year.



This diagrams show how malnutrition spreads. We only can assume that because we do not visit the desert areas in the north, our children are still lucky and even without rain there was some food in combination with the foodprogramme to help them. But we fear for 2024 as the rains still did not come and meteo kenya expects the country to remain dry.

The slight upward trend we see in the incidences for malnutrition unfortunately seem to confirm this dark mood. It might be the worst is yet to come to Kenya again.

Conclusions and recommendations

1. Deworming. Over the years the prevalence of the preventive antiworm treatment showed lots of fluctuations. In 2019 only 40 % of the checked children received antiworm treatment compared to 60 % in 2022. This year most children did not receive an antiworm pill. In Kenya governmental school based deworming programmes are available. Unfortunately local governments do not always give priority in providing them to the schools and the schools of the beaten track are most likely in being forgotten. Even when including the spillover benefits of treatment, the cost per additional year of school participation was US\$2.92, making deworming considerably more cost-effective than alternative methods of increasing school participation, such as school subsidies. At a cost of less than US\$0.60 per child per year, school-based deworming reduced serious worm infections by 61 percent and reduced school absenteeism by 25 percent. This year the distribution of antiworm pills by the government was non-existent. As most areas in western Kenya are of the beaten track most governmental healthcare supplies and workers retreat to the bigger towns when there are problems. After corona and the devastating economic effects on especially the poor and the low income jobs, distribution of health is even more unequal than before. On teacher when asks why the didn't go to the officials and demand pills for their children, just looked at me in unbelieve at my question. They would be suspected of corruption and might even be arrested. After talks on location with SFFC they will start to distribute the pills in 2023 through the foodprogramm. We will monitor in 2024 the effects.
2. Hygiene and dental care. The prevalence of caries and skin diseases can be prevented by providing information about dental care and hygiene (clean blades when shaving the heads of the children). These topics should be on the agenda especially in the schools where the Sophia Foundation is running a foodprogramm. We still see a large number of children with tinea capitis in schools where most children

have their heads shaved. Basic health education should be made just as important as the foodprogramme for the teachers and the schools. It still is hard to believe that in schools were there is water for example teachers seem unable to let their students drink even a few cups of water while in school. The amount of children we saw with headaches only stresses the importance of these kind of small interventions.

3. Makarios home. At the home we saw a broad range of children with special needs who came into the care of the Sophia Foundation. From mood disorders to Marfan and all kinds of neglect and development disorders alongside with somatic problems. A lot of children receive special drugs for various diseases. A simple follow up system for the children should be in place. When we visited this year a new nurse just started. The nurse visited us on the day before the checks in the home and worked in the carousel. At the home she already seemed to be in charge of the medical issues of the kids and we hope a working system where files, active medication, future need for hospital visits or yearly follow up for each of these children will be managed now.
4. Caretakers. As the Sophia Foundation has a focus on schoolchildren a big effort should be made to have caretakers present at the medical camp as an important part of the medical camp is the transfer and exchange of medical and healthcare information, from the parents to the doctors and vice versa. Health education to young children < 5 years is almost impossible if the parent is not there. Also we do question if parents really use the medication for their children if it is given to them by the teachers. This might mean that vulnerable children might get suboptimal treatment.
5. Follow up. After the medical camp 16 children will need to go to specialist in the hospital, 13 will need a follow up bloodtest and for 40 children there is a dental need. For the hospital visits arrangements have been already made at the conclusion of the medical camps.
6. Nutrition. As stated above the foodsecurity in lots of areas in Kenya is in Danger. Millimani and Nduidine are 2 locations who because of their geographical location already received less than average rains. And it's worse this year. In 2022 we saw the drought in effect in Millimani and Nduidine and were shown the lands where the crops failed. In 2022 after our medical camp the Sophia started a trial foodprogramme in Millimani. In 2023 we agreed to also start a foodprogramme in Nduidine as it is one of the neediest areas we visit and the teachers are reliable and do what they can already for their school. From a general point for us it is very important that the locations we visit during the medical camps are part of a bigger scheme from the Sophia to improve the situation for these kids. So we are very content with these 2 schools also becoming part of the foodprogramme. Because with only medical care once a year no structural change can be made and it will be futile for the long run.

We are very grateful for all the hard work performed by the members of the Sophia Foundation in Cyprus and in Kenya in making sure this medical camp was a success.

Annex A- Detailed results

Table 3: Prevalence of weight/age at or under P3 (underweight) per geographical location by age and gender

	Total		St Clements		St George		Jambo Rescue	
	960		Total= 212		Total = 134		Total= 45	
	N	%	n	%	n	%	n	%
Underweight	53	7%	19	9%	3	2%	1	4%
No underweight	722	93%	186	91%	130	98%	23	96%
Unknown	185		7		1		21	
Underweight children per age								
<=1 year	3	6%	0	0%	0	0%	0	0%
>1 and <5 years	10	5%	3	10%	0	0%	0	0%
<5 years	12	5%	3	8%	0	0%	0	0%
>=5 and <=10 years	41	8%	16	10%	3	4%	1	5%
>10 years	0	0%	0	0%	0	0%	0	0%
Underweight children per gender								
Boy	35	66%	12	63%	1	33%	1	100%
Girl	18	34%	7	37%	2	67%	0	0%
	Nduidini		Makarios Home		Makarios school/village		Millimani	

	Total= 214		Total= 80		Total= 148		Total=108	
	n	%	n	%	n	%	n	%
Underweight	6	5%	4	7%	13	11%	6	7%
No underweight	127	95%	50	93%	105	89%	83	93%
Unknown	81		26		30		19	18%
Underweight children per age								
<=1 year	0	0%	1	50%	1	9%	1	11%
>1 and <5 years	2	6%	1	13%	3	8%	0	0%
<5 years	2	5%	1	11%	4	8%	1	3%
>=5 and <=10 years	4	4%	3	7%	9	13%	5	8%
>10 years	0	0%	0	0%	0	0%	0	0%
Underweight children per gender								
Boy	4	67%	3	75%	10	77%	3	7%
Girl	2	33%	1	25%	3	23%	3	7%

Table 4: Prevalence of length/age at or under P3 (stunting) per geographical location by age and gender

	Total		St Clements		St George		Jambo Rescue	
	960		Total= 212		Total = 134		Total= 45	
	N	%	n	%	n	%	n	%
Stunting	74	8%	10	5%	7	5%	2	4%
No stunting	882	92%	201	95%	126	95%	43	96%
Unknown	4		1		1		0	
Stunting children per age								
<=1 year	7	14%	1	20%	2	14%	0	0%
>1 and <5 years	18	9%	3	10%	2	5%	0	0%
<5 years	23	9%	3	8%	4	7%	0	0%
>=5 and <=10 years	26	5%	6	4%	3	4%	1	5%
>10 years	25	14%	1	17%	0	0%	1	5%
Stunting children per gender								
Boy	53	72%	6	60%	5	71%	2	100%
Girl	21	28%	4	40%	2	29%	0	0%

	Ndunduini		Makarios Home		Makarios school/village		Millimani	
	Total= 214		Total= 80		Total= 148		Total=108	
	n	%	n	%	n	%	n	%
Stunting	16	8%	10	13%	19	13%	8	7%
No stunting	197	92%	70	88%	128	87%	100	93%
Unknown	1		0		1		0	0%
Stunting children per age								
<=1 year	0	0%	1	50%	1	9%	2	22%
>1 and <5 years	2	6%	3	38%	6	15%	0	0%
<5 years	2	5%	3	33%	7	15%	2	7%
>=5 and <=10 years	2	2%	4	9%	6	9%	4	7%
>10 years	12	15%	3	12%	6	19%	2	11%
Stunting children per gender								
Boy	12	75%	7	70%	16	84%	3	6%
Girl	4	25%	3	30%	3	16%	5	9%

Table 5: Prevalence of weight/length at or under P3 (wasting) per geographical location by age and gender

	Total		St Clements		St George		Jambo Rescue	
	960		Total= 212		Total = 134		Total= 45	
	N	%	n	%	n	%	n	%
Wasting	29	6%	7	7%	0	0%	2	22%
No wasting	450	94%	99	93%	98	100%	7	78%
Unknown	480		106		36		36	
Wasting children per age								
<=1 year	2	4%	0	0%	0	0%	0	0%
>1 and <5 years	6	3%	0	0%	0	0%	0	0%
<5 years	8	3%	0	0%	0	0%	0	0%

>=5 and <=10 years	21	9%	7	10%	0	0%	2	33%
>10 years	0	0%	0	0%	0	0%	0	0%
Wasting children per gender								
Boy	18	62%	5	71%	0	0%	1	50%
Girl	11	38%	2	29%	0	0%	1	50%

	Ndunduini		Makarios Home		Makarios school/village		Millimani	
	Total= 214		Total= 80		Total= 148		Total=108	
	n	%	n	%	n	%	n	%
Wasting	7	8%	2	7%	7	9%	3	6%
No wasting	78	91%	25	93%	74	91%	51	94%
Unknown	128		53		67		54	50%
Wasting children per age								
<=1 year	0	0%	1	50%	0	0%	1	11%
>1 and <5 years	3	10%	1	13%	2	5%	0	0%
<5 years	4	9%	1	11%	2	4%	1	3%
>=5 and <=10 years	3	7%	1	6%	5	15%	2	8%
>10 years	0	0%	0	0%	0	0%	0	0%
Wasting children per gender								
Boy	3	43%	1	50%	5	71%	2	7%
Girl	4	57%	1	50%	2	29%	1	4%

Table 6: Prevalence of anaemia per geographical location by age and gender

	Total		St Clements		St George		Jambo Rescue	
	960		Total= 212		Total = 134		Total= 45	
	N	%	n	%	n	%	n	%
Anaemia	259	27%	73	34%	46	35%	5	11%
No anaemia	694	73%	139	66%	86	65%	40	89%
Unknown	5		0		1		0	
Hb <5,0 mmol	8	1%	2	1%	3	2%	1	2%
Anaemia per age								
<=1 year	17	34%	2	40%	7	50%	0	0%
>1 and <5 years	68	35%	12	39%	14	34%	1	50%
<5 years	86	35%	16	42%	21	38%	1	33%
>=5 and <=10 years	131	25%	52	31%	25	32%	2	10%
>10 years	42	23%	5	71%	0	0%	2	10%
Anaemia per gender								
Boy	138	53%	40	55%	26	57%	3	60%
Girl	120	46%	33	45%	20	43%	2	40%

	Ndunduini		Makarios Home		Makarios school/village		Millimani	
	Total= 214		Total= 80		Total= 148		Total=108	
	n	%	n	%	n	%	n	%
Anaemia	36	17%	22	28%	50	34%	36	17%
No anaemia	176	83%	56	72%	98	66%	176	83%
Unknown	1		2		0		1	
Hb <5,0 mmol	2	1%	0	0%	0	0%	2	1%
Anaemia per age								
<=1 year	1	14%	0	0%	4	36%	1	14%
>1 and <5 years	7	23%	1	13%	16	41%	7	23%
<5 years	9	20%	1	11%	20	42%	9	20%
>=5 and <=10 years	12	13%	13	29%	19	28%	12	13%
>10 years	15	19%	8	31%	11	34%	15	19%
Anaemia per gender								
Boy	17	47%	10	45%	25	50%	17	47%
Girl	19	53%	12	55%	25	50%	19	53%

Table 7: Prevalence preventive anti-worm treatment in the last half-year per geographical location by age and gender

	Total		St Clements		St George		Jambo Rescue	
	960		Total= 212		Total = 134		Total= 45	
	N	%	n	%	n	%	n	%
Anti-worm	121	13%	2	1%	0	0%	1	2%
No anti-worm	839	87%	210	99%	134	100%	44	98%
Unknown	0		0		0		0	
Anti-worm per age								
<=1 year	4	8%	0	0%	0	0%	0	0%
>1 and <5 years	19	10%	0	0%	0	0%	1	50%
<5 years	22	9%	0	0%	0	0%	1	33%
>=5 and <=10 years	74	14%	2	1%	0	0%	0	0%
>10 years	25	13%	0	0%	0	0%	0	0%

	Ndunduini		Makarios Home		Makarios school/village		Millimani	
	Total= 214		Total= 80		Total= 148		Total=108	
	n	%	n	%	n	%	n	%
Anti-worm	3	1%	5	6%	29	20%	81	75%
No anti-worm	211	99%	75	94%	119	80%	27	25%
Unknown	0		0		0		0	
Anti-worm per age								
<=1 year	0	0%	0	0%	0	0%	0	0%
>1 and <5 years	0	0%	0	0%	0	0%	0	0%
<5 years	0	0%	0	0%	0	0%	0	0%
>=5 and <=10 years	23	14%	0	0%	0	0%	0	0%
>10 years	0	0%	0	0%	0	0%	0	0%

Table 8: Child with care taker at the day of the check?

	Total		St Clements		St George		Jambo Rescue	
	960		Total= 212		Total = 134		Total= 45	
	N	%	n	%	n	%	n	%
No	10	1%	1	0%	0	0%	0	0%
Yes	539	56%	51	24%	55	41%	40	89%
Teacher	411	43%	160	75%	79	59%	5	11%

	Ndunduini		Makarios Home		Makarios school/village		Millimani	
	Total= 214		Total= 80		Total= 148		Total=108	
	n	%	n	%	n	%	n	%
No	0	0%	2	3%	6	4%	1	1%
Yes	71	33%	78	98%	141	95%	101	94%
Teacher	143	67%	0	0%	1	1%	6	6%

Table 9: Disease prevalence among all children per geographical location

	Total		St Clements		St George		Jambo Rescue	
	960		Total= 212		Total = 134		Total= 45	
	N	%	n	%	n	%	n	%
Underweight	53	6%	19	9%	3	2%	1	2%
Stunting	74	8%	10	5%	7	5%	2	4%
Wasting	29	3%	7	3%	0	0%	2	4%
Anaemia	259	27%	73	34%	46	34%	5	11%
HIV pos.	1	0%	0	0%	0	0%	0	0%
Malaria (suspected)	1	0%	0	0%	0	0%	0	0%
vitamin deficit (clinical signs)	10	1%	2	1%	1	1%	1	2%
Bilharzia	1	0%	0	0%	0	0%	0	0%
HIV/AIDs confirmed	1	0%	0	0%	1	1%	0	0%
syndrome n.o.s.	8	1%	3	1%	4	3%	0	0%
pneumonia (clinical)	15	2%	4	2%	4	3%	0	0%
BHR/asthma	2	0%	1	0%	0	0%	0	0%
Respir. Other	5	1%	0	0%	0	0%	1	2%
diarrhoea without dehydration	3	0%	2	1%	1	1%	0	0%
constipation	1	0%	1	0%	0	0%	0	0%
active worm infection	5	1%	2	1%	1	1%	0	0%
GI other	1	0%	0	0%	0	0%	0	0%
otitis media acuta	2	0%	0	0%	0	0%	0	0%
otitis media with effusion	1	0%	0	0%	0	0%	0	0%
otitis externa	2	0%	0	0%	0	0%	1	2%
mastoiditis	1	0%	0	0%	0	0%	0	0%
hearing impairment	3	0%	0	0%	0	0%	0	0%
other	9	1%	0	0%	1	1%	0	0%
cariës n.o.s.	155	16%	28	13%	18	13%	18	40%
pain n.o.s	14	1%	5	2%	1	1%	0	0%
fluorosis	118	12%	47	22%	2	1%	8	18%
caries with pain	45	5%	10	5%	6	4%	3	7%
eczema n.o.s.	8	1%	2	1%	1	1%	0	0%
dermatomycosis	33	3%	7	3%	4	3%	3	7%
Impetigo/furunculosis	8	1%	0	0%	2	1%	0	0%
lice	1	0%	0	0%	1	1%	0	0%
scabies	4	0%	0	0%	0	0%	0	0%
Tinea Capitis	22	2%	5	2%	2	1%	3	7%
wounds infected,	9	1%	2	1%	2	1%	0	0%
Skin other (psoriasis etc)	16	2%	4	2%	0	0%	0	0%
psychomotoric retardation	8	1%	3	1%	1	1%	0	0%
epilepsy	4	0%	0	0%	1	1%	0	0%
migraine/headache	18	2%	5	2%	0	0%	0	0%
Neuromusc other	2	0%	0	0%	0	0%	0	0%
physiological murmur	10	1%	1	0%	1	1%	0	0%
pathological murmur (suspected)	7	1%	3	1%	1	1%	0	0%
refractory problem	5	1%	1	0%	0	0%	0	0%
strabismus	2	0%	1	0%	0	0%	0	0%
keratoconjunctivitis	4	0%	1	0%	2	1%	0	0%
eye other	5	1%	1	0%	0	0%	0	0%
menorrhagia	1	0%	1	0%	0	0%	0	0%
pregnancy	3	0%	3	1%	0	0%	0	0%
chronic kidney path.	1	0%	0	0%	0	0%	0	0%
skeletal other	3	0%	1	0%	0	0%	0	0%
hernia(umbilical etc)	1	0%	1	0%	0	0%	0	0%
abdomen other	5	1%	2	1%	1	1%	2	4%

	Ndunduini		Makarios Home		Makarios school/village		Millimani	
	Total= 214		Total= 80		Total= 148		Total=108	
	n	%	n	%	n	%	n	%
Underweight	6	3%	4	5%	13	9%	6	6%
Stunting	16	7%	10	13%	19	13%	8	7%
Wastina	7	3%	2	3%	7	5%	3	3%

	Ndunduini		Makarios Home		Makarios school/village		Millimani	
	Total= 214		Total= 80		Total= 148		Total=108	
	n	%	n	%	n	%	n	%
Anaemia	36	17%	22	28%	50	34%	16	15%
HIV pos.	0	0%	1	1%	0	0%	0	0%
Malaria (suspected)	0	0%	0	0%	1	1%	0	0%
vitamin deficit (clinical signs)	4	2%	0	0%	2	1%	0	0%
Bilharzia	1	0%	0	0%	0	0%	0	0%
HIV/AIDs confirmed	0	0%	0	0%	0	0%	0	0%
syndrome n.o.s.	0	0%	0	0%	0	0%	1	1%
pneumonia (clinical)	3	1%	0	0%	3	2%	0	0%
BHR/asthma	1	0%	0	0%	0	0%	0	0%
Respir. Other	1	0%	0	0%	0	0%	3	3%
diarrhoea without dehydration	0	0%	0	0%	0	0%	0	0%
constipation	0	0%	0	0%	0	0%	0	0%
active worm infection	1	0%	0	0%	0	0%	1	1%
GI other	0	0%	0	0%	1	1%	0	0%
otitis media acuta	1	0%	0	0%	1	1%	0	0%
otitis media with effusion	1	0%	0	0%	0	0%	0	0%
otitis externa	0	0%	0	0%	1	1%	0	0%
mastoiditis	1	0%	0	0%	0	0%	0	0%
hearing impairment	0	0%	2	3%	1	1%	0	0%
other	3	1%	2	3%	3	2%	0	0%
cariës n.o.s.	55	26%	2	3%	15	10%	17	16%
pain n.o.s	3	1%	0	0%	2	1%	3	3%
fluorosis	12	6%	12	15%	21	14%	16	15%
caries with pain	9	4%	2	3%	6	4%	7	6%
eczema n.o.s.	0	0%	0	0%	1	1%	4	4%
dermatomycosis	8	4%	1	1%	4	3%	5	5%
Impetigo/furunculosis	0	0%	1	1%	2	1%	3	3%
lice	0	0%	0	0%	0	0%	0	0%
scabies	1	0%	0	0%	0	0%	3	3%
Tinea Capitis	6	3%	1	1%	3	2%	2	2%
wounds infected,	2	1%	1	1%	1	1%	0	0%
Skin other (psoriasis etc)	1	0%	2	3%	5	3%	4	4%
psychomotoric retardation	0	0%	2	3%	1	1%	1	1%
epilepsy	0	0%	2	3%	0	0%	1	1%
migraine/headache	6	3%	4	5%	2	1%	1	1%
Neuromusc other	1	0%	0	0%	1	1%	0	0%
physiological murmur	4	2%	2	3%	2	1%	0	0%
pathological murmur (suspected)	2	1%	0	0%	1	1%	0	0%
refractory problem	2	1%	1	1%	0	0%	1	1%
strabismus	1	0%	0	0%	0	0%	0	0%
keratoconjunctivitis	0	0%	0	0%	0	0%	1	1%
eye other	0	0%	3	4%	1	1%	0	0%
menorrhagia	0	0%	0	0%	0	0%	0	0%
pregnancy	0	0%	0	0%	0	0%	0	0%
chronic kidney path.	0	0%	1	1%	0	0%	0	0%
skeletal other	2	1%	0	0%	0	0%	0	0%
hernia(umbilical etc)	0	0%	0	0%	0	0%	0	0%
abdomen other	0	0%	0	0%	0	0%	0	0%

Table 10: Treatment among all children per geographical location

	Total		St Clements		St George		Jambo Rescue	
	960		Total= 212		Total = 134		Total= 45	
	N	%	n	%	n	%	n	%
ferro	209	22%	61	29%	34	25%	5	11%
mother iron	8	1%	2	1%	4	3%	0	0%
multivitamins	137	14%	24	11%	17	13%	3	7%
anti-worm	771	80%	191	90%	116	87%	42	93%
acute worm	13	1%	2	1%	0	0%	0	0%
anti-scabies	3	0%	0	0%	0	0%	0	0%
niclosamide	1	0%	0	0%	0	0%	0	0%
scabies soap	2	0%	0	0%	0	0%	0	0%
amoxicillin	13	1%	3	1%	3	2%	0	0%
augmentin	7	1%	1	0%	2	1%	0	0%
2e lijns antibiotica	3	0%	1	0%	0	0%	0	0%
paracetamol	30	3%	5	2%	5	4%	5	11%
inhaler	1	0%	1	0%	0	0%	0	0%
AB urine infection	1	0%	0	0%	0	0%	0	0%
ORS	1	0%	0	0%	0	0%	0	0%
eardrops	5	1%	0	0%	1	1%	2	4%
hydrocortisone cream	9	1%	3	1%	0	0%	0	0%
dactarin cream	12	1%	3	1%	1	1%	0	0%
dactacort cream	9	1%	3	1%	0	0%	3	7%
fusidin cream	17	2%	2	1%	4	3%	1	2%
neutral cream	7	1%	1	0%	1	1%	0	0%
griseofulvine	12	1%	4	2%	0	0%	2	4%
eyedrops	87	9%	1	0%	2	1%	0	0%

	Ndunduini		Makarios Home		Makarios school/village		Millimani	
	Total= 214		Total= 80		Total= 148		Total=108	
	n	%	n	%	n	%	n	%
ferro	28	13%	15	19%	40	27%	17	16%
mother iron	0	0%	0	0%	2	1%	0	0%
multivitamins	32	15%	18	23%	30	20%	10	9%
anti-worm	197	92%	69	86%	104	70%	34	31%
acute worm	6	3%	2	3%	1	1%	2	2%
anti-scabies	2	1%	0	0%	0	0%	1	1%
niclosamide	0	0%	0	0%	0	0%	1	1%
scabies soap	2	1%	0	0%	0	0%	0	0%
amoxicillin	4	2%	0	0%	1	1%	1	1%
augmentin	0	0%	0	0%	0	0%	3	3%
2e lijns antibiotica	1	0%	0	0%	1	1%	0	0%
paracetamol	3	1%	0	0%	3	2%	9	8%
inhaler	0	0%	0	0%	0	0%	0	0%
AB urine infection	0	0%	0	0%	1	1%	0	0%
ORS	0	0%	0	0%	1	1%	0	0%
eardrops	0	0%	0	0%	2	1%	0	0%
hydrocortisone cream	0	0%	0	0%	3	2%	3	3%
dactarin cream	2	1%	0	0%	2	1%	4	4%
dactacort cream	1	0%	1	1%	0	0%	1	1%
fusidin cream	2	1%	2	3%	4	3%	2	2%
neutral cream	2	1%	1	1%	1	1%	1	1%
griseofulvine	3	1%	0	0%	1	1%	2	2%
eyedrops	0	0%	0	0%	0	0%	0	0%

Table 11: Follow-up of all children per geographical location

	Total		St Clements		St George		Jambo Rescue	
	960		Total= 212		Total = 134		Total= 45	
	N	%	n	%	N	%	n	%
Dentist	40	4%	10	5%	6	4%	1	2%
Specialist in hospital	16	2%	3	1%	3	2%	1	2%
Revisit	10	1%	5	2%	0	0%	0	0%
Diagnostics (HIV/Malaria)	1	0%	1	0%	0	0%	0	0%

Bloodtest after 3 months	13	1%	8	4%	2	1%	0	0%
International organisation	4	0%	1	0%	0	0%	0	0%
Other...	2	0%	1	0%	1	1%	0	0%

	Ndunduini		Makarios Home		Makarios school/village		Millimani	
	Total= 214		Total= 80		Total= 148		Total=108	
	n	%	n	%	n	%	n	%
<i>Dentist</i>	9	4%	1	1%	3	2%	8	7%
<i>Specialist in hospital</i>	3	1%	2	3%	1	1%	3	3%
<i>Revisit</i>	1	0%	2	3%	1	1%	1	1%
<i>Diagnostics (HIV/Malaria)</i>	0	0%	0	0%	0	0%	0	0%
<i>Bloodtest after 3 months</i>	0	0%	0	0%	1	1%	2	2%
<i>International organisation</i>	1	0%	2	3%	0	0%	0	0%
<i>Other...</i>	0	0%	0	0%	0	0%	0	0%