

Medical Checks for Children

# Medical Report Vuwani 2024



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## Introduction

From September 27th until October 5th Medical Checks for Children (MCC) visited Vhembe district, Limpopo province, for the first time. The MCC team checked and treated free of cost 1146 children in 5 days.

The medical checks were organized in close cooperation with Kurisanani St Joseph's and Kinderfonds Mamas. Kurisanani is a non-governmental organization which aims to serve vulnerable communities in northern South Africa through provision of safe water, sanitation, and hygiene as well as other community developmental services, such as education, school lunches and environmental protection.

The cooperation of Kurisanani St Joseph's existed out of the following (amongst others):

- Announcement of the medical camp in the different villages;
- All contacts with districts/governmental officers, the Mission hospital and the health centres;
- Selection of nurses/translators/local helpers;
- Ordering medication listed by MCC;
- Arrangements for food, drinks and lodging of the MCC team;
- Transportation of the MCC team to and from Johannesburg;
- Give follow-up for the referred children: arranging hospital visits.

The MCC team consisted of eleven members from The Netherlands:

Ines von Rosenstiel (medical- mission leader, paediatrician),  
Dorien Jacobs (organizational mission leader, paediatric nurse),  
Judith Desel (congress organiser), Felix Dikken (paediatrician), Caroline Groenewegen (general practitioner), Patrick Nomden (nurse), Annette Stallinga (nurse in training), Ilse Tomassen (physiotherapist), Judit Wesseling (paediatrician), Sabine Zoethout (paediatric nurse), Toine Janssen -van der Nooij (general practitioner).

The medical checks were performed in collaboration with five local health centres.

Technical equipment, medical supplies and toothbrushes, knitted caps were brought from the Netherlands by MCC team members. Medication was ordered by pharmacist Elias Mukwevho.

The aim of the mission is to make an inventory of the health situation of the children in Vuwani, treat the children if necessary and to advise Kurisanani St Joseph's on the future steps to take. In addition, we also focussed on the psychosocial and dental situation of the children.

Since the medical camp was organized in collaboration with the local health centres, this medical report will be shared with them, as prior to our medical camp all caretakers gave their informed consent.

## Medical Checks for Children on location

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

1. Registration of the child;
2. Education on hygiene and tooth brushing (a toothbrush was given to each child);
3. Measuring height and weight;
4. Blood test (haemoglobin) and urine test;
5. Physical examination by a medical doctor;
6. Giving medication (pharmacy);
7. Hand out new clothes and covering shawl to small children treated for scabies;
8. Enter children's files in data base.

Special attention was given to the transfer of knowledge on hygiene and dental care to the children and parents by use of the information provided by Aisha and Friends ([www.aishaandfriends.com](http://www.aishaandfriends.com)).

## Results Medical Camp in Vuwani district

During the first medical camp in Vuwani district MCC saw in total 1146 children from different primary schools and the families from the surrounding villages. Most important findings are described below, and detailed tables of the findings are given in Annex A.

Table 1: Number of checked children per day

<b>Check</b>	<b>30-09</b>	<b>1-10</b>	<b>2-10</b>	<b>3-10</b>	<b>4-10</b>	<b>Total</b>
Day 1	198	0	0	0	0	198
Day 2	0	187	0	0	0	187
Day 3	0	0	232	0	0	232
Day 4	0	0	0	275	0	275
Day 5	0	0	0	0	254	254
<b>Total</b>	<b>198</b>	<b>187</b>	<b>232</b>	<b>275</b>	<b>254</b>	<b>1146</b>

Children and caretakers of multiple villages visited the medical camp, which were grouped into the one locations at St Joseph's Parish.

In the announcement of the medical camp, children below the age of 12 years were invited to come with their caretakers. Of the 1146 children, 12% was younger than 1 year of age, 33% were between 1 and 5 years old, given a total of 42% was below the age of 5 years, 44% of the children was between 5 and 10 years of age, and 14% was above 10 years old. Children below 5 years of age are considered to benefit most from a medical camp, so we were happy to see these young children and their parents visit the MCC medical camp.

Special attention was paid to the presence of caretakers during the medical camp, at the announcement of the medical camp and at registration. All children brought

a caretaker (parent, grandmother/father, sister/brother). We are very pleased with this high attendance of caretakers, 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. We learned from previous medical camps that the presence of caretakers will make the medical camp more sustainable.

## Findings

The following findings can be highlighted:

- Moderate prevalence of anaemia (27% for all children and 31% for children < 5 years), compared to 15.5% in the Netherlands (< 5 years) (WHO, 2019).
- High prevalence of stunting in the young children up to 1 year of age (29%) and 23% for < 5 years), compared to 1.6% in the Netherlands (WHO, 2020).
- Moderate prevalence of underweight (7% for the children under 5 years), compared < 0.5% in the Netherlands (< 5 years) (WHO, 2020).
- Moderate prevalence of wasting (2% (n=9) for < 5 years), compared < 0.3% in the Netherlands (< 5 years) (WHO, 2020). Remarkable another 8 children above 5 year were also wasted (3%).
- Very high prevalence of acute worm infection (22%, n=247) and 48% (n=550) were given preventive deworming.
- Other frequent diagnoses: caries (13%, 149 children), keratoconjunctivitis (3%, 39 children), pneumonia (3%, 30 children), clinical vitamin deficiencies (2%, 28 children) and various skin diseases (tinea capitis (5%, 56 children), dermatomycosis (3%, 29 children), scabies (3%, 36 children).
- Several children with functional heart murmurs were identified, 3 children with a suspected pathological murmur are sent to the cardiologist for further diagnosis and treatment.
- 12 children with physical and/or mental disabilities came to the medical camp, and one teenager was admitted directly to hospital care due to severe malnutrition and tuberculosis.
- Through MCC case detection 45 referrals were already referred on the spot via the local clinics to the nearby hospitals, and will benefit from further follow-up. 11 special cases will be followed up by the local Mamas of St Joseph's.

## Treatment

Most frequent treatment given to the children was deworming (48%), multivitamin (38%), antibiotics (6%), various cremes for skin diseases (8%) and anti-scabies treatments (4%).

Table 2: Summary of most frequent findings

	Total		Day 1		Day 2		Day 3		Day 4		Day 5	
	1146		Total = 198		Total= 187		Total = 232		Total = 275		Total = 254	
	N	%	n	%	n	%	n	%	n	%	n	%
Underweight	57	5%	17	9%	11	6%	9	4%	10	4%	10	4%
Stunting	163	14%	24	12%	45	24%	34	15%	22	8%	38	15%
Wasting	18	2%	5	3%	0	0%	1	0%	7	3%	5	2%
Anaemia	311	27%	67	34%	61	33%	62	27%	75	27%	46	18%
Vitamin deficit (clinical signs)	28	2%	4	2%	5	3%	4	2%	1	0%	14	6%
pneumonia (clinical)	30	3%	5	3%	7	4%	6	3%	9	3%	3	1%
BHR/asthma	8	1%	2	1%	0	0%	3	1%	3	1%	0	0%
Respir. Other	8	1%	1	1%	3	2%	4	2%	0	0%		
diarrhoea without dehydration	9	1%	0	0%	1	1%	4	2%	1	0%	3	1%
active worm infection	226	20%	22	11%	39	21%	46	20%	75	27%	44	17%
otitis media acuta	17	1%	1	1%	4	2%	7	3%	4	1%	1	0%
otitis media with effusion	18	2%	1	1%	2	1%	2	1%	7	3%	6	2%
(adeno)tonsillitis	11	1%	3	2%	1	1%	3	1%	2	1%	2	1%
caries n.o.s.	149	13%	28	14%	24	13%	32	14%	37	13%	28	11%
eczema n.o.s.	18	2%	5	3%	4	2%	0	0%	3	1%	6	2%
dermatomycosis	29	3%	6	3%	5	3%	6	3%	5	2%	7	3%
Impetigo/furunculosis	12	1%	1	1%	4	2%	3	1%	1	0%	3	1%
scabies	36	3%	3	2%	6	3%	8	3%	9	3%	10	4%
Tinea Capitis	56	5%	1	1%	15	8%	15	6%	16	6%	9	4%
Skin other (psoriasis etc)	35	3%	9	5%	8	4%	7	3%	5	2%	6	2%
psychomotoric retardation	12	1%	2	1%	1	1%	5	2%	1	0%	3	1%
keratoconjunctivitis	39	3%	5	3%	5	3%	11	5%	10	4%	8	3%
eye other	16	1%	7	4%	2	1%	5	2%	1	0%	1	0%
hernia(umbilical etc)	19	2%	0	0%	6	3%	1	0%	4	1%	8	3%

## Malnutrition

Of the children 1-5 years old seen in the medical camp 8% showed underweight, 21% stunting and 2% wasting. Especially the prevalence of stunting in children under 1 year of age is remarkably high (29%). After weaning the introduction of solid food consists mainly porridge which is a one sided diet with low variety of vegetable content.

Within MCC growth abnormalities were assessed by measuring and weighing all children in a standardized fashion, using the following criteria:

- Underweight = weight for age at or under the third percentile of the reference population (WHO growth curves), only children up to 10 years old. This is an indicator of malnutrition or weight loss because of disease.
- Wasting = weight for height at or under the third percentile of the reference population (WHO growth curves), only children up to 120 cm in height. This is an indicator of acute malnutrition.
- Stunting = height for age at or under the third percentile of the reference population, (WHO growth curves), only children up to 19 years of age. This is an indicator of chronic malnutrition.

Malnutrition is thought to account for one third of all deaths of children under five (UN Millennium Development Goals). Malnutrition has been related to poor cognitive and school performance. The main factors contributing to malnutrition

are rural poverty, lack of sanitation, poor living conditions and a lack of energy, protein intake, iron and multivitamins.

Although MCC has not yet implemented a dataset for children with obesity we see a growing number on our medical camps in South Africa in recent years. The primary cause of the overweight and /or obese children is diet-related factors, including unhealthy food choices, such as high-energy foods, and also a lack of physical activity and/or a sedentary lifestyle.

During the medical camp we gave nutritional advice to all children and caretakers, with emphasis on vegetable intake and vitamin C. Kurisanani is working together with Kinderfonds mamas , to bring more knowledge on nutritious food and improve the school lunch given, in schools around Vuwani. For this purpose, school gardens are put in place and supported. Learning at school on nutritious food and providing a school lunch containing vegetables and fruits, is endorsed by MCC.

## **Anemia**

27% of all checked children were suffering from anaemia, predominantly in the 0 to 5 year age group (32 %). Only 5 children had a severe anaemia, they were treated with iron instead of multivitamins and will receive a blood test within 3 months at the local clinic.

Anaemia is an indicator of both poor nutrition and poor health. It is problematic on its own, but it can also impact other global nutritional concerns as growth, such as stunting, wasting and low birth weight. School performance in children and reduced work productivity in adults due to anaemia can have further social and economic impacts for the individual and family.

In the villages in Vuwani , the high prevalence of anaemia might be due to: - a high incidence of acute worm infections (22%);

- low coverage by the deworming program;
- lack of important vitamins and minerals from fruit and vegetables in the diet;
- high prevalence of caries leading to feeding difficulties.

Anaemia due to nutritional deficiencies and infectious diseases such as helminthiasis and seasonal malaria are prevalent in Limpopo.

## **Deworming**

MCC provided deworming treatment to all children above 1 year of age, and who did not receive deworming treatment in the last 6 month. In total preventive deworming was provided to 48% (n=550) children. In 22% (n=247) a treatment for active worm treatment was needed.

The presence of intestinal parasites in a population is indicative of lack of proper sanitation, low economic standards and poor educational background. The parasite consumes the nutrients from the children they infect and worsen malnutrition and physical development. There is a strong relationship between a parasitic worm infection and anaemia. The parasitic infection can also cause abdominal pain, diarrhoea, intestinal obstruction and various other health problems. Prolonged infection affects growth, development and educational achievements.

During the medical camp special attention was given to provide education on hand hygiene to prevent worm infections in toddlers using the information developed in cooperation with Aisha & Friends.

### **Eye problems**

We encountered 39 children with moderate to severe vernal keratoconjunctivitis. This seasonal atopic keratoconjunctivitis mainly affects children and teenagers. It commonly calms down after puberty. The children were complaining about severe irritation, increased redness, discharge, or any visual symptoms. Vernal keratoconjunctivitis is a chronic noninfectious inflammatory condition and can result in a severe ophthalmic complications associated with atopic dermatitis. It requires effective treatment to prevent progressive vision loss. We advised and handed out some sun glasses and treated the children with vernal keratoconjunctivitis with allergex eyedrops.

### **Dental problems**

We identified 13% of the children with severe caries, which might be an underestimation of the prevalence of dental problems. And children need to be referred to the local hospital for dental care. This scarcity underlines the need for good dental programs to educate children and parents on the importance of dental hygiene.

During the medical camp we provided education on dental hygiene, and all children were given a toothbrush after explanation and demonstration of brushing teeth.

MCC stresses that creating a supportive and healthy environment is an important way to promote oral health in schoolchildren. Many studies determine the associations between school environments and children's oral behaviour and caries. Providing fresh fruits with school meals is associated with low sweets consumption and low caries levels. Kurisanani wants to address school oral health-related environments. We suggest a project to stimulate the stalls to offer healthier food options.

### **Referrals to hospital and special needs children**

During the medical camp one teenager was immediately admitted to the local hospital with the clinical diagnosis of tuberculosis in the lungs, with a very low oxygen saturation of 79%.

Eleven children were referred to specialists in hospitals; three of them for an evaluation of their heart, one teenager to a kidney specialist, 3 children for diagnostics of a deep anaemia, and others for hearing problems and congenital abnormalities.

For the disabled children, further follow-up is considered necessary, as there is lack of care for this specific group of children, and in addition support and training of the parents. During the medical camp in 2024, 12 children were identified with disabilities, of whom three with severe handicaps due to kernicterus. Kernicterus is a preventable life-long neurologic syndrome caused by severe and untreated hyperbilirubinemia during the neonatal period. High levels of bilirubin are toxic to the brain of the developing newborn. Features of kernicterus may include

choreoathetoid cerebral palsy, mental retardation, sensorineural hearing loss, and gaze paresis. MCC shared the knowledge to the Mamas for prevention of kernicterus by early screening of babies with yellow eyes, severe jaundice, lethargy, and poor feeding, who need prompt treatment.

## Awareness health and treatment

The mission of MCC medical camps is not only limited to providing healthcare, but extends to spreading health awareness to the caregivers and children. This establishes a culture that promotes disease prevention and the adoption of a healthy lifestyle. MCC acknowledges the importance of the active role the Mamas can play in local health promotion.

Table 3: Treatment among all children per day

	Total		Day 1		Day 2		Day 3		Day 4		Day 5	
	1146		n= 198		Total 187	n= 232		Total 275	Total 254			
	N	%	n	%	n	%	n	%	n	%	n	%
ferro	16	1%	7	4%	2	1%	4	2%	2	1%	1	0%
mother iron	12	1%	1	1%	3	2%	3	1%	2	1%	3	1%
multivitamins	430	38%	71	36%	81	43%	87	38%	88	32%	103	41%
anti-worm	550	48%	114	58%	89	48%	110	47%	117	43%	120	47%
acute worm	247	22%	22	11%	40	21%	48	21%	80	29%	57	22%
anti-lice	1	0%	0	0%	0	0%	0	0%	0	0%	1	0%
anti-scabies	32	3%	2	1%	6	3%	7	3%	7	3%	10	4%
niclosamide	1	0%	0	0%	0	0%	0	0%	1	0%	0	0%
scabies soap	20	2%	1	1%	4	2%	7	3%	3	1%	5	2%
amoxicillin	33	3%	6	3%	6	3%	13	6%	6	2%	2	1%
augmentin	9	1%	5	3%	1	1%	1	0%	1	0%	1	0%
2e lijns antibiotica	19	2%	1	1%	6	3%	1	0%	5	2%	6	2%
paracetamol	14	1%	4	2%	4	2%	4	2%	1	0%	1	0%
inhaler	1	0%	0	0%	0	0%	0	0%	1	0%	0	0%
co-trimoxazol	4	0%	1	1%	0	0%	1	0%	2	1%	0	0%
ORS	7	1%	2	1%	2	1%	2	1%	0	0%	1	0%
eardrops	4	0%	0	0%	2	1%	1	0%	0	0%	1	0%
nystatine	9	1%	0	0%	4	2%	2	1%	3	1%	0	0%
hydrocortisone cream	24	2%	9	5%	0	0%	3	1%	6	2%	6	2%
dactarin cream	48	4%	6	3%	7	4%	9	4%	15	5%	11	4%
iodine	1	0%	0	0%	0	0%	1	0%	0	0%	0	0%
fusidin cream	14	1%	1	1%	7	4%	3	1%	2	1%	1	0%
neutral cream	1	0%	1	1%	0	0%	0	0%	0	0%	0	0%
griseofulvine	26	2%	2	1%	10	5%	9	4%	2	1%	3	1%
eyedrops	35	3%	11	6%	7	4%	13	6%	3	1%	1	0%

## Conclusion

This year's exploratory mission camp could be the start of a long term health planning process and collaboration with the local clinics and Kurisanani.

MCC concludes that there is a need to continue the medical camps in Vuwani district. Basic healthcare infrastructure is in principle available in Vhembe district and could benefit from an effective collaboration between Kurisanani and the local health centers. MCC felt a mutual trust and responsibility for establishing a common ground for future cross team collaboration. A future medical mission could strengthen the mutual collaboration of the three parties with an active roles of



the Mamas and the opportunity of catch up vaccinations and deworming by the local nurses for an substantial amount of children.

In the meantime, MCC's recommendations to Kurisanani St Joseph s are as follows:

1.Nursery build up

- Nutrition Support Programme: Future health of young children can be improved by providing school lunches in the nursery/drop centre to be established and brought back in operation on the Saint Joseph's parish.
- Deworming: Deworming should become a part of the nursery programme, which it being offered twice a year.

2.Investment in basic health care training of the Kinderfonds Mama team members of St Josephs and future role in the health collaboration

3.Setting up an infrastructure for the special cases /MCC referrals in care of Kurisanani (shared responsibility)

We are very grateful for all work performed by Father Gregory, Father Arizon, Baphly, Father Chris the three Mamas of Kinderfonds Mamas, the six local nurses of the nearby clinics and all other translators and helpers during the medical camp. We could not have performed our work without their presence and hard work. We are also very grateful for all the effort made by Kurisanani to support the children which will be referred to hospital care in the coming weeks and months

Judit Wesseling and Ines von Rosenstiel



## Annex A

### Summary of checked children per day, age and gender

Age	Total		Day 1		Day 2		Day 3		Day 4		Day 5	
	1146		Total= 198		Total= 187		Total= 232		Total= 275		Total= 254	
	N	%	n	%	n	%	n	%	n	%	n	%
<=1 year	136	12%	16	8%	25	13%	41	18%	26	9%	28	11%
>1 and <5 years	381	33%	70	35%	75	40%	92	40%	72	26%	72	28%
<5 years	482	42%	83	42%	94	50%	126	54%	89	32%	90	35%
>=5 and <=10 years	503	44%	95	48%	72	39%	86	37%	132	48%	118	46%
>10 years	161	14%	20	10%	21	11%	20	9%	54	20%	46	18%
<b>Gender</b>												
Boy	577	50%	104	53%	89	48%	117	50%	140	51%	127	50%
Girl	567	49%	94	47%	98	52%	114	49%	134	49%	127	50%

### Prevalence of weight/age at or under P3 (underweight) per day by age and gender

	Total		Day 1		Day 2		Day 3		Day 4		Day 5	
	1146		Total= 198		Total= 187		Total= 232		Total= 275		Total= 254	
	N	%	n	%	n	%	n	%	n	%	n	%
Underweight	57	5%	17	9%	11	6%	9	4%	10	4%	10	4%
No underweight	919	80%	160	81%	152	81%	202	87%	211	77%	194	76%
Unknown	170	15%	21	11%	24	13%	21	9%	54	20%	50	20%
<b>Underweight children per age</b>												
<=1 year	3	2%	1	6%	0	0%	0	0%	1	4%	1	4%
>1 and <5 years	32	8%	9	13%	8	11%	5	5%	3	4%	7	10%
<5 years	33	7%	10	12%	8	9%	5	4%	3	3%	7	8%
>=5 and <=10 years	24	5%	7	8%	3	4%	4	5%	7	5%	3	3%
>10 years	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
<b>Underweight children per gender</b>												
Boy	31	54%	7	41%	6	55%	6	67%	5	50%	7	70%
Girl	26	46%	10	59%	5	45%	3	33%	5	50%	3	30%

### Prevalence of length/age at or under P3 (stunting) per day by age and gender

	Total		Day 1		Day 2		Day 3		Day 4		Day 5	
	1146		Total= 198		Total= 187		Total= 232		Total= 275		Total= 254	
	N	%	n	%	n	%	n	%	n	%	n	%
Stunting	163	14%	24	12%	45	24%	34	15%	22	8%	38	15%
No stunting	981	86%	174	88%	142	76%	197	85%	253	92%	215	85%
Unknown	2	0%	0	0%	0	0%	1	0%	0	0%	1	0%
<b>Stunting children per age</b>												
<=1 year	40	29%	2	13%	6	24%	13	32%	6	23%	13	46%
>1 and <5 years	80	21%	15	21%	26	35%	15	16%	6	8%	18	25%
<5 years	108	23%	17	20%	30	32%	26	21%	9	10%	26	29%
>=5 and <=10 years	37	7%	6	6%	9	13%	5	6%	10	8%	7	6%
>10 years	18	11%	1	5%	6	29%	3	15%	3	6%	5	11%
<b>Stunting children per gender</b>												
Boy	95	58%	11	46%	29	64%	18	53%	12	55%	25	66%
Girl	68	42%	13	54%	16	36%	16	47%	10	45%	13	34%

Prevalence of weight/length at or under P3 (wasting) per day by age and gender

	Total		Day 1		Day 2		Day 3		Day 4		Day 5	
	1146		Total= 198		Total= 187		Total= 232		Total= 275		Total= 254	
	N	%	n	%	n	%	n	%	n	%	n	%
Wasting	18	2%	5	3%	0	0%	1	0%	7	3%	5	2%
No wasting	699	61%	117	59%	135	72%	164	71%	142	52%	141	56%
Unknown	429	37%	76	38%	52	28%	67	29%	126	46%	108	43%
<b>Wasting children per age</b>												
<=1 year	1	1%	0	0%	0	0%	0	0%	0	0%	1	4%
>1 and <5 years	9	2%	2	3%	0	0%	0	0%	4	6%	3	4%
<5 years	9	2%	2	2%	0	0%	0	0%	4	4%	3	3%
>=5 and <=10 years	8	3%	3	8%	0	0%	1	3%	3	5%	1	2%
>10 years	1	20%	0	0%	0	0%	0	0%	0	0%	1	50%
<b>Wasting children per gender</b>												
Boy	11	61%	4	80%	0	0%	1	100%	2	29%	4	80%
Girl	7	39%	1	20%	0	0%	0	0%	5	71%	1	20%

Prevalence of anaemia per day by age and gender

	Total		Day 1		Day 2		Day 3		Day 4		Day 5	
	1146		Total= 198		Total= 187		Total= 232		Total= 275		Total= 254	
	N	%	n	%	n	%	n	%	n	%	n	%
Anaemia	311	27%	67	34%	61	33%	62	27%	75	27%	46	18%
No anaemia	639	56%	128	65%	118	63%	166	72%	145	53%	82	32%
Unknown	194	17%	1	1%	8	4%	4	2%	55	20%	126	50%
Hb <5.0 mmol	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
<b>Anaemia per age</b>												
<=1 year	39	29%	4	25%	9	36%	9	22%	8	31%	9	32%
>1 and <5 years	121	32%	26	37%	27	36%	21	23%	27	38%	20	28%
<5 years	148	31%	29	35%	33	35%	29	23%	32	36%	25	28%
>=5 and <=10 years	129	26%	30	32%	19	26%	27	31%	33	25%	20	17%
>10 years	34	21%	8	40%	9	43%	6	30%	10	19%	1	2%
<b>Anaemia per gender</b>												
Boy	157	50%	32	48%	32	52%	31	50%	37	49%	25	54%
Girl	153	49%	35	52%	29	48%	31	50%	37	49%	21	46%

Prevalence preventive anti-worm treatment in the last half-year per day by age and gender

	Total		Day 1		Day 2		Day 3		Day 4		Day 5	
	1146		Total= 198		Total= 187		Total= 232		Total= 275		Total= 254	
	N	%	n	%	n	%	n	%	n	%	n	%
Anti-worm	170	15%	39	20%	31	17%	36	16%	33	12%	31	12%
No anti-worm	976	85%	159	80%	156	83%	196	84%	242	88%	223	88%
<b>Anti-worm per age</b>												
<=1 year	86	23%	18	26%	15	20%	20	22%	19	26%	14	19%
>1 and <5 years	106	22%	20	24%	20	21%	27	21%	22	25%	17	19%
<5 years	54	11%	15	16%	10	14%	8	9%	7	5%	14	12%
>=5 and <=10 years	10	6%	4	20%	1	5%	1	5%	4	7%	0	0%
>10 years	86	23%	18	26%	15	20%	20	22%	19	26%	14	19%

Disease prevalence among all children per day

	Total		Day 1		Day 2		Day 3		Day 4		Day 5	
	1146		Total= 198		Total= 187		Total= 232		Total= 275		Total= 254	
	N	%	n	%	n	%	n	%	n	%	n	%
Underweight	57	5%	17	9%	11	6%	9	4%	10	4%	10	4%
Stunting	163	14%	24	12%	45	24%	34	15%	22	8%	38	15%
Wasting	18	2%	5	3%	0	0%	1	0%	7	3%	5	2%
Anaemia	311	27%	67	34%	61	33%	62	27%	75	27%	46	18%
HIV pos.	1	0%	0	0%	0	0%	0	0%	0	0%	1	0%
AIDS	1	0%	0	0%	0	0%	0	0%	1	0%	0	0%
Malaria (suspected)	3	0%	0	0%	1	1%	0	0%	2	1%	0	0%
vitamin deficit (clinical signs)	28	2%	4	2%	5	3%	4	2%	1	0%	14	6%
HIV/AIDs confirmed	3	0%	0	0%	1	1%	1	0%	0	0%	1	0%
pneumonia (clinical)	30	3%	5	3%	7	4%	6	3%	9	3%	3	1%
tuberculosis (clinical)	1	0%	0	0%	1	1%	0	0%	0	0%	0	0%
bronchitis	4	0%	3	2%	1	1%	0	0%	0	0%	0	0%
BHR/asthma	8	1%	2	1%	0	0%	3	1%	3	1%	0	0%
Respir. Other	8	1%	1	1%	3	2%	4	2%	0	0%		
dysentery	1	0%	0	0%	0	0%	1	0%	0	0%	0	0%
dehydration : acute diarrhoea	2	0%	2	1%	0	0%	0	0%	0	0%	0	0%
dehydration : chronic diarrhoea	1	0%	0	0%	1	1%	0	0%	0	0%	0	0%
diarrhoea without dehydration	9	1%	0	0%	1	1%	4	2%	1	0%	3	1%
constipation	4	0%	1	1%	1	1%	2	1%	0	0%	0	0%
active worm infection	226	20%	22	11%	39	21%	46	20%	75	27%	44	17%
GI other	10	1%	3	2%	2	1%	3	1%	2	1%		
otitis media acuta	17	1%	1	1%	4	2%	7	3%	4	1%	1	0%
otitis media with effusion	18	2%	1	1%	2	1%	2	1%	7	3%	6	2%
otitis externa	1	0%	0	0%	1	1%	0	0%	0	0%	0	0%
(adeno)tonsillitis	11	1%	3	2%	1	1%	3	1%	2	1%	2	1%
candida stomatitis	4	0%	0	0%	2	1%	0	0%	1	0%	1	0%
sinusitis	3	0%	1	1%	0	0%	1	0%	0	0%	1	0%
hearing impairment	6	1%	2	1%	0	0%	4	2%	0	0%	0	0%
other	17	1%	6	3%	0	0%	3	1%	5	2%	3	1%
cariës n.o.s.	149	13%	28	14%	24	13%	32	14%	37	13%	28	11%
pain n.o.s	1	0%	1	1%	0	0%	0	0%	0	0%	0	0%
fluorosis	1	0%	0	0%	1	1%	0	0%	0	0%	0	0%
caries with pain	2	0%	1	1%	0	0%	1	0%	0	0%	0	0%
wounds n.o.s.	1	0%	0	0%	1	1%	0	0%	0	0%	0	0%
eczema n.o.s.	18	2%	5	3%	4	2%	0	0%	3	1%	6	2%
dermatomycosis	29	3%	6	3%	5	3%	6	3%	5	2%	7	3%
Impetigo/furunculosis	12	1%	1	1%	4	2%	3	1%	1	0%	3	1%
scabies	36	3%	3	2%	6	3%	8	3%	9	3%	10	4%
Tinea Capitis	56	5%	1	1%	15	8%	15	6%	16	6%	9	4%
wounds infected,	2	0%	0	0%	2	1%	0	0%	0	0%	0	0%
Burn wound fresh	1	0%	0	0%	0	0%	0	0%	1	0%	0	0%
Skin other (psoriasis etc)	35	3%	9	5%	8	4%	7	3%	5	2%	6	2%
psychomotoric retardation	12	1%	2	1%	1	1%	5	2%	1	0%	3	1%
hypertonia	3	0%	0	0%	0	0%	2	1%	1	0%	0	0%
hypotonia	2	0%	1	1%	1	1%	0	0%	0	0%	0	0%
migraine/headache	7	1%	1	1%	3	2%	0	0%	1	0%	2	1%
Neuromusc other	7	1%	2	1%	0	0%	2	1%	3	1%		
pathological murmur (suspected)	4	0%	0	0%	0	0%	1	0%	3	1%	0	0%
Cardio other	1	0%	1	1%	0	0%	0	0%				
refractory problem	2	0%	1	1%	1	1%	0	0%	0	0%	0	0%
strabismus	8	1%	3	2%	2	1%	1	0%	2	1%	0	0%
keratoconjunctivitis	39	3%	5	3%	5	3%	11	5%	10	4%	8	3%
eye other	16	1%	7	4%	2	1%	5	2%	1	0%	1	0%
diabetes	1	0%	0	0%	0	0%	0	0%	1	0%	0	0%
Sickle Cell	27	2%	3	2%	3	2%	6	3%	11	4%	4	2%
endocrin other	1	0%	1	1%	0	0%	0	0%	0	0%	0	0%
menorrhagia	4	0%	0	0%	2	1%	0	0%	1	0%	1	0%

	Total		Day 1		Day 2		Day 3		Day 4		Day 5	
	1146		Total= 198		Total= 187		Total= 232		Total= 275		Total= 254	
	N	%	n	%	n	%	n	%	n	%	n	%
gyn other	1	0%	0	0%	0	0%	0	0%	1	0%	0	0%
urinary infection	1	0%	0	0%	1	1%	0	0%	0	0%	0	0%
urogen other	1	0%	0	0%	0	0%	0	0%	0	0%	1	0%
chronic kidney path.	1	0%	0	0%	0	0%	0	0%	0	0%	1	0%
artralgia n.o.s.	1	0%	0	0%	0	0%	1	0%	0	0%	0	0%
skeletal other	3	0%	0	0%	1	1%	0	0%	1	0%	1	0%
hernia(umbilical etc)	19	2%	0	0%	6	3%	1	0%	4	1%	8	3%

#### Treatment among all children per day

	Total		Day 1		Day 2		Day 3		Day 4		Day 5	
	1146		Total= 198		Total= 187		Total= 232		Total= 275		Total= 254	
	N	%	n	%	n	%	n	%	n	%	n	%
ferro	16	1%	7	4%	2	1%	4	2%	2	1%	1	0%
mother iron	12	1%	1	1%	3	2%	3	1%	2	1%	3	1%
multivitamins	430	38%	71	36%	81	43%	87	38%	88	32%	103	41%
anti-worm	550	48%	114	58%	89	48%	110	47%	117	43%	120	47%
acute worm	247	22%	22	11%	40	21%	48	21%	80	29%	57	22%
anti-lice	1	0%	0	0%	0	0%	0	0%	0	0%	1	0%
anti-scabies	32	3%	2	1%	6	3%	7	3%	7	3%	10	4%
niclosamide	1	0%	0	0%	0	0%	0	0%	1	0%	0	0%
scabies soap	20	2%	1	1%	4	2%	7	3%	3	1%	5	2%
amoxicillin	33	3%	6	3%	6	3%	13	6%	6	2%	2	1%
augmentin	9	1%	5	3%	1	1%	1	0%	1	0%	1	0%
2e lijns antibiotica	19	2%	1	1%	6	3%	1	0%	5	2%	6	2%
paracetamol	14	1%	4	2%	4	2%	4	2%	1	0%	1	0%
inhaler	1	0%	0	0%	0	0%	0	0%	1	0%	0	0%
co-trimoxazol	4	0%	1	1%	0	0%	1	0%	2	1%	0	0%
ORS	7	1%	2	1%	2	1%	2	1%	0	0%	1	0%
eardrops	4	0%	0	0%	2	1%	1	0%	0	0%	1	0%
nystatine	9	1%	0	0%	4	2%	2	1%	3	1%	0	0%
hydrocortisone cream	24	2%	9	5%	0	0%	3	1%	6	2%	6	2%
dactarin cream	48	4%	6	3%	7	4%	9	4%	15	5%	11	4%
iodine	1	0%	0	0%	0	0%	1	0%	0	0%	0	0%
fusidin cream	14	1%	1	1%	7	4%	3	1%	2	1%	1	0%
neutral cream	1	0%	1	1%	0	0%	0	0%	0	0%	0	0%
griseofulvine	26	2%	2	1%	10	5%	9	4%	2	1%	3	1%
eyedrops	35	3%	11	6%	7	4%	13	6%	3	1%	1	0%

#### Follow-up of all children per day

	Total		Day 1		Day 2		Day 3		Day 4		Day 5	
	1146		Total= 198		Total= 187		Total= 232		Total= 275		Total= 254	
	N	%	n	%	n	%	n	%	n	%	n	%
Dentist	2	0%	0	0%	2	1%	0	0%	0	0%	0	0%
Specialist in hospital	11	1%	3	2%	3	2%	1	0%	3	1%	1	0%
Revisit	2	0%	0	0%	0	0%	2	1%	0	0%	0	0%
Social program	1	0%	1	1%	0	0%	0	0%	0	0%	0	0%
Bloodtest after 3 months	5	0%	0	0%	2	1%	2	1%	0	0%	1	0%
Other...	1	0%	1	1%	0	0%	0	0%	0	0%	0	0%