Medical Checks for Children

Medical Report Tzaneen 2024

Ines von Rosenstiel
16 November 2024

Introduction

From October 18th until October 26 th Medical Checks for Children (MCC) visited Tzaneen, Limpopo province, for the second time. The MCC team checked and treated free of cost 1122 children in 5 days.

The medical checks were organized in close cooperation with Kurisanani St Scholastica and Kinderfonds Mamas. Kurisanani St Scholasticais 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 Scholastica 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; and local transport villages
- Give follow-up for the referred children: arranging hospital visits.

The MCC team consisted of ten members from The Netherlands:
Ines von Rosenstiel (medical- mission leader, paediatrician),
Véronique Schram (organizational mission leader, nurse), Eric Duthler(family physician), Leontine Groeneveldt (family physician), Judith Polak (tropical doctor in training), Marjolein Hoekstra (youth health care physician), Leonore Wever (resident pediatrics), Yvonne Verdonk (pediatric nurse), (Irene Maris (lawyer), Miryam Maghri (pediatric nurse), Esther Noordhoek (manager), Hester Krouwel (medical assistant);
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 Tzaneen, treat the children if necessary and to advise Kurisanani St Scholastica 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 carrousel:

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 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).

Results Medical Camp in Tzaneen district

During the first medical camp in Tzaneen MCC saw in total 1121 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

Table 1: Number of checked children per day

Check days	30-09-24	01-10-24	02-10-24	03-10-24	04-10-24	Total
Maandanakulu	0	0	258	0	0	258
Moila	0	0	0	0	180	180
Mudikhomu	0	65	0	0	0	65
St Scholastica	219	136	0	0	0	355
Tshivhuyuni	0	0	0	264	0	264
Total	**219**	**201**	**258**	**264**	**180**	**1122**

In the announcement of the medical camp, children below the age of 12 years were invited to come with their caretakers. Of the 1121 children, 11% was younger than 1 year of age, 37% were between 1 and 5 years old, given a total of 41% was below the age of 5 years, 58 % of the children was between 5 and 10 years of age, and only 4 children were 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. Almost all children brought a caretaker (parent, grandmother/father, sister/brother).; and one

teacher was representing one class of children. 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 (34 % for all children and 37 % 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 (36 %) 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=11) for < 5 years) compared < 0.3% in the Netherlands (< 5 years) (WHO, 2020). Remarkable another 8 children above 5 years were also wasted (2 %).
- Moderate prevalence of acute worm infection (9 %, n=101) and 74% (n=834) were given preventive deworming. Thus only26 % did receive worm treatment in the last 6 months.
- Other frequent diagnoses: caries (19%, n=211children), keratoconjunctivitis (4%, 47 children), pneumonia (3%, 31 children), clinical vitamin deficiencies (5%, 52 children) and various skin diseases (tinea capitis (11%, 118 children), dermatomycosis (2%, 21 children), scabies (2%, 20 children).
- Several children with functional heart murmurs were identified, 4 children with a suspected pathological murmur are sent to the cardiologist for further diagnosis and treatment.
- 10 children with physical and/or mental disabilities came to the medical camp.
- Through detection of MCC 46 referrals were served via the local clinics to the nearby hospitals and will benefit from further follow-up. 8 children will be followed up by the Mamas of Father Chris

Treatment
Most frequent treatment given to the children was deworming (76%), multivitamin (45%), antibiotics (6%), various cremes for skin diseases (8%) and anti-scabies treatments (1%).

Table 2: Summary of most frequent findings

	Total		Maandana-kulu		Moila		Mudikhomu		St Scholastica		Tshivhuyuni	
	1122		Total= 258		Total = 180		Total= 1122		Total= 258		Total= 180	
	N	%	n	%	n	%	n	%	n	%	n	%
Underweight	55	5%	10	4%	7	4%	3	5%	19	5%	16	6%
Stunting	136	12%	19	7%	15	8%	12	18%	38	11%	52	20%
Wasting	19	2%	2	1%	1	1%	2	3%	5	1%	9	3%
Anaemia	378	34%	78	30%	64	36%	15	23%	118	33%	103	39%
HIV pos.	6	1%	1	0%	2	1%	0	0%	0	0%	3	1%
vitamin deficit (clinical signs)	52	5%	12	5%	14	8%	2	3%	14	4%	10	4%
HIV/AIDs confirmed	3	0%	0	0%	1	1%	0	0%	1	0%	1	0%
pneumonia (clinical)	31	3%	5	2%	4	2%	0	0%	8	2%	14	5%
BHR/asthma	16	1%	4	2%	3	2%	1	2%	1	0%	7	3%
active worm infection	101	9%	25	10%	12	7%	11	17%	25	7%	28	11%
otitis media acuta	8	1%	2	1%	0	0%	0	0%	4	1%	2	1%
otitis media with effusion	6	1%	0	0%	1	1%	1	2%	3	1%	1	0%
(adeno)tonsillitis	16	1%	4	2%	0	0%	0	0%	5	1%	7	3%
other	22	2%	4	2%	5	3%	3	5%	9	3%	1	0%
cariës n.o.s.	211	19%	35	14%	36	20%	14	22%	93	26%	33	13%
caries with pain	28	2%	6	2%	3	2%	3	5%	12	3%	4	2%
dermatomycosis	21	2%	5	2%	3	2%	1	2%	4	1%	8	3%
scabies	20	2%	12	5%	2	1%	0	0%	0	0%	6	2%
Tinea Capitis	118	11%	37	14%	24	13%	5	8%	25	7%	27	10%
Skin other (psoriasis etc)	12	1%	6	2%	1	1%	1	2%	1	0%	3	1%
psychomotoric retardation	8	1%	4	2%	1	1%	0	0%	2	1%	1	0%
physiological murmer	10	1%	4	2%	0	0%	0	0%	4	1%	2	1%
keratoconjunctivitis	47	4%	10	4%	7	4%	4	6%	18	5%	8	3%
eye other	14	1%	2	1%	2	1%	4	6%	4	1%	2	1%
Sickle Cell	14	1%	5	2%	2	1%	1	2%	6	2%	0	0%
hernia(umbilical etc)	24	2%	6	2%	4	2%	1	2%	3	1%	10	4%

Malnutrition

Of the children 1-5 years old seen in the medical camp 7% showed underweight, 22% stunting and 2% wasting. Especially the prevalence of stunting in children under 1 year of age is remarkably high (36 %). 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.

During the medical camp we gave nutritional advice to all children and caretakers, with emphasis on vegetable intake and vitamin C. Kurisanani St Scholastica 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

34% of all checked children were suffering from anaemia, predominantly in the 0-to-5-year age group (37 %). Only two 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 Tzaneen district, the high prevalence of anaemia might be due to:
- a moderate incidence of acute worm infections (11%).
- 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 by MCC was provided to 65% (n=727) children. In 11 % (n=120) 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 47 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 non-infectious inflammatory condition and can result in a severe ophthalmic complication associated with atopic dermatitis. It requires effective treatment to prevent progressive vision loss. We advised and handed out some sunglasses and treated the children with vernal keratoconjunctivitis with allergex eyedrops.

Dental problems

We identified 19 % 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. Father Chris wants to address school oral health-related environments. We suggest a project to stimulate the stalls to offer healthier food options and workshops for the caregivers and children.

Referrals to hospital and special needs children

Eight children were referred to specialists in hospitals.

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, 8 children were identified with disabilities, of whom three with severe handicaps due to cerebral palsy.

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		Maandanakulu		Moila		Mudikhomu		St Scholastica		Tshivhuyuni	
	1122		Total= 258		Total = 180		Total= 1122		Total= 258		Total= 180	
	N	%	n	%	n	%	n	%	n	%	n	%
ferro	16	1%	2	1%	5	3%	0	0%	0	0%	9	3%
mother iron	9	1%	1	0%	0	0%	0	0%	4	1%	4	2%
multivitamins	509	45%	109	42%	82	46%	32	49%	155	44%	131	50%
anti-worm	727	65%	175	68%	126	70%	33	51%	238	67%	155	59%
acute worm	120	11%	26	10%	12	7%	12	18%	41	12%	29	11%
anti-lice	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
anti-scabies	12	1%	7	3%	1	1%	0	0%	0	0%	4	2%
niclosamide	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
praziquantel	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
scabies soap	13	1%	5	2%	1	1%	0	0%	0	0%	7	3%
amoxicillin	43	4%	7	3%	4	2%	0	0%	12	3%	20	8%
augmentin	17	2%	6	2%	2	1%	0	0%	5	1%	4	2%
2e lijns antibiotica	6	1%	0	0%	2	1%	0	0%	1	0%	3	1%
malaria treatment	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
ivermectine for lice	1	0%	1	0%	0	0%	0	0%	0	0%	0	0%
paracetamol	5	0%	2	1%	0	0%	0	0%	1	0%	2	1%
inhaler	10	1%	2	1%	2	1%	2	3%	1	0%	3	1%
metranidazol	1	0%	1	0%	0	0%	0	0%	0	0%	0	0%
co-trimoxazol	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
ceftriaxon	1	0%	0	0%	0	0%	0	0%	1	0%	0	0%
AB urine infection	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
ORS	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
eardrops	1	0%	1	0%	0	0%	0	0%	0	0%	0	0%
nystatine	1	0%	1	0%	0	0%	0	0%	0	0%	0	0%
mupirocine=Bactroban	5	0%	4	2%	0	0%	0	0%	0	0%	1	0%
hydrocortisone cream	22	2%	8	3%	3	2%	2	3%	3	1%	6	2%
dactarin cream	65	6%	17	7%	19	11%	1	2%	5	1%	23	9%
dactacort cream	2	0%	1	0%	0	0%	0	0%	0	0%	1	0%
iodine	1	0%	0	0%	0	0%	0	0%	0	0%	1	0%
fusidin cream	5	0%	2	1%	2	1%	1	2%	0	0%	0	0%
sudo cream	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
neutral cream	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
griseofulvine	55	5%	19	7%	8	4%	4	6%	18	5%	6	2%
eyedrops	42	4%	9	3%	6	3%	5	8%	13	4%	9	3%

Conclusion

MCC believes in working efficiently and truly under the principle of locally led action. This cannot be achieved overnight, and we were very positively surprised about the established close ties between Father Chris and the nurses of the local health centres after our exploratory mission in 2024. This year's second mission camp was already the next step of a long-term health planning process and collaboration with the local clinics and St Scholastica. This successful implementation of partnerships could be even more extended to the fact that the local nurses could adopt the medical carousel and medical checks by themselves in the near future. In that way MCC would empower others, instead of expanding their own footprint and visibility. The MCC volunteers are very happy to help them with a start-up donation of hemocue equipment and thereby (co)built-up local capacity for the community.

MCC’s recommendations to Father Chris and kurisani St Scholastica after this year's mission are as follows:

1.The development of a programme(workshops) to improve dental care for the children in the community, with a special focus on promoting healthy foods

2. Investigation of the feasibility of a local implementation platform for a diverse set of partners to work on basic health care and prevention via the adopted medical carousel, to become more sustainable efficient, impactful and ultimately drive truly locally led development.

3. A logistic pathway for the special cases referrals and follow up under shared responsibility of kurisanani St scholastica and MCC

We are very grateful for all work performed by Father Chris and his team 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 St Scholastica to support the children which will be referred to hospital care in the coming weeks and months

Ines von Rosenstiel

Annex A

Summary of checked children per day, age and gender

	Total		Maandanakulu		Moila		Mudikhomu		St Scholastica		Tshivhuyuni	
	1122		Total= 258		Total= 180		Total= 65		Total= 355		Total= 264	
Age	**N**	**%**	**n**	**%**	**n**	**%**	**n**	**%**	**n**	**%**	**n**	**%**
<=1 year	122	11%	22	9%	17	9%	8	12%	25	7%	50	19%
>1 and <5 years	410	37%	97	38%	35	19%	26	40%	116	33%	136	52%
<5 years	465	41%	105	41%	47	26%	28	43%	125	35%	160	61%
>=5 and <=10 years	653	58%	152	59%	133	74%	37	57%	227	64%	104	39%
>10 years	4	0%	1	0%	0	0%	0	0%	3	1%	0	0%
Gender												
Boy	544	48%	133	52%	73	41%	28	43%	178	50%	132	50%
Girl	575	51%	125	48%	107	59%	37	57%	176	50%	130	49%

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

	Total		Maandanakulu		Moila		Mudikhomu		St Scholastica		Tshivhuyuni	
	1122		Total= 258		Total= 180		Total= 1122		Total= 258		Total= 180	
	N	**%**	**n**	**%**	**n**	**%**	**n**	**%**	**n**	**%**	**n**	**%**
Underweight	55	5%	10	4%	7	4%	3	5%	19	5%	16	6%
No underweight	1057	94%	245	95%	170	94%	62	95%	332	94%	248	94%
Unknown	8	1%	3	1%	1	1%	0	0%	4	1%	0	0%
Underweight children per age												
<=1 year	12	10%	3	14%	1	6%	2	25%	2	8%	4	8%
>1 and <5 years	29	7%	5	5%	1	3%	2	8%	9	8%	12	9%
<5 years	33	7%	7	7%	2	4%	2	7%	9	7%	13	8%
>=5 and <=10 years	22	3%	3	2%	5	4%	1	3%	10	4%	3	3%
>10 years	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Underweight children per gender												
Boy	29	53%	6	60%	2	29%	0	0%	9	47%	12	75%
Girl	26	47%	4	40%	5	71%	3	100%	10	53%	4	25%

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

	Total		Maandanakulu		Moila		Mudikhomu		St Scholastica		Tshivhuyuni	
	1122		Total= 258		Total= 180		Total= 1122		Total= 258		Total= 180	
	N	**%**	**n**	**%**	**n**	**%**	**n**	**%**	**n**	**%**	**n**	**%**
Stunting	136	12%	19	7%	15	8%	12	18%	38	11%	52	20%
No stunting	978	87%	237	92%	162	90%	53	82%	314	88%	212	80%
Unknown	4	0%	2	1%	1	1%	0	0%	1	0%	0	0%
Stunting children per age												
<=1 year	44	36%	2	9%	6	35%	5	63%	10	40%	21	42%
>1 and <5 years	89	22%	13	14%	7	20%	10	38%	25	22%	34	25%
<5 years	108	23%	13	13%	11	23%	11	39%	27	22%	46	29%
>=5 and <=10 years	26	4%	5	3%	4	3%	1	3%	10	4%	6	6%
>10 years	2	67%	1	100%	0	0%	0	0%	0	0%	0	0%
Stunting children per gender												
Boy	58	43%	6	32%	6	40%	5	42%	15	39%	26	50%
Girl	78	57%	13	68%	9	60%	7	58%	23	61%	26	50%

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

	Total		Maandanakulu		Moila		Mudikhomu		St Scholastica		Tshivhuyuni	
	1122		Total= 258		Total= 180		Total= 1122		Total= 258		Total= 180	
	N	%	n	%	n	%	n	%	n	%	n	%
Wasting	19	2%	2	1%	1	1%	2	3%	5	1%	9	3%
No wasting	863	77%	174	67%	155	86%	56	86%	246	69%	232	88%
Unknown	235	21%	82	32%	21	12%	7	11%	103	29%	22	8%
Wasting children per age												
<=1 year	5	4%	1	5%	0	0%	0	0%	1	4%	3	6%
>1 and <5 years	10	2%	1	1%	0	0%	1	4%	2	2%	6	4%
<5 years	11	2%	2	2%	0	0%	1	4%	2	2%	6	4%
>=5 and <=10 years	8	2%	0	0%	1	1%	1	3%	3	2%	3	4%
>10 years	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Wasting children per gender												
Boy	9	47%	2	100%	0	0%	0	0%	2	40%	5	56%
Girl	10	53%	0	0%	1	100%	2	100%	3	60%	4	44%

Prevalence of anaemia per day by age and gender

	Total		Maandanakulu		Moila		Mudikhomu		St Scholastica		Tshivhuyuni	
	1122		Total= 258		Total= 180		Total= 1122		Total= 258		Total= 180	
	N	%	n	%	n	%	n	%	n	%	n	%
Anaemia	378	34%	78	30%	64	36%	15	23%	118	33%	103	39%
No anaemia	730	65%	178	69%	112	62%	50	77%	231	65%	159	60%
Unknown	13	1%	2	1%	3	2%	0	0%	6	2%	2	1%
Hb <5,0 mmol	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Anaemia per age												
<=1 year	38	31%	3	14%	4	24%	1	13%	11	44%	19	38%
>1 and <5 years	151	37%	29	30%	14	40%	5	19%	39	34%	64	47%
<5 years	172	37%	32	30%	18	38%	5	18%	45	36%	72	45%
>=5 and <=10 years	204	31%	45	30%	46	35%	10	27%	72	32%	31	30%
>10 years	2	50%	1	100%	0	0%	0	0%	0	0%	0	0%
Anaemia per gender												
Boy	185	49%	43	55%	28	44%	9	60%	59	50%	46	45%
Girl	192	51%	35	45%	36	56%	6	40%	59	50%	56	54%

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

	Total		Maandanakulu		Moila		Mudikhomu		St Scholastica		Tshivhuyuni	
	1122		Total= 258		Total= 180		Total= 1122		Total= 258		Total= 180	
	N	%	n	%	n	%	n	%	n	%	n	%
Anti-worm	288	26%	64	25%	52	29%	18	28%	87	25%	67	25%
No anti-worm	834	74%	194	75%	128	71%	47	72%	268	75%	197	75%
Anti-worm per age												
<=1 year	161	39%	43	44%	16	46%	7	27%	44	38%	51	38%
>1 and <5 years	180	39%	47	45%	21	45%	8	29%	46	37%	58	36%
<5 years	108	17%	17	11%	31	23%	10	27%	41	18%	9	9%
>=5 and <=10 years	161	39%	43	44%	16	46%	7	27%	44	38%	51	38%
>10 years	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%

Disease prevalence among all children per day

	Total		Maandana-kulu		Moila		Mudikhomu		St Scholastica		Tshivhuyuni	
	1122		Total= 258		Total= 180		Total= 1122		Total= 258		Total= 180	
	N	%	n	%	n	%	n	%	n	%	n	%
Underweight	55	5%	10	4%	7	4%	3	5%	19	5%	16	6%
Stunting	136	12%	19	7%	15	8%	12	18%	38	11%	52	20%
Wasting	19	2%	2	1%	1	1%	2	3%	5	1%	9	3%
Anaemia	378	34%	78	30%	64	36%	15	23%	118	33%	103	39%
HIV pos.	6	1%	1	0%	2	1%	0	0%	0	0%	3	1%
AIDS	1	0%	1	0%	0	0%	0	0%	0	0%	0	0%
vitamin deficit (clinical signs)	52	5%	12	5%	14	8%	2	3%	14	4%	10	4%
HIV/AIDs confirmed	3	0%	0	0%	1	1%	0	0%	1	0%	1	0%
Abuse/social diagnosis	1	0%	0	0%	0	0%	1	2%	0	0%	0	0%
pneumonia (clinical)	31	3%	5	2%	4	2%	0	0%	8	2%	14	5%
bronchitis	1	0%	0	0%	0	0%	1	2%	0	0%	0	0%
BHR/asthma	16	1%	4	2%	3	2%	1	2%	1	0%	7	3%
Respir. Other	3	0%	0	0%	0	0%	0	0%	3	1%		
dysenteria	1	0%	1	0%	0	0%	0	0%	0	0%	0	0%
dehydration : acute diarrhoea	2	0%	1	0%	0	0%	0	0%	1	0%	0	0%
dehydration : chronic diarrhoea	1	0%	1	0%	0	0%	0	0%	0	0%	0	0%
constipation	3	0%	1	0%	1	1%	0	0%	0	0%	1	0%
active worm infection	101	9%	25	10%	12	7%	11	17%	25	7%	28	11%
GI other	1	0%	0	0%	0	0%	0	0%	1	0%		
otitis media acuta	8	1%	2	1%	0	0%	0	0%	4	1%	2	1%
otitis media with effusion	6	1%	0	0%	1	1%	1	2%	3	1%	1	0%
tympanic perforation	1	0%	0	0%	0	0%	0	0%	1	0%	0	0%
(adeno)tonsillitis	16	1%	4	2%	0	0%	0	0%	5	1%	7	3%
candida stomatitis	1	0%	0	0%	0	0%	0	0%	1	0%	0	0%
hearing impairment	3	0%	1	0%	0	0%	1	2%	1	0%	0	0%
other	22	2%	4	2%	5	3%	3	5%	9	3%	1	0%
cariës n.o.s.	211	19%	35	14%	36	20%	14	22%	93	26%	33	13%
pain n.o.s	3	0%	1	0%	0	0%	1	2%	1	0%	0	0%
fluorosis	8	1%	0	0%	0	0%	0	0%	6	2%	2	1%
caries with pain	28	2%	6	2%	3	2%	3	5%	12	3%	4	2%
eczema n.o.s.	7	1%	0	0%	2	1%	0	0%	3	1%	2	1%
dermatomycosis	21	2%	5	2%	3	2%	1	2%	4	1%	8	3%
Impetigo/furunculosis	4	0%	2	1%	1	1%	0	0%	0	0%	1	0%
scabies	20	2%	12	5%	2	1%	0	0%	0	0%	6	2%
Tinea Capitis	118	11%	37	14%	24	13%	5	8%	25	7%	27	10%
wounds infected,	4	0%	2	1%	1	1%	1	2%	0	0%	0	0%
Skin other (psoriasis etc)	12	1%	6	2%	1	1%	1	2%	1	0%	3	1%
psychomotoric retardation	8	1%	4	2%	1	1%	0	0%	2	1%	1	0%
hypertonia	2	0%	1	0%	0	0%	0	0%	1	0%	0	0%
migraine/headache	3	0%	0	0%	0	0%	1	2%	1	0%	1	0%
Neuromusc other	1	0%	0	0%	0	0%	0	0%	1	0%		
physiological murmer	10	1%	4	2%	0	0%	0	0%	4	1%	2	1%
pathological murmur (suspected)	1	0%	0	0%	0	0%	0	0%	1	0%	0	0%
refractory problem	4	0%	1	0%	0	0%	0	0%	3	1%	0	0%
strabismus	2	0%	0	0%	0	0%	0	0%	0	0%	2	1%
keratoconjunctivitis	47	4%	10	4%	7	4%	4	6%	18	5%	8	3%
eye other	14	1%	2	1%	2	1%	4	6%	4	1%	2	1%
Sickle Cell	14	1%	5	2%	2	1%	1	2%	6	2%	0	0%
urinary infection	2	0%	2	1%	0	0%	0	0%	0	0%	0	0%
nefro other	1	0%	0	0%	0	0%	0	0%	1	0%	0	0%
skeletal other	7	1%	4	2%	0	0%	0	0%	2	1%	1	0%
hernia(umbilical etc)	24	2%	6	2%	4	2%	1	2%	3	1%	10	4%
abdomen other	2	0%	1	0%	0	0%	0	0%	1	0%	0	0%

Treatment among all children per day

	Total		Maandana-kulu		Moila		Mudikhomu		St Scholastica		Tshivhuyuni	
	1122		Total= 258		Total= 180		Total= 1122		Total= 258		Total= 180	
	N	%	n	%	n	%	n	%	n	%	n	%
ferro	16	1%	2	1%	5	3%	0	0%	0	0%	9	3%
mother iron	9	1%	1	0%	0	0%	0	0%	4	1%	4	2%
multivitamins	509	45%	109	42%	82	46%	32	49%	155	44%	131	50%
anti-worm	727	65%	175	68%	126	70%	33	51%	238	67%	155	59%
acute worm	120	11%	26	10%	12	7%	12	18%	41	12%	29	11%
anti-lice	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
anti-scabies	12	1%	7	3%	1	1%	0	0%	0	0%	4	2%
niclosamide	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
praziquantel	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
scabies soap	13	1%	5	2%	1	1%	0	0%	0	0%	7	3%
amoxicillin	43	4%	7	3%	4	2%	0	0%	12	3%	20	8%
augmentin	17	2%	6	2%	2	1%	0	0%	5	1%	4	2%
2e lijns antibiotica	6	1%	0	0%	2	1%	0	0%	1	0%	3	1%
malaria treatment	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
ivermectine for lice	1	0%	1	0%	0	0%	0	0%	0	0%	0	0%
paracetamol	5	0%	2	1%	0	0%	0	0%	1	0%	2	1%
inhaler	10	1%	2	1%	2	1%	2	3%	1	0%	3	1%
metranidazol	1	0%	1	0%	0	0%	0	0%	0	0%	0	0%
co-trimoxazol	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
ceftriaxon	1	0%	0	0%	0	0%	0	0%	1	0%	0	0%
AB urine infection	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
ORS	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
eardrops	1	0%	1	0%	0	0%	0	0%	0	0%	0	0%
nystatine	1	0%	1	0%	0	0%	0	0%	0	0%	0	0%
mupirocine=Bactroban	5	0%	4	2%	0	0%	0	0%	0	0%	1	0%
hydrocortisone cream	22	2%	8	3%	3	2%	2	3%	3	1%	6	2%
dactarin cream	65	6%	17	7%	19	11%	1	2%	5	1%	23	9%
dactacort cream	2	0%	1	0%	0	0%	0	0%	0	0%	1	0%
iodine	1	0%	0	0%	0	0%	0	0%	0	0%	1	0%
fusidin cream	5	0%	2	1%	2	1%	1	2%	0	0%	0	0%
sudo cream	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
neutral cream	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
griseofulvine	55	5%	19	7%	8	4%	4	6%	18	5%	6	2%
eyedrops	42	4%	9	3%	6	3%	5	8%	13	4%	9	3%

Follow-up of all children per day

	Total		Maandanakulu		Moila		Mudikhomu		St Scholastica		Tshivhuyuni	
	1122		Total= 258		Total= 180		Total= 1122		Total= 258		Total= 180	
	N	%	n	%	n	%	n	%	n	%	n	%
Dentist	37	3%	6	2%	5	3%	3	5%	19	5%	4	2%
Specialist in hospital	8	1%	2	1%	2	1%	1	2%	2	1%	1	0%
Social program	3	0%	1	0%	1	1%	1	2%	0	0%	0	0%
Diagnostics (HIV/Malaria)	3	0%	1	0%	0	0%	0	0%	2	1%	0	0%
Bloodtest after 3 months	2	0%	0	0%	0	0%	0	0%	1	0%	1	0%
Other…	46	4%	14	5%	2	1%	3	5%	9	3%	18	7%

Child with care taker at the day of the check?

	Total		Maandanakulu		Moila		Mudikhomu		St Scholastica		Tshivhuyuni	
	1122		Total= 258		Total= 180		Total= 1122		Total= 258		Total= 180	
	N	%	n	%	n	%	n	%	n	%	n	%
No	15	1%	2	1%	5	3%	2	3%	2	1%	4	2%
Yes	1104	98%	256	99%	175	97%	63	97%	350	99%	260	98%
Teacher	3	0%	0	0%	0	0%	0	0%	3	1%	0	0%

Children checked last year?

	Total		Maandanakulu		Moila		Mudikhomu		St Scholastica		Tshivhuyuni	
	1122		Total= 258		Total= 180		Total= 1122		Total= 258		Total= 180	
	N	%	n	%	n	%	n	%	n	%	n	%
No	775	69%	228	88%	101	56%	54	83%	144	41%	248	94%
Yes	327	29%	27	10%	78	43%	11	17%	203	57%	8	3%