# **Medical Checks for Children**

Medical Report Pokhara area, Nepal. 2013





# Introduction, word of thanks

From December 2<sup>nd</sup> to 5<sup>th</sup> 2013 a team from Medical Checks for Children (MCC) checked and treated 808 children in the villages in the area of Pokhara, Nepal. The checks were performed free of cost.

The team consisted of 9 volunteers from the Netherlands, 2 Nepali doctors and volunteers from DIDA (Disability Independence Development Association) in close collaboration with Chandra Gurung of the Pahar Trust.

The Dutch MCC team consisted of: Claire Aris (medical doctor), Eric van Diessen (medical doctor), Marloes van Kasteren (general practitioner, mission's medical-end-responsible), Christine Vos (medical doctor), Stephen van Elshout (ICT / chips developer), Alide Heukers (speech therapist), Simone de Jong (practice nurse), Maaike Kemna (IC nurse), Gerrit Nieuwenhuis (former lawyer, mission's organizational-end-responsible)and Marjolein van Zanten (researcher at the Dutch Ombudsman).

Two medical doctors working at the pediatric ward of the Manipal Teaching Hospital in Pokhara and both assisted us during the mission. It was a wonderful experience to work together and learn from one another.

The mission was organized on invitation and in close collaboration with Mr. Chandra Br. Gurung, cofounder of the Pahar Trust and staff member. The MCC team was very delighted with the cooperation with Mr Chandra Br. Gurung. His preparations, hard work, organizational skills and never-ending enthusiasm were essential for the success of the MCC mission.

This year Chandra Br. Gurung prepared and coordinated the mission in cooperation with DIDA. They played an important role in the preparation and obtaining of our permits: without their help it would not have been possible to do our work! But even more they were of great importance during the checks. Miss Manju is a professional health counselor and did a wonderful job in translating for the doctors and in sharing her knowledge on health care in the region and especially care for disabled children. All of this in a very committed and caring way for the children. Mr Chabbi Goudel is also a professional health educator and was of great value. He educated the children about hand and mouth hygiene in his own very enthusiastic way. Mr Giri is the president of DIDA. During the mission he was great in coordinating things right on the spot.

Dixha Gurung, Chandra's daughter, is a recently graduated dental nurse. She joined us over the past years. This year she was of great importance again, this time mainly in working on the pharmacy post and also translating at the doctors posts.

A group of students from the school in Duipiple assisted us during the mission and they did a great job. Without them our work couldn't have been done! We were and are very grateful to them.

We want to say thanks to all teachers who facilitated the project, volunteered and brought the children to us. Special thanks goes to the school director who organised our stay very well and who was always around during the project. We thank all other local helpers and the cooks for their great assistance and work.

And last but not least, we would like to thank the children and their care-takers who came to the checks for their inspiring presence.

# Background

# The region

The mission was started up in Pokhara, Nepal, most days based in Duipipele and the last day in Kalesti Tanahu. Duipipele and Kalesti are two villages on the foot of the Himalayas a few hours drive from Pokhara. The area is situated in the northwestern corner of the Pokhara Valley, which is a widening of the Seti Gandaki valley that lies in the midland region of the Himalayas.

The children who attended the checks are students at the school in Duipipele or surrounding schools that were invited. Also inhabitants from the surrounding villages visited the checks. There has always been very limited access to health care in this region. Very recently a small health post was opened nearby the school.

Total population	28.2 million
Surface area	147.181 km <sup>2</sup>
Life expectancy at birth	61.3 years
Median age of total population	20.1 years
Goal 1: Eradicate Extreme Poverty and Hunger:	
GDP per capita	1.596 US\$
Annual GDP growth	1.9 %
Population below PPP \$1 per day	24.1 %
Goal 2: Achieve universal primary education	
Net enrolment ratio in primary education (both sexes)	80.1 %
Percentage of pupils starting Grade 1 and reach Grade 5 (both sexes)	78.5 %
Goal 3: Promote gender equality and empower women	
Gender parity Index in primary level enrolment (ratio of girls to boys)	1.0
Literacy rates of 15-24 years old (both sexes)	_%
Seats held by women in national parliament	17.3_%
Goal 4: Reduce child mortality	79.3
Mortality rate of children under 5 years old (per 1,000 live births)	59
1-year-old children immunized against measles	85 %
Goal 5: Improve maternal health	
Maternal mortality ratio (per 100,000 births)	830
Goal 6: Combat HIV/AIDS, malaria and other diseases	
People living with HIV,15-49 yrs old	0.5 %
Prevalence of tuberculosis (per 100,000 people)	244
Goal 7: Ensure environmental sustainability	
Land area covered by forest	25.4 %
Access to improved drinking water sources (% of total population)	89 %
Goal 8: Develop a global partnership for development	
Internet users (per 100 people)	1.1

#### Facts on Nepal (Millenium goals: source: www.mdgmonitor.org)

### History of the checks of the Pokhara region

MCC has been working with Mr. Chandra Br. Gurung since the first mission in this region, in 2007. From 2007 – 2010 the MCC teams checked in different villages and different schools each year. In 2011 MCC decided to aim for more sustainability and continuity. It started with having the same mission leaders (organisational-end-responsibel and medical-end-responsibel) for three subsequent years. Besides, the aim was to visit – at least partly - the same villages and schools for at least three years in a row. Since 2011 we checked every year at the Bhairab Kali school in Duipipele, which has become the "base camp". This year we visited the Dovan English Boarding School in Kalesti again, which we visited in 2011 as well. On request of the Pahar Trust, this year we started the checks at the Navadeep Boarding School in Pokhara. At this school half of the students are originally from the poorer mountain villages. The parents who are able to pay more pay partly for the children of the mountain villages.

# Pahar Trust and Mr. Chandra Br. Gurung

Since 2007, when the first mission in the Pokhara area started, it is organised on invitation and in close collaboration with Mr. Chandra Br. Gurung, co-founder and staff member of the Pahar Trust. The Pahar Trust is a British based charity and was registered in 1993. Its main focus is raising the funds necessary and co-ordinating the construction of schools in remote areas of East and West Nepal. Part of the schools we checked over the past years was founded by the Pahar Trust.

## New regulations and rules for NGO's in Nepal

In 2013 new rules and regulations for foreign NGO's were established. Before starting their work, all foreign volunteers should be personally interviewed by the Ministry of Health. This can take many days (even a week or more) and permission is not guaranteed. Besides, an amount of money (aprox. €50,-) per doctor has to be paid. If foreign volunteers work for a Nepali organisation, this organisation can organise the work permits for them at the Ministry of Health. In our situation DIDA got involved and organised the permits before our arrival.

Another new condition was that at least one Nepali doctor should be present during the checks. Therefore two medical doctors from the Manipal Teaching Hospital in Pokhara joined our team. For this reason we unfortunately had to reduce the number of checking days and reschedule the programme.

After the checks we were faced with another new condition: for the first time we had to pay tax / registration fee for every checked child (they were registered for the Ministry of Health).

### **DIDA: Disabilities independent development Association**

The aim of DIDA is to integrate and empower **children with disabilities**, **street**, **poor**, **orphan children** by providing quality and practical education for their equality in rights and resources which enable them to come ahead as role-plays in their communities. It believes that the access to education, health services, employment, transportation, information technology (IT), assistive device, attendant services and barrier free physical infrastructure is a fundamental requirement for the quality of life of persons with disabilities. Health has become an important issue on their agenda. Two professional health counselors / educators, Mr. Chhabi Goudel and Miss Manju are involved in the organization and we were happy to have them in our team. Giridhari Subedi, the president of DIDA, assisted by Chhabi Goudel, was of great support to us for the preparations, arranging permits etc. and for the logistics during the mission. Chhabi Goudel played a great role in the health education during the mission and Ms. Manju was of great importance as translator and health counselor during the checks.

## Cooperation and organisation of the checks

The cooperation with Mr. Chandra Br. Gurung existed out of the following (amongst others):

- Contact with the school in Duipipele and preparing for our stay
- Selection of schools: inviting them to Duipipel and informing & preparing the schools for the checks in Duipipele
- Contact with local pharmacy, order and delivering medication
- Prior announcement of the checks in the region
- Making copies of all necessary papers
- Facilitating board and lodging for all MCC team members. Before and after the mission by arranging a hotel in Pokhara. During the mission by providing matrasses and bringing wonderfull cooks.
- Transportation of the MCC team to the check location and back
- Selection of patients and care givers
- Contact with DIDA
- Arranging a translator besides DIDA

The cooperation with DIDA

- Arranging work permits for the complete team
- Announcements about the checks on local radio and in local news paper
- Arranging clinical doctors
- Logistics during the mission
- Translating for the doctors in the field
- Health education and counselling during the checks by DIDA volunteers
- Giving support to the MCC team throughout the whole medical programme

Technical equipment and some of the supplies were brought from Europe by MCC team members. Most of the medication was ordered by Mr. Chandra Br. Gurung and was ordered in advance by the MCC team.

# **Medical Checks for Children on location**

The initial plan was to check children on 7 subsequent days, as we were used to do in previous years. Due to the new regulations and conditions we had to reschedule our programme. On the 2<sup>nd</sup> of December we checked at the **Navadeep Boarding School** in Pokhara. On the 3<sup>rd</sup> of December we could not proceed with the checks because the Nepali doctors were not able to join us. This happened to be the UN International Day of Disabled Persons. This is a very important day for DIDA on which they organized a rally through Pokhara for and with people with disabilities. DIDA asked us to join this rally and we were happy we could experience this truly impressive event, which was attended by an astounding number of people, with and without disabilities.

In the afternoon we travelled to Duipiple. We checked for three days at the Bairab Kali school in Duipiple. Other primary schools and children living in the surrounding villages were invited for the checks. A big group of children from Rhamga attended de checks. See table.

On the last day we checked at the Dovan English Boarding School in Kunchha.

Table 1: Number of Children per date by gender

Day	Воу	Girl	Total
2 dec 13	58	43	101
3 dec 13	0	0	0
4 dec 13	82	72	154
5 dec 13	143	121	264
6 dec 13	91	79	170
7 dec 13	62	57	119
Total	436	372	808

Table 3: Children also checked last year

Day	Воу	Girl	Total
2 dec 13	0	0	0
3 dec 13	0	0	0
4 dec 13	33	34	67
5 dec 13	64	62	126
6 dec 13	39	46	85
7 dec 13	46	35	81
Total	182	177	359

A subsequent number of children who were checked this year were checked last year as well, see table 3.

# Summary of number of check-ups per geographical location by age and gender

	All Locations		Duip Nav sc	iple (not vadeep hool)	Ra	amgha	Nav	adeep	Dova Sch	n E.B. 1001
	N	%	Ν	%	Ν	%	Ν	%	Ν	%
Total	808	100%	439	100%	110	100%	101	100%	38	100 %
Age										
>=0 and <1	29	4%	4	1%	11	10%	0	0%	0	0%
>=1 and <5	300	37%	101	23%	85	77%	30	30%	14	37%
>=5 and <12	473	59%	334	76%	14	13%	65	64%	24	63%
>=12 and <18	5	1%	0	0%	0	0%	5	5%	0	0%
Воу	436	54%	230	52%	59	54%	58	57%	24	63%
Girl	372	46%	209	48%	51	46%	43	43%	14	37%

### Caretakers

In the announcement of the checks on the radio and in the papers our contact persons strongly recommended parents / caretakers to come along with the patients. We registered whether the children came by themselves, with a family member / care taker or with a teacher. Unfortunately it was not registered whether the family member was an adult or not. A lot of patients were guided by a brother or sister who was just a few years older. Caretakers remain an important focus in the future.

#### Table 3: Children with/without caretaker

Day	No guidance or not registered	Together with a family member / caretaker	Together with a teachter
2 dec 13	101*	0	0
3 dec 13	0	0	0
4 dec 13	3	85	66
5 dec 13	27	235	2
6 dec 13	13	154	3
7 dec 13	1	118	0
Total	145	592	71

\* this day it was not registered (former registration forms were used)

# The MCC Carrousel

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

- 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. There was an extra post for more intensive education,

### **Data collection**

Anthropometric measurements such as weight, height and head circumference were noted . A finger prick sample was taken to determine the haemoglobin (Hb) concentration. Each child was examined by a clinical doctor. History of illnesses was noted. Specifically, caregivers were asked if the child was complaining about pain, if he/she, had fever, symptoms of respiratory tract infection, diarrhoea, vomiting, decreased appetite, or weight loss. They were also asked if their child had received prior treatment, especially deworming within the last half year, iron or multivitamin suppletion and antibiotics. The medical doctors, examined all children from top to toe, with sometimes special attention for certain aspects, depending on the history.

At the end of the MCC carrousel, the data of the checked children were analysed which made it possible to make a quick scan of children's health every evening, which was communicated to the team.

### Weight and Height

The weight and height of all children was checked as well as the head measure.

### 1: Abormal growth and malnutrition:

Malnutrition has been related to health problems, but also to poor cognitive and school performance. There is strong evidence to suggest that malnutrition places children under the age of 5 at increased risk of death. Facts from Nepali cases shows that 3.5 Million children are chronically malnourished. The main factors contributing to malnutrition in Nepal and specific in this area are poverty, lack of sanitation, worminfections, other chronic infections and diseases, poor living conditions and low level of (health) education. The poor living standards lead to a lack of e.g. protein iron and vitamines.

Malnutrition is thought to account for one third of all deaths of children under five (UN Millennium Developmental Goals). Therefore by measuring and weighing all children in a standardised fashion we assessed different growth abnormalities:

- > Underweight
- > Wasting
- ➤ Stunting

It should be noted that reference data was only available for certain heights, weights and ages (as specified per condition). The following tables only show the results for the complete population. In the appendix you find the data per location.

Also, it should be noted that age might not always be accurate, since the date of birth is often not known. This can lead to a bias to both sides: children can be registered younger or older than their accurate age. This might be critical for the data of underweight and stunting.

# Underweight

# Prevalence of weight/age under P3 per geographical location by age and gender

	All Locations		All Locations Dui				i Piple Ramgha			Navadeep			Dovan E.B. School		
	n	Ν	%	n	Ν	%	n	Ν	%	n	Ν	%	n	Ν	%
Total	14 8	79 7	19 %	50	43 6	11 %	28	10 9	26 %	21	95	22 %	9	37	24%
Unknown	11	80 8	1%	3	43 9	1%	1	11 0	1%	6	10 1	6%	1	38	3%
Age															
>=0 and <1	4	29	14 %	0	3	0%	2	11	18 %	0	1	0%	0	0	0%
>=1 and <5	79	30 0	26 %	17	10 1	17 %	23	85	27 %	8	30	27 %	3	14	21%
>=5 and <12	65	47 3	14 %	33	33 4	10 %	3	14	21 %	13	65	20 %	6	24	25%
>=12 and <18	0	5	0%	0	0	0%	0	0	0%	0	5	0%	0	0	0%
Gender															
Воу	84	43 6	19 %	28	23 0	12 %	15	59	25 %	11	58	19 %	8	24	33%
Girl	64	37 2	17 %	22	20 9	11 %	13	51	25 %	10	43	23 %	1	14	7%

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

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.

# Prevalence of weight/height under P3 per geographical location by age and gender

	All Locations		Duipiple			Ramgha			Navadeep			Dovan E.B. School			
	n	Ν	%	n	Ν	%	n	Ν	%	n	Ν	%	n	Ν	%
Total	66	677	10%	25	340	7%	12	105	11 %	6	78	8%	3	36	8%
Unknown	131	808	16%	99	439	23%	5	110	5 %	23	10 1	23 %	2	38	5%
Age															
>=0 and <1	3	29	10%	0	3	0%	1	11	9 %	0	1	0%	0	0	0%
>=1 and <5	38	300	13%	10	101	10%	10	85	12 %	2	30	7%	2	14	14%
>=5 and <12	25	473	5%	15	334	4%	1	14	7 %	4	65	6%	1	24	4%
>=12 and <18	0	5	0%	0	0	0%	0	0	0 %	0	5	0%	0	0	0%
Gender															
Воу	40	436	9%	13	230	6%	9	59	15 %	3	58	5%	3	24	13%
Girl	26	372	7%	12	209	6%	3	51	6 %	3	43	7%	0	14	0%

# Stunting

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.

# Prevalence of height/age under P3 per geographical location by age and gender

	All Locations		Duipiple			Ramgha			Navadeep			Dovan E.B. School			
	n	Ν	%	n	Ν	%	n	Ν	%	n	Ν	%	n	Ν	%
Total	232	803	29%	102	437	23%	42	108	39%	23	100	23 %	14	38	37%
Unknown	5	808	1%	2	439	0%	2	110	2%	1	101	1%	0	38	0%
Age															
>=0 and <1	7	29	24%	0	3	0%	1	11	9%	0	1	0%	0	0	0%
>=1 and <5	124	300	41%	38	101	38%	37	85	44%	10	30	33 %	5	14	36%
>=5 and <12	101	473	21%	64	334	19%	4	14	29%	13	65	20 %	9	24	38%
>=12 and <18	0	5	0%	0	0	0%	0	0	0%	0	5	0%	0	0	0%
Gender												22			
Воу	139	436	32%	64	230	28%	22	59	37%	13	58	%	12	24	50%
Girl	93	372	25%	38	209	18%	20	51	39%	10	43	23 %	2	14	14%

We found in every category of growth abnormalities in the checked group of children. The most prevalent form of malnutrition was stunting: 29% of all children. This is according to what we expected since this is a strong indicator for *chronic* malnutrition, which is one of the main problems in this area. Besides this, the children under five years showed as well wasting and underweight. This underlines the importance of the checks for children of this age group.

The highest prevalence of all types of growth abnormalities were found in the group of children from Ramgha.

### Anemia

	All Locations					-	)		Navadeep			Dovan E.B. School			
	All	All Locations		Duipipie			r	amgn	a	N	avade	ep		Scho	וכ
	n	Ν	%	n	Ν	%	n	Ν	%	n	Ν	%	n	Ν	%
Total	320	786	41%	162	424	38%	53	108	49%	33	98	34%	14	37	38%
Unknown	22	808	3%	15	439	3%	2	110	2%	3	101	3%	1	38	3%
Age															
>=0 and <1	16	29	55%	1	3	33%	6	11	55%	1	1	100%	0	0	0%
>=1 and <5	138	300	46%	39	101	39%	45	85	53%	10	30	33%	8	14	57%
>=5 and <12	165	473	35%	122	334	37%	2	14	14%	21	65	32%	6	24	25%
>=12 and															
<18	1	5	20%	0	0	0%	0	0	0%	1	5	20%	0	0	0%
Gender															
Воу	173	436	40%	87	230	38%	28	59	47%	16	58	28%	11	24	46%
Girl	147	372	40%	75	209	36%	25	51	49%	17	43	40%	3	14	21%

Prevalence of anemia per geographical location by age and gender

Anaemia is the most prevalent micronutrient disorder. While iron deficiency is frequently the primary factor contributing to anaemia, it is important to recognize that the control of anemia requires a multi faceted approach which, through integrative interventions, addresses the various factors that play a significant role in producing anaemia in a given community. In the rural area of Nepal, worm infections are known as an important cause of aneamia (see as well below). But also other chronic infections as well as other nutritional deficiencies, are especially important.

Anemia was diagnosed in 41% of the total group of checked children. In children < 1 it was even found in 55%. This is often due to malnutrition and anemia in the mother. Also a very high percentage of the children 1- 5 years of age showed anemia.

We treated the children with anaemia (and their mothers if they were breast fed) with supplements for three months.

Of 880 children, 53 children (6,6 %) and/or their mothers were given iron tablets or iron syrup, 419 (51,9%) were given multivitamins.

In children 25 children (3%) the haemoglobin level equals or was less than 5.5 mmol/l. We asked for a re-check of the haemoglobin level after treatment. Amongst them of 7 children the haemoglobin was even less than 5.0 mmol/l. These children were referred to the Manipal Teaching Hospital for further diagnostic procedures.

	All Locations		Duipiple				Ramgha	l	Navadeep			Dovan E.B. School			
	n	N	%	n	N	%	n	Ν	%	n	N	%	n	N	%
Total	359	799	45%	191	434	44%	61	109	56%	30	101	30%	21	38	55%
Unknown	0	799	0%	0	434	0%	0	109	0%	0	101	0%	0	38	0%
Age															
>=0 and <1	6	29	21%	0	3	0%	3	11	27%	0	1	0%	0	0	0%
>=1 and <5	160	300	53%	53	101	52%	51	85	60%	15	30	50%	9	14	64%
>=5 and <12	193	473	41%	138	334	41%	7	14	50%	15	65	23%	12	24	50%
>=12 and <18	0	5	0%	0	0	0%	0	0	0%	0	5	0%	0	0	0%
Gender															
Воу	202	436	46%	101	230	44%	34	59	58%	21	58	36%	13	24	54%
Girl	157	372	42%	90	209	43%	27	51	53%	9	43	21%	8	14	57%

## Frequency of worm prophylaxes in last half year per geographical location by age and gender

### **Worm Prophylaxes**

However there is a national program for worm prophylaxes only 45% of the children did actually receive anti-worm via the school. It must be noted that there might be a lower registration than actually. We found out that some children were told by their care takers that they should say "no" when asked. They believed it would be better if they would get extra treatment.

Still, we believe that less than 50% actually receive anti-worm prophylaxes. Therefore we have been focusing on education about this topic to caretakers as well as to teachers.

The data do not show a clear relation between the percentage of worm prophylaxes in an area or school and anemia.

# Other health problems and diagnoses

The complete overview can be found at the end of this chapter. In this chapter we high light some important and / or frequently found diagnoses / symptoms.

# Cardiology

In 39 children a cardiac abnormality was found. After recheck by the medical responsible and /or other team members 27 cases it was diagnosed as a physiological murmur and in 7 children a pathologic murmur that needed follow up. These children were referred to Shahid Gangalal National Heart Centre. They all meet the criteria of the national CAP programme.

One girl visited the checks and showed proudly a vertical scar on her sternum. When she visited us in 2011 she was severely stunted, suffered from shortness of breath and fatigue, she was not able to play with other children and could only walk short distance. This time she run to us with a big smile on her face. In spring 2012 she was operated in the Shahid Gangala National Centre, after that she recovered very quickly. Even so well that she now showed a normal weight and height!



### **Respiratory system**

We examined a lot of children with upper respiratory tract infections. Not all diagnoses were registered. 9 children were diagnosed with pneumonia. Of two of them an X ray was made to confirm or to exclude other diagnoses.

A health risk for the respiratory tract is the fact that people cook their meals on open fire inside small houses without adequate ventilation. We gave some education on this subject, but it seems to be a difficult issue to tackle. This is an issue we want to discuss with local doctors next year.

#### Dermatology

We found a lot of skin problems, mostly wounds and different types of skin infections such as Impetigo / furunculosis, erysipelas / cellulites, dermatomycosis but also eczema often with secondary infection. Because these infections can cause severe health problems, we think this is an important topic. Besides we diagnosed an immense number of scabies and lice. The first days we did treat them, but soon we run out of medication. We did a resupply, but decided only to treat severe cases.

#### Ear, Nose, throat

51 children were diagnosed with ear, nose throat problems. Most of them with infections. 11 of them had Otitis media acuta, they were all treated. 45 had otitis externa, only the most severe ones were treated. Because infections can, espically in these circumstances, cause hearing impairment we believe it is important for MCC to keep on checking ears.

#### Neurology

14 children with psychomotor retardation or other mental of physical disabilities (besides hearing / visual impairment) visited the camp. Because our cooperation with DIDA this year we could inform

them about different supplies and aid for people with a handicap and we referred them to specialized centers.

### **Dental problems**

330 children (41%) presented with dental problems. Of them 123 had caries ánd complained of pain. We did not have a dentist in our team. We think it is I highly valuable to bring one with us next year again. This we year we did, with the great help of Mr Chabbi Goudel a lot of attention to education about dental care.



# Overview of all diagnoses

Tractus		Diagnosis		
	1	HIV positive	0	0,0%
	2	AIDS	0	0,0%
	3	Malaria (suspected)	0	0,0%
	4	Vitamin deficit (clinical signs)	58	7,2%
	5	Bilharzia	0	0,0%
	9	Syndrome n.o.s.	2	0,2%
RESP	10	Pneumonia (clinical diagnosis)	9	1,1%
	11	Pneumonia (confirmed by X-thorax)	0	0,0%
	12	Tuberculosis (clinical diagnosis)	0	0,0%
	13	Tuberculosis (confirmed by X-thorax)	0	0,0%
	14	Bronchitis	0	0,0%
	15	BHR/Asthma	0	0,0%
	19	Other	19	2,4%
GI	20	Giardia (suspected)	0	0,0%
	21	Dysenteria	0	0,0%
	22	Dehydration - acute diarrhoea	0	0,0%
	23	Dehydration - chronic diarrhoea	0	0,0%
	24	Diarrhoea without dehydration	1	0,1%
	25	Obstipation	21	2,6%
	26	Active worm infection	30	3,7%
	27	Active tape worm (suspected)	14	1,7%
	29	Other	8	1,0%
ENT	30	Otitis media acuta / n.o.s.	5	0,6%
	31	Otitis media with effusion	4	0,5%
	32	Otitis externa	25	3,1%
	33	Tympanic perforation	4	0,5%
	34	Mastoiditis	0	0,0%
	35	Adenotonsillitis / tonsillitis	5	0,6%
	36	Candida stomatitis	0	0,0%
	37	Sinusitis	0	0,0%
	38	Hearing impairment	0	0,0%
	39	Other	8	1,0%
DENTAL	40	Caries n.o.s.	197	24,4%
	41	Toothache	8	1,0%
	45	Caries with pain	123	15,2%
	49	Other	3	0,4%
DERMATO	50	Wounds n.o.s.	2	0,2%
	51	Eczema n.o.s.	5	0,6%
	52	Dermatomycosis	16	2,0%
	53	Impetigo / Turunculosis	13	1,0%
	54	LICE	/	0,970

	55	Scabies	33	4,1%
	56	erysipelas / cellulites	2	0,2%
	57	Wounds infected	19	2,4%
	58	Burn wound (fresh)	0	0,0%
	59	Other	21	2,6%
NEUROMUSC	60	Psychomotoric retardation	4	0,5%
	61	Hypertonia	0	0,0%
	62	Hypotonia	0	0,0%
	63	Epilepsy	0	0,0%
	64	Spina bifida	0	0,0%
	65	Migraine / headache	0	0,0%
	66	Meningitis	0	0,0%
	67	Leg cramps	0	0,0%
	69	Other	3	0,4%
CARDIO	70	Physiological murmur	13	1,6%
	71	Pathological murmur (suspected)	9	1,1%
	73	Other	0	0,0%
EYE	74	Refractory problems	1	0,1%
	75	Strabismus	1	0,1%
	76	Keratoconjunctivitis	1	0,1%
	77	Amblyopia	1	0,1%
	79	Other	4	0,5%
ENDOCRIN	80	Thyroid dysfunction (suspected)	0	0,0%
	81	Diabetes	0	0,0%
	83	Other	0	0,0%
GYN	84	Menorraghia	0	0,0%
	85	Amenorrhoea	0	0,0%
	86	Pregnancy	0	0,0%
	89	Other	0	0,0%
UROGEN	90	Epi- / hypospadia	0	0,0%
	91	Cryptorchism	0	0,0%
	92	Inguinal hernia	0	0,0%
	93	Orinary tract infection	2	0,0%
NEEDO	95	Chronic kidney nethology (suspected)	0	0,2%
NEFRO	90	Other	1	0.1%
SKELETAL	100	Artralgia n.o.s	0	0.0%
SKELLIAL	100	Sentic artritis	0	0.0%
	101	Hip dvsplasia	0	0,0%
	103	Fracture (old)	0	0,0%
	104	Fracture (new)	0	0,0%
	106	Other	2	0,2%
ABDOMEN	107	Hernia (umbilical, epigastric, cicatric)	0	0,0%
	109	Other	1	0,1%

# Last words / future

It was a very special experience for us to cooperate with DIDA. We do believe it has been beneficial for the children who visited the checks. We are very thankful to the people we have been working with in the fields. We do believe they did a wonderful job. See also the introduction in this report. Nevertheless, we still do have to evaluate the cooperation on organizational level.

Next year it will be our last year to organize checks in this region. It is important to us that the checks will be taken over by a local organization. This may be DIDA or a local health post.

We are looking forward to continue our work next year and hand it over to one of the local partner organizations.