MOZAMBIQUE

Health and Nutrition

Annual Report

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EXECUTIVE SUMMARY

The refugee camp of Maratane was founded in 2001 in the Province of Nampula to receive refugees coming from Lichinga in the same province and from the Province of Maputo.

Until 2005, UNHCR has gave support (financial and technically) to the Government of Mozambique in order to protect the refugee population, find durable solutions and give direct assistance.

The refugee populations in the camp are involved in activities related to improve their quality of life in the field of health and nutrition, community services and education, agriculture, environmental, micro credit and vocational training.

During the year of 2005 four international ONG have joined UNHCR-INAR as an implemented partners to work together in function of the refugee population well being: Save the Children, .World Relief, World Vision and Oxfam.

The Minister of Health is the line Ministry with the high degree of involvement in provide assistance to the refugee population.

The refugee has the same right to access and use the health services provided by MOH at the same level of the Mozambican population.

The traditional program of primary attention are available in the refugee camp plus a regularly medical consultation and referral system with the Central Hospital of Nampula and other specialized health unit in the province devoted to psiquiatric illness, TB and HIV/AIDS. For special cases, Central Hospital of Maputo is available as well.

The main feature of the health services provision is that it is addressees to both population refugee and Mozambican. Both populations integrate the “Center of Maratane”.

The main problem health problem is Malaria although HIV/AIDS, malnutrition, cholera/diarrheas and reproductive health represent other public health areas of concern of UNHCR and the Government of Mozambique.

To continuous providing health services timely and to promote both refugee and Mozambican self responsibility in take care about their own health for the year of 2006 three strategic initiatives has been identified in the Center of Maratane:

1. Reinforce the movement of CHW (refugee and Mozambican) and the communitarian mobilization around the main public health problem, and
2. Accurate the organization, function and coverage of the health services provided by the health post.
3. Work together and deeper the ties with MOH and looking for others partner to invest in the gap which the health and nutrition sector has.

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Background

The Refugee Camp of Maratane was founded in February 2001 in order to receive refugee who were placed in Lichinga (2001), Province of Nampula and in the Refugees Camps of Massaca II and Bobole (2002), Province of Maputo.

In figure numbers, those 440 refugees who were in Lichinga, 380 went to the Maratane Camp and those 600 refugees who were in Massaca, 400 went to the Refugee Camp of Bobole. The others 200 took the options of local reintegration in the community of Boane, Province of Maputo.

After this process of Camp reunification and local integration, the Mozambican Government took the decision (2002) of transfer this refugee population to the Camp of Maratane. Due to this fact one of the Zones of the Maratane Camp has the name of "Maputo".

The Government of Mozambique took the decision of create the Camp of Maratane because do not want to has a refugee population near to the capital of the country as well as the needed of place the refugee population in a Province without borders with another countries. Two provinces were taking into account to place the Refugee Camp: Nampula and Beira. The province of Nampula was selected.

In order to found this Camp, the Government of Mozambique reserved 178 Hect of land, which included the non removable natural resources, and perform a general rehabilitation of the infrastructure. In addition, the Mozambican Government built a school and put in place teachers to give lessons according with the Mozambican academic curriculum and open opportunities to study to the young refugee people inside and outside the Camp. A police station was open as well.

The Ministry of Health is the line Ministry which has the high investments devoted to well being of the refugee population. This institution offers to the refugee population the traditional program of health at the primary level as well as has put in place nurses and technician to serve the refugee population. In addition, the MOH supply with medicines, laboratory reactive and health reposition material the health post in the Camp.

The refugee population has the same right of the Mozambican population to use the health services at province level without charge and selected cases have gone to the Capital of the Country in order to satisfied special health needed.

The main features of the health and nutrition services provided in the Camp is that its are addresses both population refugee and Mozambican.

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UNHCR has gave support (financial and technically) to the Government of Mozambique during all this period in order to protect the refugee populations, find durable solutions and gave direct assistance.

Now days are operating in the Camp four UNHCR's implementers partners: Save the Children (Health and Nutrition sector), World Vision (Communitarian Services and education), World Relief (agriculture, micro credit, vocational training and environmental) and Oxfam (water)

At the end of the year 2005 the Maratane Camp has the following demographic structure.

The predominant nationality are Congolese and in second and third place Burgundies and Rwandans. Other refugees, in small quantity, are placed in the City of Nampula, as well as in other Provinces of Mozambique

A map (approximate version) of the Camp can be appreciated in the next page.

End of period		
Female	**Male**	**Total**
384	401	785
767	827	1,594
771	1,092	1,863
10	7	17
1,932	2,327	4,259

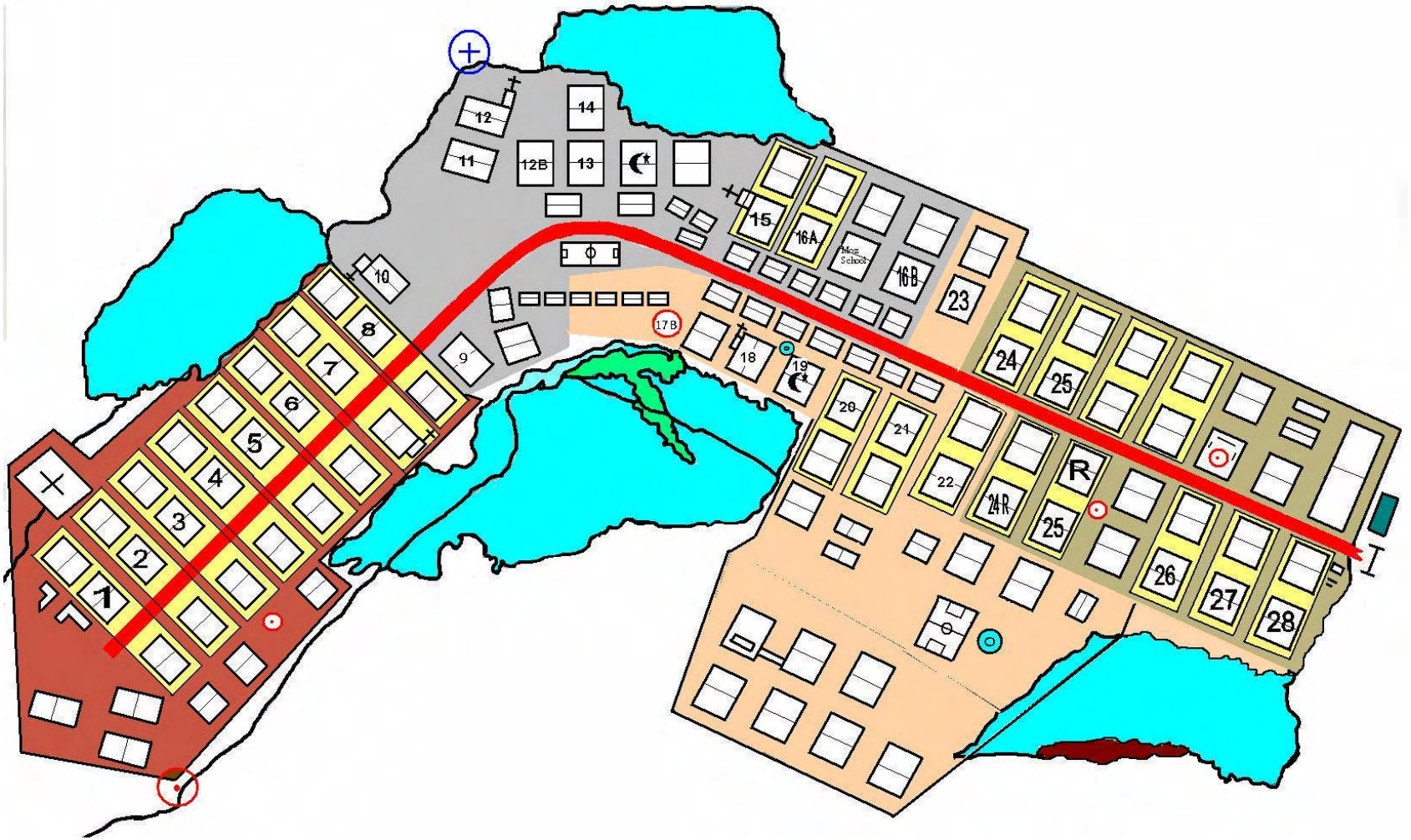


Figure 1Map of the Refugee Camp of Maratane

Sources of information

- Statistics report, Health Post, Refugee Camp of Maratane, 2005
- Mortality report. INAR, WV. 2005
- SCF's monthly and weekly report, Sptember – December, 2005.
- Salazar.M.; Massaza.F; Balanca.J. Evaluation of nutritional status in children between 6 and 59 months in the Center of Maratane. Final report, Summary in English, Nampula, Mozambique, 2006, p: 03.
- Personal interview, Mr. Aderito Matangala, Camp Administrator, Tuesday, May 02, 2006
- Personal interview, Mr. Amizzi Amigo, Communitarian mobilization, SCF, Wednesday, May 03, 2006
- Personal interview, Mr. Antonio Martinho, UNHCR's dirver, Thursday, May 04, 2006Perso
- Report of Mission, UNHCR Regional HIV/AIDS and PPASA Life Skills Program Manager, November 2004

Key observations

Programmer overview

Summary standards and indicators

Sector	Indicator	Standards	Maratane	Comments
DEMOGRAPHY	Crude birth rate (per 1000 population per year)	10 to 40	52	
	Crude mortality rate (per 1000 per month)	< 1.5	6	
	Under-5 mortality rate (per 1000 per month)	< 3	25	
	Infant mortality rate (per 1000 live birth per year)	< 60	14	
HEALTH	Number of persons per primary health care facility	< 10.000	4,259	Including only refugee population
	Number of consultations per trained clinician per day	<_ 50		
	Number of consultations at primary health care facility per person per year	1 to 4	6	
	Measles vaccination coverage among 9 – 59 months old children	>- 90	85%	The coverage include both population refugee and Mozambican

Sector	Indicator	Standards	Maratane	Comments
	% of newborn children with low birthweight (< 2500g) (weghed within 72 hours)	< 15%		
	% of live birt attended by skilled peronel (excluding TBSs)	>_ 50	100 %	
	% of live birth attended by TBAs			
	% of rape survivors receiving medical care within 72 hours (including PEP and EC)	100%	0	
	Number of outbreaks (elaborate in narrative part of the report)	0	0	
HIV / AIDS	Number of condoms distributed per person per month	>- 1	11	
	Antirtroviral therapy accessible to refugees (yes / no) Numberof antiretroviral treatments to refugees	As host community	Host: **Y** / N Refugee: **Y** / N	
	% of HIV pregnant women having access to PMTCT	100%	0	
FOOD AND NUTRITION	Average number of kilocalories distributed per person per day	>_ 2100		
	Rate of malnourished 6 – 59 months old children (GAM) measured by Z-score	< 5%	4%	This rate include both population refugee and Mozambican
WATER	Average quantity of water available per person per day (in litres)	>_ 20	2	Date of the month of June was used to get this data
	Number of person per usable tap (a) or well/hand pump (b)	(a) < 80 (b) < 200	(a) 852 (b) 473	
	% of faecal coliform detected at distribution points per 100 ml sample during the year	0%		According with the test performed by OXFAM during the first 3 months of this year all the water point produce potable water.

Sector	Indicator	Standards	Maratane	Comments
SANITATION	% of families with latrines	100%		Several latrines are full but the figures numbers are not available.
	Number of person per drop holes in communal latrines	<_ 20		
	Number of persons per communal shower head	<- 50	0	

UNHCR budget and health personnel

Un known

Partners and services

Partners	Services provided[1]	
MOH-Mozambique	✓ The following final services and health programs are providing: o Emergency attendance with 24 Hrs ambulance[2]. o Reference system to the following health units in the Province of Nampula: ▪ Hospital Central (City of Nampula) ▪ Mental Hospital (City of Nampula) ▪ TB specialized unit: • Anchilo (District of Nampula) • Marrene (City of Nampula) ▪ Mental Hospital (City of Nampula) o References system to health specialized unit in Maputo o General consultation for children and adults o Preventive consultation for children between the ages of 0 -11 months and 0 – 4 years o Control antenatal, delivery and immediate postnatal care. o Family planning. o Vaccination of children, adults and pregnant women (BCG, Polio, DPT/Hep B, Tetanus, Measles) o Weight children control o Health Education ✓ The following intermediate services are provided: o Pharmacy which provide medicines according with the profile of Kit "A". Specific medicines not available in the Kit "A" are purchase in the city of Nampula or get from the Health District of Rapale through specific mechanism belong to the Mozambican Health Institution. o Condoms are available and distributed through the Pharmacy as well. o Clinical Laboratory able to perform exams of HTZ, RPR, BK, Urine, Feces o Health system statistics are available for the out services and a weekly epidemiological report is available.	

[1] All the services are providing to both population: refugee and Mozambican.
[2] The ambulance has been provided by UNHCR and the management of it is under the responsibility of SCF

Partners	Services provided[1]	
Save the Chidren USA	➢ Administrative issues o To pay both the driver and the ambulance combustible and maintenance o To hire the Medical Doctor end ensure that he has transport to perform a three week consultation o To select and hire the refugee nurses o To buy medicines (City of Nampula) not available in the MOH-Kit "A" and to the delivery it to the health post pharmacy. o To following the cases refered to Maputo (flight ticket, support to go the health unit, record the medical file) o Provide milk to children of HIV infected mothers o Provide double food rations to HIV infected individuals ➢ Programatics issues o Health education in the communitarian scenario. (HIV/AIDS, Malaria) o To perform regularly a General supervision in the Health Post o Communitarian mobilization o To perform a Health Facility Assessment o To lies with MOH to obtain and prevent stocks out of family planning methods and vaccinations cards. o To prevent the re-use of disposable equipment through the provision of adequate supplies, appropriate needle disposal containers and education of the staff and the client o Establish and maintain a record for mortality and unusual health occurrences o Identify community groups in the community and to arrange meetings with them and establish a schedule; resources required; logistics of production o Ensure supply of condoms and establish an action plan regarding distributions. o Identifications of high risk patients by Camp Medical Consultant and support as necessary	

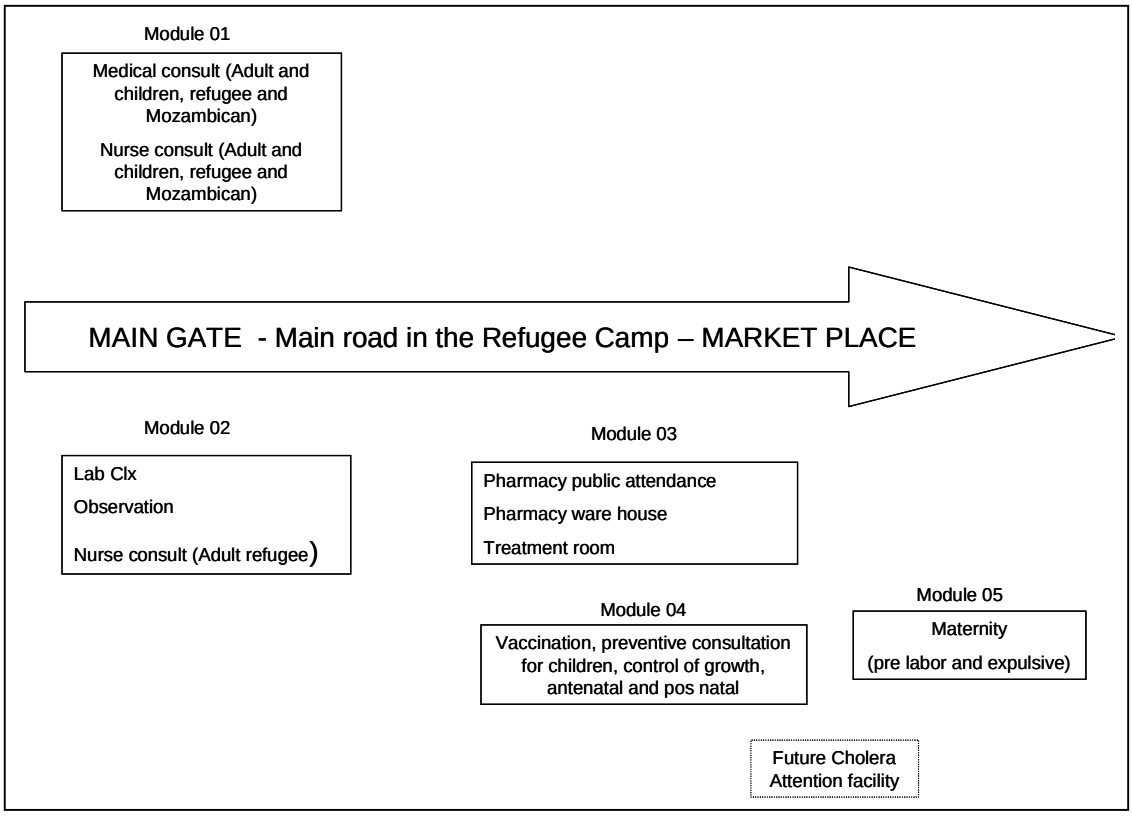
Health services access and utilization

1. Organization of health activities:
   - The health activities are organized in two sceneries in relationship: health post and community. The activities performed in the health post are organized by programs located in different structures. The logical of the infrastructure is not appropriate for a health post and do not facilitate the flow of patients. In the next page you can find a drawn about both the modules and the programme in the health post. The community health services are described in the third item of this section.

2. Number of health structures

Camp name	Total population	No of health facilities	Nro of health workers	Consultation rates	NGO in charge	Referral Hospital
Maratane	4,259 (Dec 2005)	01	MD: 01 Ma/CO: _ Nurses: (17) 9 refugee 8 mozamb Midwifes: _	06	MOH-Moz SCF	Central Hospital of Nampula

Figure 2 Basic diagram of the Maratane health post



3. Community health services
    - 20 CHW refugee and 20 CHW Mozambicans
    - Activities
        - To take part in the nutritional survey performed during Nov – December.
        - In the Camp of refugee:
            - To perform visit in house to cronical patients (HIV + including)
            - To gave to the population health education.
            - To refer patients to the health post.

Drug management

The procurement system has the following features:

1. The MOH-Moz provide every 2 weeks a Kit of medicines type "A".
2. UNHCR buy the medicines which are nor available in the KIT "A". This medicine are bought by SCF I the City of Nampula.. A system to delivery these medicines to the health post pharmacy are in place.
3. The system of storage and delivery follows the MOH-Moz protocol.

Referrals, training and urban refugee

1. Referrals
    a. Referral rate: Date of referral is not available for the year as a whole. This data exist partially for the period of Sept – December and is not usefully to build the referral rate.
    b. Connectedness, relevance, appropriateness, sustainability
        i. The relevance is high. The refugee population has access, at the same level of Mozambican population, to all the health services in the Province of Nampula and, for some special cases, in the province of Maputo as well.
        ii. The appropriateness is high as well. The refugee population can access health services of second level in the Central Hospital of Nampula (emergency, external consultation, hospitalization) and in other specialized health unit: Mental Health Hospital, TB Provincial Unit.
        iii. The sustainability is high as well due to this services are provided for the MOH-Mozambique for the Mozambican citizens and the refugee has the same right of the Mozambican population to use these services.
    c. Linkage with national programmes.
        i. High. All the services provided take part of the overall offers of services providing for the MOH-Mozambique to the Mozambican citizens. Several of this services are based in national protocols.
    d. Relevance to UNHCR's overall goals, linkagen with protection
        i. Relevance to UNHCR's overall goals is high as well. The access to the health services take part of the overall effort of UNHCR addressees to the well being of the refugee population.
        ii. The linkage with protection is week. Vulnerable groups[3] receive a general health assistance but they need on health are not systematic

[3] Minority groups, children and adolescents, unaccompanied minors, single parent households female-headed, survivors of rape, disable and handicapped, olders person and chronic illness.

monitoring. The exceptions for this situation are chronics illness, including HIV+, and some disable and handicap people.

2. Training
    a. During December SCF organized training to the health post nurse about Reproductive Health, HIV/AIDS and Malaria.
3. Urban refugee
    a. Health services access and utilization
        i. Information is not available
    b. Health out come data
        i. Information is not available

Health outcome data

Mortality

1. Data disaggregated by age and sex. Diseases specific mortality

Table 1 Mortality disaggregated by age and sex. Diseases specific mortality, Camp of Maratane, Nampula, Mozambique, 2005

Diseases	< 5 years			> 5 years			Total			Percentage
	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Malaria confirmed										
Fever unknow/sus malaria	4	2	6	3	0	3	7	9	16	48.48%
Non-bloody diarrhoea			0			0	0	0	0	0.00%
Bloddy diarrhoea			0			0	0	0	0	0.00%
ARI			0			0	0	0	0	0.00%
Measles			0			0	0	0	0	0.00%
Acute malnutrition			0			0	0	0	0	0.00%
Jaundice/susp.hepatitis			0			0	0	0	0	0.00%
TB			0			0	0	0	0	0.00%
AIDS			0	2		2	2	2	4	12.12%
Injures			0			0	0	0	0	0.00%
Anemia		2	2			0	0	2	2	6.06%
Others	1		1	4	1	5	5	6	11	33.33%
Total # of cases	5	4	9	9	1	10	14	19	33	100.00%

NB: It has been taking into account only the deaths diagnosed. All the main cause of death are clinical dgx.

2. Maternal death (01)
    a. #: 01, Reason: High risk pregnancy (Diabetic + pregnant)

Morbidity

Table 2 Disease specific Morbidity, Camp of Maratane, Mozambique, 2005 (Version 1 and 2)

Version 01

Diseases	Total	Percentage
Malaria confirmed	1442	0.00%
Fever unknow/sus malaria	9823	9.04%
Non-bloody diarrhoea	1536	61.56%
Bloddy diarrhoea	289	9.63%
ARI	2720	1.81%
Measles	146	17.05%
Acute malnutrition	0	0.92%
Jaundice/susp.hepatitis	0	0.00%
TB	0	0.00%
AIDS	0	0.00%
Injures	0	0.00%
Anemia	0	0.00%
Others	0	0.00%
Total # of cases	15956	100.00%

NB: Dates are not available by sex and age

In the next page you can appreciate the morbidity of the refugee population according with the record of the Health Post in the Camp of Maratane.

Version 02

MORBIDITY OF THE REFUGEE POPULATION, 2005

	2005 JAN	2005 FEB	2005 MARCH	2005 APRIL	2005 MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR 2005	%
Malaria	957	1421	997	1128	575	816	770	737	649	815	297	701	9863	60.08%
ARI	167	336	205	229	162	183	235	379	387	224	213	0	2720	16.57%
Malnourish						2	4	7	0	0	6	3	22	0.13%
Wound	19	31	18	36	16								120	0.73%
Int Parasite	106	205	15	118	39	59	80	101	86	70	35	40	954	5.81%
Dysentery	46	47	10	14	15	21	17	34	26	28	4	27	289	1.76%
Anemia						4	3	5	6	1	10	6	35	0.21%
Cellulites	14	25	0	37	15								91	0.55%
IST	7	33	6	52	25	24	20	38	28	7	10	29	279	1.70%
Conjunctivitis	10	33	27	56	3	30	11	37	30	10	33	30	310	1.89%
Measles	5	2	35	31	0	5	2	35	31	0	0	0	146	0.89%
Diarrhea	23	46	18	1	664	23	46	18	1	664	32	0	1536	9.36%
Arthritis	2	5	2	17	0								26	0.16%
Flu	0	13	0	0	12								25	0.15%
Total													16416	100.00%

NB: All of this dgx has been made in a clinical basis using a syndromes approach. Those sub lined have a national protocol of dgx and tx.

Disease specific health programmes

Vaccination coverage

1. Measles: 85.3% (Include both refugee and Mozambican population)
2. Polio: 90% (Include both refugee and Mozambican population)
3. How coverage is measured:
    a. These coverage were measured during the nutritional survey done during Dec – Nov, 2005

Communicable disease control

1. The health post produces a weekly epidemiological report. In case of suspects of any illness including in this report, the Camp receive the support of specific unit of epidemiological control belong to the MOH-Nampula to perform the control of focus and plan the appropriate measures to be took.
2. In the next page you can see graphs related to the cases and death of measles, diarrhea, dysentery and malaria which have been the transmissible illness reported during 2005.

Outbreaks

None

Reproductive health

Safe motherhood

The number of both delivery and newborn death (refugee and Mozambican population) can be appreciate in the table below.

Table 3 Number of delivery and newborns death, Center of Maratane, Nampula, Mozambique, 2005

	DEL MOZ	DEL REF	NB DEATH REF	NB DEATH MOZ
JAN	20	47		
FEB	15	29		
MARCH	20	27		
APRIL	19	33	1	2
MAY	10	34		
JUNE	21	19		
JULY	21	24		
AUGUST	12	26	2	
SEPT	7	15	1	
OCT	46	38		
NOV	16	37		
DEC	13	31		
Total 2005	220	360	4	2

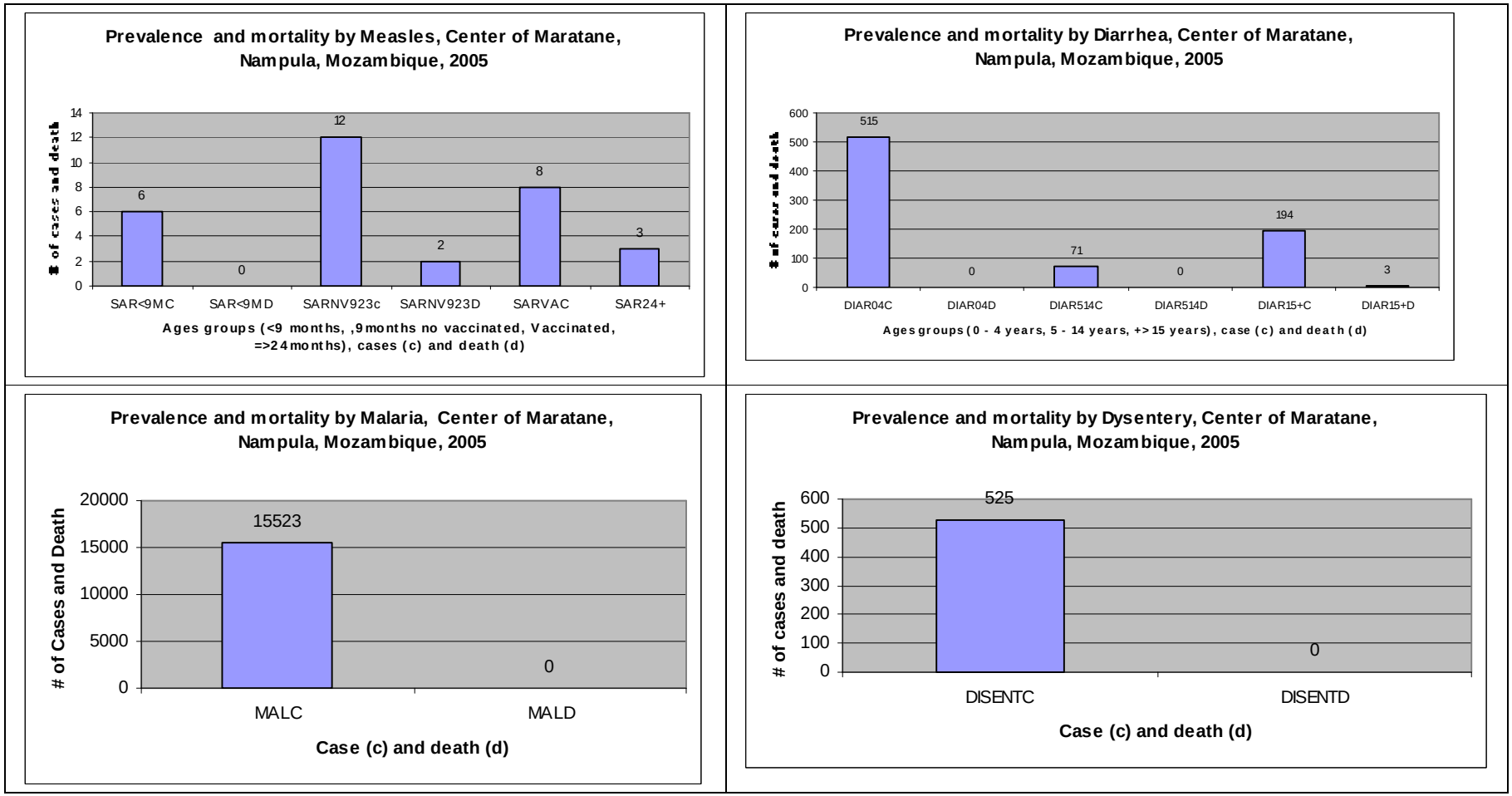
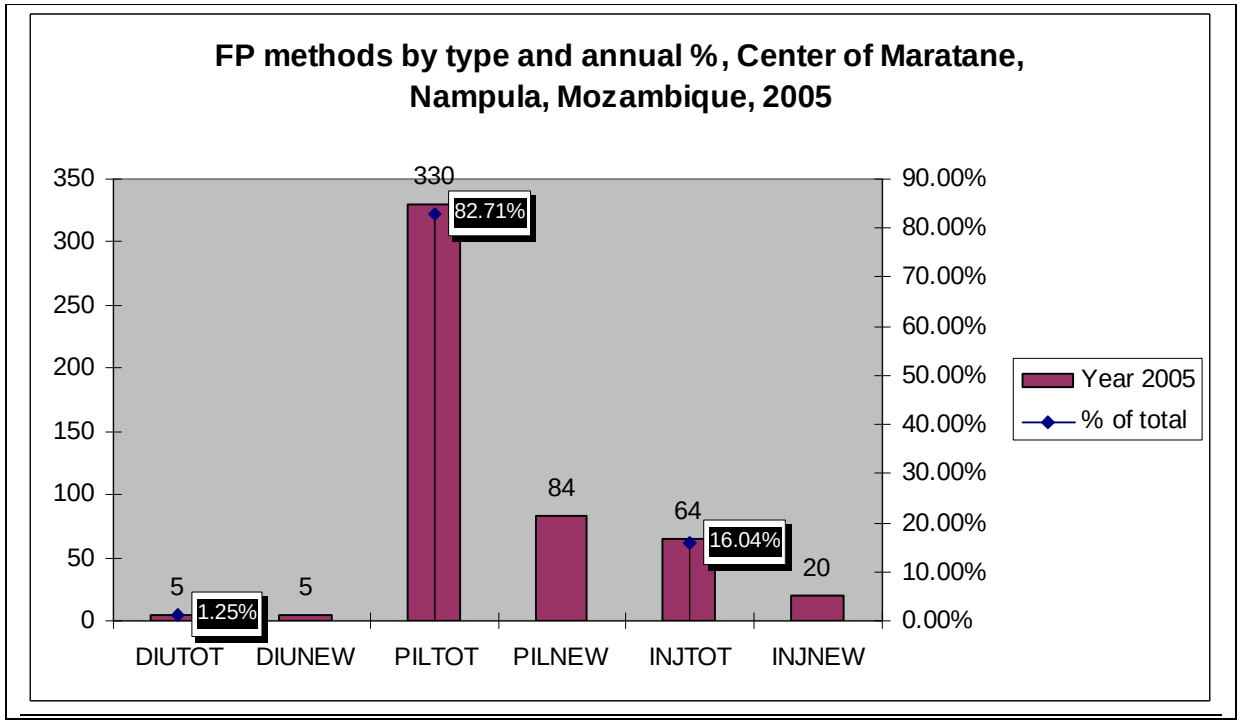
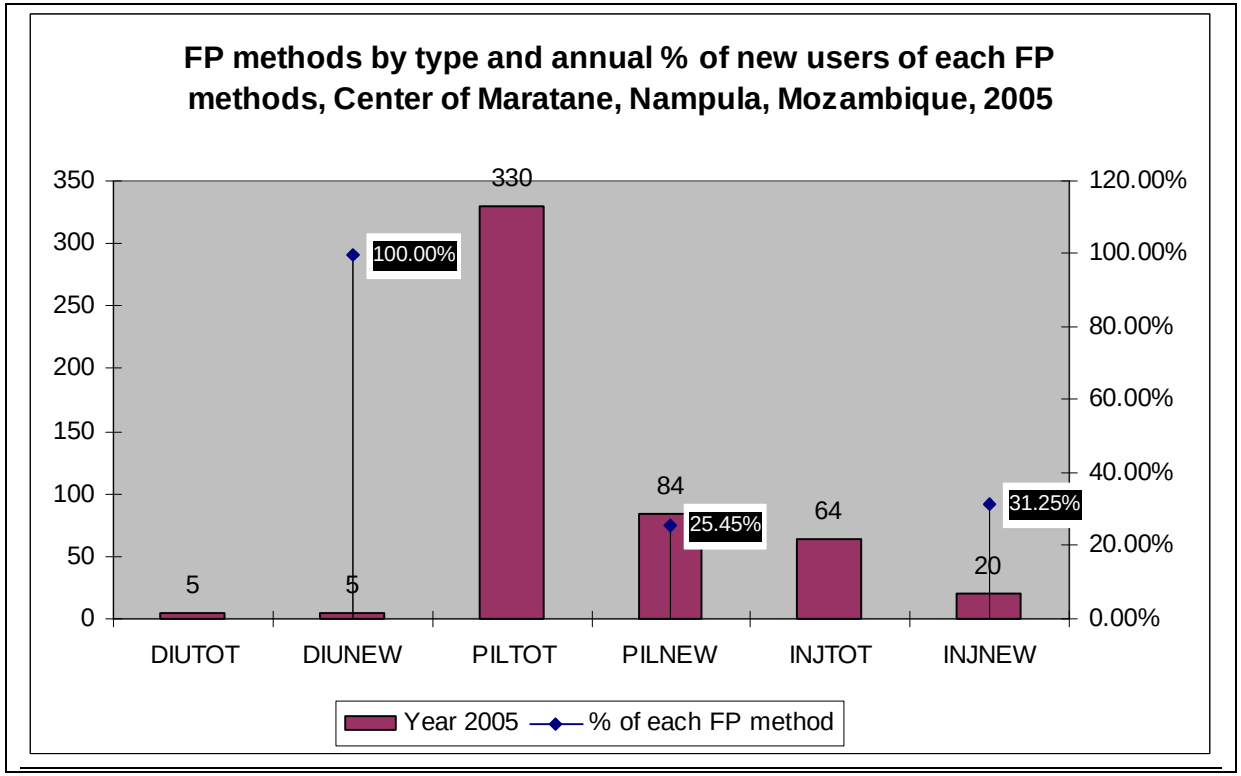


Table 4 Communicable diseases reported, Center of Maratane, Nampula, Mozambique, 2005

Family planning

Three are the methods of FP that has been used in the Center Of Maratane during the year 2005. Below this paragraph you can appreciate charts related to this issue. The main hypothesis is that the availability of methods in the Health Post is the main cause to choose one or other and is influencing as well the rate of new users.




FP methods by type and annual % of new users of each FP methods, Center of Maratane, Nampula, Mozambique, 2005
350
300
250
200
150
100
50
0
120.00%
100.00%
80.00%
60.00%
40.00%
20.00%
0.00%
5
5
330
84
64
20
100.00%
25.45%
31.25%
DIUTOT
DIUNEW
PILTOT
PILNEW
INJTOT
INJNEW
Year 2005
% of each FP method

Nutrition

1. Global Acute malnutrition rates, % of anemia and Vit "A" coverage.

	Center of Maratane	Comments
Local population and Refugee population GAM %	< 3 Z score 4.3%	The sources of this date are the nutritional survey performed year 2005.
Refugee % of Anemia	35 , 0.21% of the causes of external consultation cases (clinical diagnoses)	This dates are related to the second semester of the year 2005
Local population % of Anemia	96 cases, 0.58% of the causes of external consultation cases (clinical diagnoses)	This dates are related to the second semester of the year 2005
Vit "A" Coverage (Local population and Refugee population)	49.3 % trough the National Campaign of Vaccination	The sources of this date are the nutritional survey performed year 2005.

2. Number of Joint assessment with WPF: 0
3. Number of Nutrition survey: 01
    a. The final summary report is placed in the annex 01 of this document

Figure 3 Good and bad growth reported by Health Post, Center of Maratane, Nampula, Mozambique, 2005

0 - 35 MONTHS				
2005	GOOD GROWTH	BAD GROWTH	TOT	% BAD
JAN	185	15	200	7.50%
FEB	151	10	161	6.21%
MARCH	318	17	335	5.07%
APRIL	460	23	483	4.76%
MAY	553	98	651	15.05%
JUNE	705	41	746	5.50%
JULY	442	32	474	6.75%
AUGUST	588	57	645	8.84%
SEPT	645	86	731	11.76%
OCT	468	46	514	8.95%
NOV	549	57	606	9.41%
DEC	0	0	0	0.00%
Total	5064	482	5546	8.69%

HIV/AIDS

1. Prevalence
    a. Average national HIV prevalence among adults was 13.6% (2002)
    b. Nampula province prevalence among adults was 8.1%
2. Prevention:
    a. PEP is available for UNHCR staff.
    b. Blood transfusion is conducted at the Nampula Hospital which reported adequate screening mechanism.
    c. Condoms are supplied to the Maratane's Clinic through the MOH
    d. It has been development HIV/AIDS awareness activities in the Camp.
    e. VCT is site in Nampula City.
3. Care, support and training
    a. STI are managed syndromically at the Camp Clinic
    b. Refugee living with HIV and AIDS are provided with an additional food rations
    c. Home based care is provided on ad hoc basis
    d. Refugees in need of ART can take part of the government treatment programme.
4. Surveillance, monitoring and evaluation
    a. A BSS was conducted in December 2005. The outputs of this research are not available in Nampula.

Water and Sanitation

1. Water
    a. Two tanks of water area available. Two with the capacity of 1.500 lt and one with the capacity of 2.000 lt. They are filled two times a day.
    b. Five taps area available.
2. Sanitation
    a. About 2083 latrines area available, mostly of them were filled at the end of the year.

Health Post at the Marratane Camp: Improvement and problem remaining4

Improvement	Problem remaining
Infrastructure/Equipment • Water tank • New bed for delivery room • Two beds for emergency room • Two solar lamps Two hanger for infusion for patients	• Waiting area for patients out side • Water connections for maternity • Incinerator • Final disposal for black waters
Ambulance • Repaired after accident and ready to function in one week • Used only for emergency cases	• Parking lot for ambulance
General consultation • New room for children consultation, separately from adults.	• Covered waiting area
Specifics programs • Community Health planning • Health Education (malaria, vaccination, HIV-aids, antenatal) • Free distribution of condoms among youth groups	• Covered estimations for the traditional health programs. • Nurses screening to support medical consultation • Weakness in environment health programs
Laboratory • Proper electricity supply and continuous maintenance of the generator • Commitment with AIFO (Italian Ngo) to support the lab with reagents and equipment.	• Lack of water
Pharmacy • Pallets for correct storage of medicines • Weekly supervision to avoid expired medicines • Better system of purchasing medicines not available in Kit A	
Other improvement • Quality of supervision and coordination between IP, UNHCR and Health Centre staff. • New health mobilizer for health community awareness and work. • One more driver for ambulance. • Twenty three new community activists for	• Better book registration on new born babies. • Insubordination from refugee workers to health director.

[4] This chart should be improved periodically

Improvement	Problem remaining
nutrition, HIV aids and family planning. • DPS and DDS involvement in supervisions and coordination with IP's. • Referrals of patients to Maputo and Nampula central hospitals • Bio security • Coordination between SCF and WVI in selecting refugees in need of eye glasses.	
Plan for the future • Trainings for health staff in : Bio security. • Creating counseling groups of mother among the refugees and Mozambicans in family planning • Nutrition councilors • Annual rotate system of refugee health workers • Purchase a proper sterilizer • Simplification of health weekly reports for IP's. • Review the role of the medical doctor in the camp and his reference terms for him. • Overall physical structural rebuild	

Barriers

1. The predominate culture of the refugee and Mozambican population is curative not preventive. Health promotion is a pending issue.
2. The health information system belongs to the MOH and is not appropriate to manage the health and nutrition sector in a Refugee Camp. Most of the variables available in the HIS are not grouped by refugee and Mozambican population, sex and age. The health workers both refugee and Mozambicans show high resistance to chance the health information system.
3. Save the Children as an implemented partner arrive delayed in the Camp and has show both a lack of capabilities in the field and experience working in a refugee Camp. The independent attitude that has been shown interfere with the goal of integrate an efficiently team work SCF/UNHCR. In addition, the SCF agreement has been unknown which has difficult the work of monitoring and supervision it role. The absence of plan work is another think that added difficulties to supervise and monitor it role.
4. The high level of conflict between the FO and OCM has harder the integration of teamwork between the two UNHCR's dimension of action in the country.
5. The H&N coordinator has been not involved in prepare the health and nutrition proposal for 2006.

Plans for year 2006

1. Promote the develop of preventive medicine involving the refugee and Mozambican population in the care of their own health trough health education, communitarian mobilization and reinforcing the role of the Health communitarian activist.
2. Improve the process of SCF's monitoring and evaluation and double the effort to build a joint teamwork with emphases in the implementation of HIV/AIDS, Malaria and Reproductive Health strategy.
3. Maintain the coordination with MOH and identified potential health investments to fill gap I the field of health and nutrition.

Conclusion

1. The health and nutrition status of the refugee population as a whole in the Camp of Maratane is stable. At the end of the year 2005 any sign is show that this trend will be rapid deteriorated in the near future.

Key recommendations

1. Malaria is the main public health problem and the measures to prevent the disease, perform an early diagnosis and give treatments timely has to be reinforced.
2. Others transmissible diseases that need special attention are cholera, diarrhea and dysentery due to the lack of usefully latrines in the camp and the epidemic cycle of cholera in the Province.
3. Measures to maintain and increase the vaccination coverage of measles, polio, Vit "A" , DPT/HpB and TT (pregnant and women 15 – 45) , has to be taken.
4. The launch of Targeted Supplementary Feeding Programme lead to both refugee and Mozambican population has to be decided.
5. Awareness about HIV/AIDS has to be maintained and increase. UNHCR has to find a partner to develop counseling and testing in the camp.
6. The movement of health communitarian activist has to be reinforced and their role and coordination with MOH has to be improved.
7. The reproductive health program has to be reinforced with emphasis in safe motherhood and family planning.
8. The availability of waters and latrines has to be increased.
9. The organization and the quality of the attention to the patients in the health facility has to be improved reviewing the role of the medical doctor, training the nurses, ensuring the continuous supply of medicines (including condoms), material of periodical reposition and laboratory reactive, as well as reinforcement the supervision from the head of the health post and from the districts. A continuous process of education on services has to be maintained and reinforced.

Annex 01: Evaluation of nutritional status in children between 6 and 59 months in the Centre of Maratane

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Update: 27/05/2006

Evaluation of nutritional status in children between 6 and 59 months in the Centre of Maratane

Mariano Salazar Castellón[5], Fernando Massaza[6], Josué Balanca[7]

Summary

Objective. Identify the nutritional status of children between 6 – 59 months of age using the weight-for-height and weight-for-age anthropometric indices in the Centre of Maratane.

Methodology. A descriptive and exploratory study was carried out during the period between November 31st and December 4th in the Centre of Maratane which include both the Refugees Camp of Maratane and adjacent Mozambican Villages, in a sample (N = 300) by conglomerates (4 neighbourhoods of the Refugee's Camp and 6 Mozambican Villages, n = 30), classified by age, weight and sex, using a cross methodology. The variable evaluated was the weight of children between 6 and 59 months through the Z score measure (Weight-for-height) and the standardized curves of weight-by-age used by the Ministry of Health of Mozambique. The data obtained were described using -2Z score cut off for W/H and absolute frequencies, accumulated frequencies and percentages for W/A. The test of Chi-Square was used as a test of independence.

Outputs. **A**) It was estimated a percentage of cases below -2Z score of 13.3% and a percentage of 86.6% up -2Z score. The percentage of cases less than -3Z score were 4.3% and between -3 and -2 Z score were 9% of cases. Below -2Z score the group of age more affected was 12 – 36 months (75%). The other groups of age were affected in the following manner: 37 – 56 months (0%) and 06 – 11 months (22.5%). **B**) In addition, in the case of the indicators of W/A indice, it was estimated an accumulated prevalence of 47.7% of the indicators of low weight (36.3%) and very low weight (11.3%) with relation to the age in the sample obtained. Other indicators in the sample are normal weight (49.7%) and excess of weight (2.7%). The group of age more affected was 12 – 36 months. The other groups of age were affected in the following manner: 12 – 36 months (55%), 37 – 56 months (32%) and 06 – 11 months (23%). The differences between the variables "Male and Female" related to the indicators of W/A indice have statistical significance (p = 0.008). The percentage differences between the variables "Male and Female" in all the indicators of W/A indice are favourable to the "Male". This difference is high in the indicator "Very low weight for age". **C**) The pattern of answers produced for the mother interviewed point out that the high concentration (85.3%) of the variable "Numbers of meals during the last 24 hrs" is inside the interval of "2-3 meals in 24 hrs". This same pattern of answers point out that the food less consumed in the last 24 hrs are fruit and vegetables (38.7%) and the more consumed food were cereals and tuber (85.7%). This same patterns of answers point out that in the last six months 58% of the kids between 36 – 59 months received the vaccine against measles (+ Vit A: 49.3%) and 49.0% received the vaccine against polio through the National Campaign of Vaccination. In the same period, 18.35% received the vaccine against measles (+ Vit A: 6.0%) and 30.0% received the vaccine against polio through the Routine Vaccination Program. In the same period, 14.7% did not receive the vaccine against measles and 10.0% did not receive the vaccine against polio. This same patterns of answers point out that during the last two weeks 40.7% of cases had diarrhea and during the last 24 hrs 65.7% of the cases were sick and 62.0% received breastfeeding.

Conclusion. Moderate malnutrition as well as a faltering in growth are the main features of the nutritional status of the population under study. The group of age 12 – 36 months and females in all groups of age represent the priorities to planning interventions. The immediate cause identified but probably not the only one was a diet based on the consume of cereals and tube with limited consume of fruit and vegetables (first) and meat, fish and beans (second). The main hypothetical cause of the identified problem is related to the overall social system of food production and consume and the degree of poverty of the Refugee and Mozambican populations but this study did not perform any analysis about it. In addition, the status of measles (plus Vit A) and polio vaccination should be improved as well as the promotion of breastfeeding and the measures to prevent diarrhoea.

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Recommendations

1. The geographical area constituted by the Camp of Refugees and the adjacent Mozambican Villages should be considered as an unique area for the local socioeconomic development taking into consideration the perspective of the Mozambican Government and the System of United Nations.

2. The possibility of open a Target Supplementary Feeding Programme in the Centre of Maratane should be considered taking into account the outputs of this research and other information available.

3. An active search of cases of severe malnutrition should be undertaken in the groups of age of 6 – 11 and 12 – 36 months to be immediately referred to the Nampula Central Hospital.

4. An educational nutrition programme should be organized lead to the mother of kids between 6 – 56 months.

5. The measles status of vaccination should be improved close to 100% in the target population.

6. The Movement of Health Activists that is, the refugees as well as Mozambicans, should participate actively on the different activities to be planned

7. Other studies should be undertaken to know the specific nutritious status of the refugee and Mozambican population as well as specific target group: pregnant women, breastfeeding mother, old people, chronic illnesses and HIV positive.

8. A specific study has to be undertaken to know the state of the art of the System of Nutritional Security related to both refugees and Mozambican population.

9. Appropriate measures should be taken to increase the incomes of family heads and other members of the family unit and to increase the availability of fruit and vegetables, meat, fish and beans in the local markets of reference.

10. All the recommendations should be undertaken in narrow relationship with the Ministry of Health, the National Institute which assists the Refugees and other institutions potentially related to the Mozambican Government.

11. An active programme of search of resources with donor potentials should be undertaken.

Key word Malnutrition, Refugee, , Mozambique, United Nations

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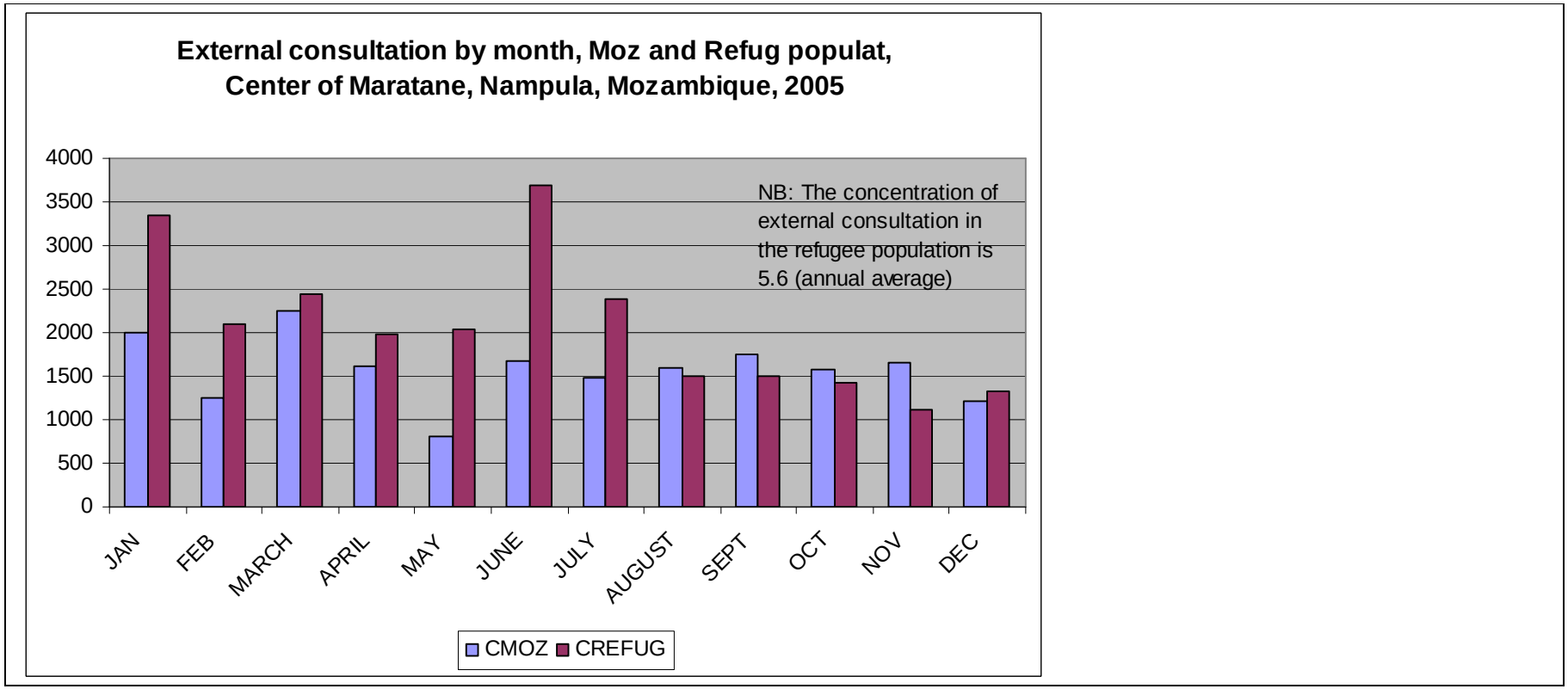
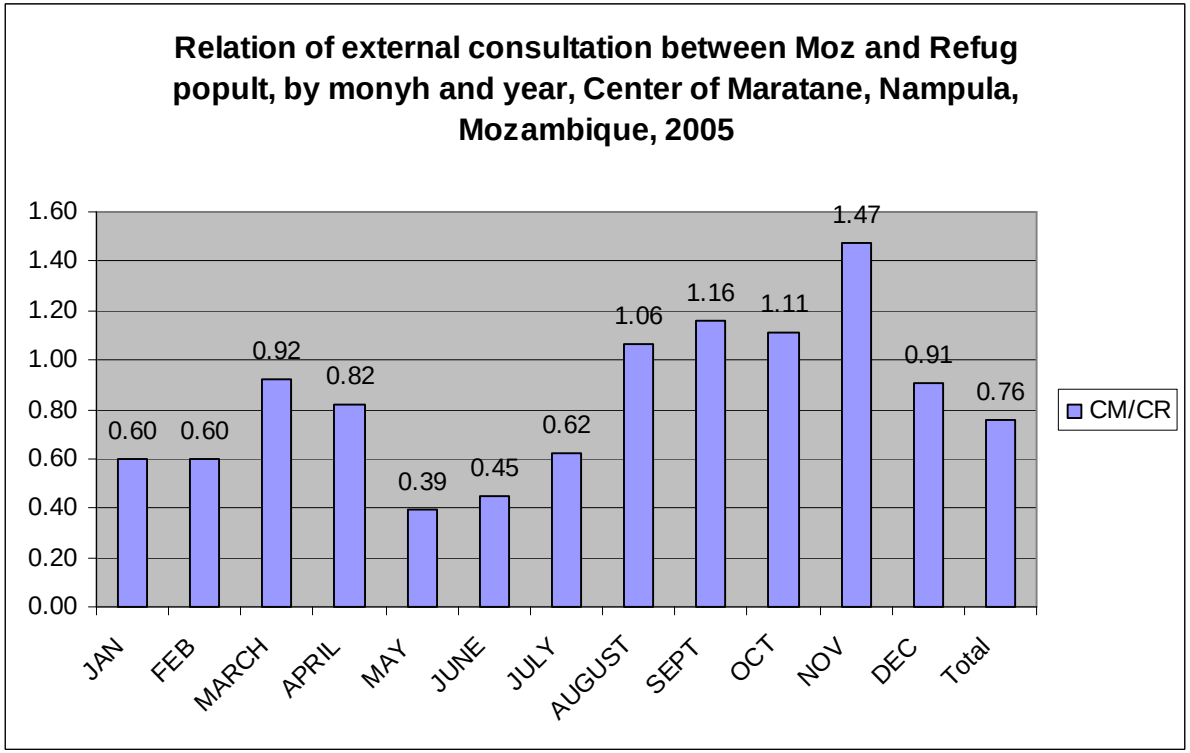
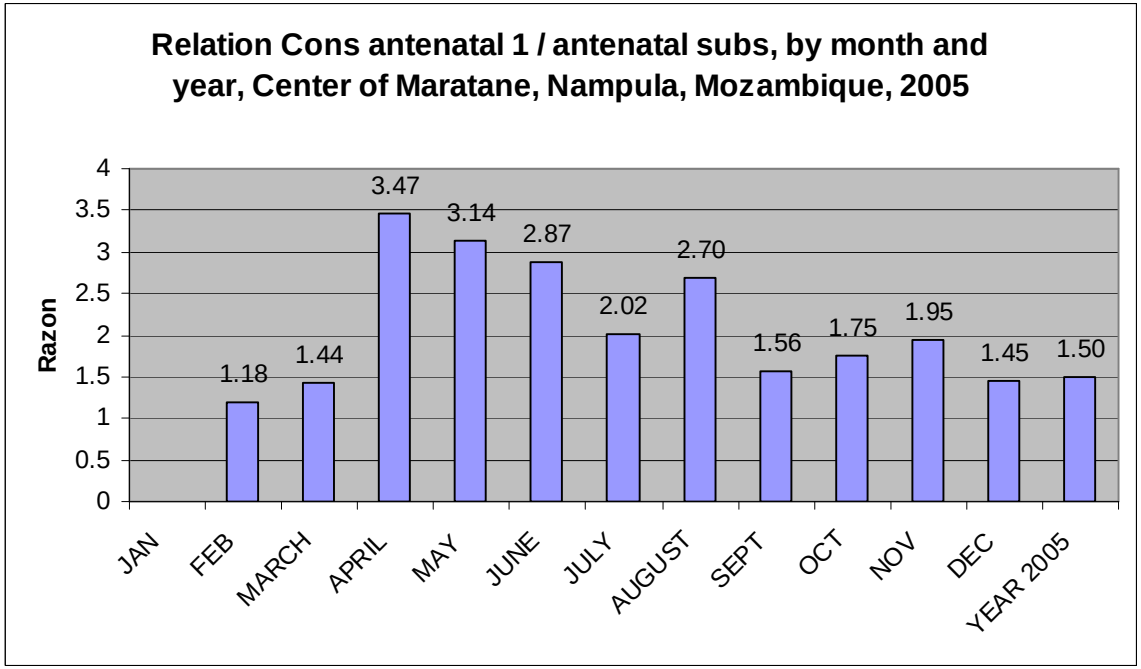
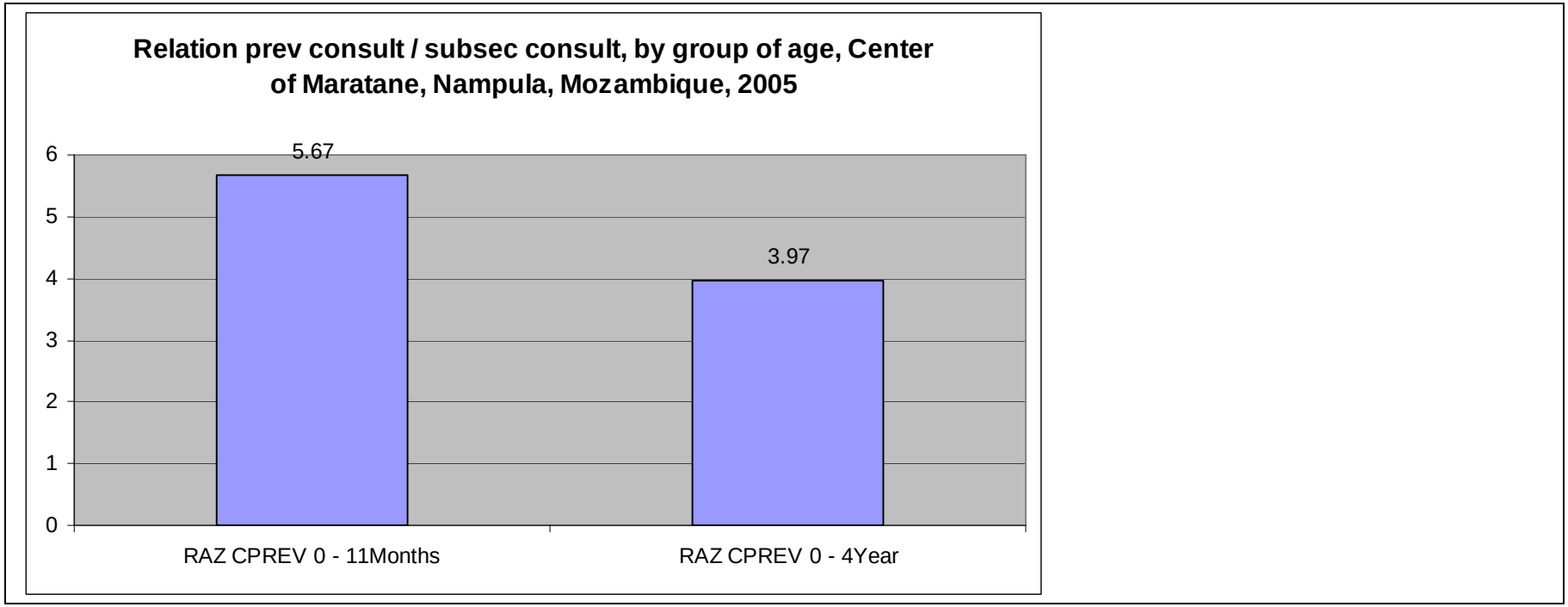
Members of the field teamwork	*Health Communitarian Activist, Refugee Camp of Maratane*	

Annex 01: General statistics available in the Health Post of the Center of Maratane



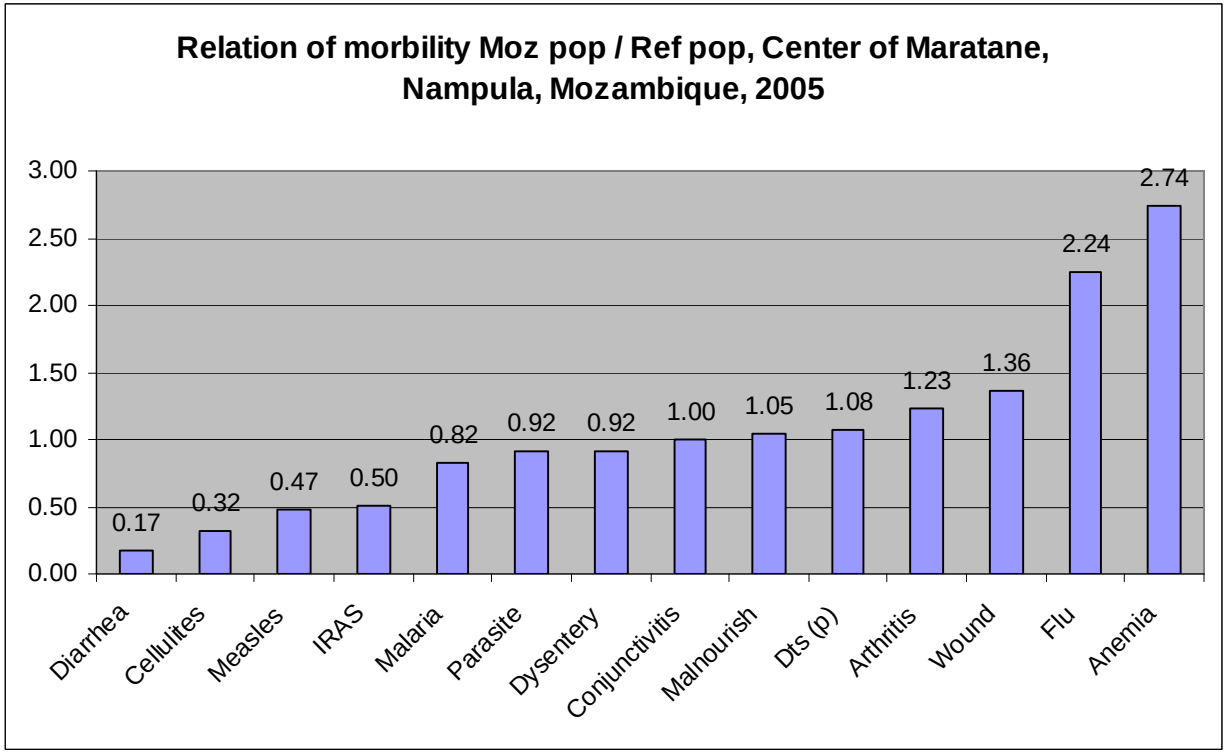

Relation of external consultation between Moz and Refug popult, by monyh and year, Center of Maratane, Nampula, Mozambique, 2005
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
0.60
0.60
0.92
0.82
0.39
0.45
0.62
1.06
1.16
1.11
1.47
0.91
0.76
JAN
FEB
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPT
OCT
NOV
DEC
Total
CM/CR


Relation Cons antenatal 1 / antenatal subs, by month and year, Center of Maratane, Nampula, Mozambique, 2005
Razon
4
3.5
3
2.5
2
1.5
1
0.5
0
1.18
1.44
3.47
3.14
2.87
2.02
2.70
1.56
1.75
1.95
1.45
1.50
JAN
FEB
MARCH
APRIL
MAY
JUNE
JULY
AUGUST
SEPT
OCT
NOV
DEC
YEAR 2005


Relation prev consult / subsec consult, by group of age, Center of Maratane, Nampula, Mozambique, 2005
6
5
4
3
2
1
0
5.67
3.97
RAZ CPREV 0 - 11Months
RAZ CPREV 0 - 4Year

REFUGEE POPULATION													
Cause	**JAN**	**FEB**	**MARCH**	**APRIL**	**MAY**	**JUN**	**JUL**	**AUG**	**SEP**	**OCT**	**NOV**	**DEC**	**YEAR 2005**
Malnourish						2	4	7	0	0	6	3	22
Flu	0	13	0	0	12								25
Arthritis	2	5	2	17	0								26
Anemia						4	3	5	6	1	10	6	35
Cellulites	14	25	0	37	15								91
Wound	19	31	18	36	16								120
Measles	5	2	35	31	0	5	2	35	31	0	0	0	146
DTS	7	33	6	52	25	24	20	38	28	7	10	29	279
Dysentery	46	47	10	14	15	21	17	34	26	28	4	27	289
Conjunctivitis	10	33	27	56	3	30	11	37	30	10	33	30	310
Parasite Int	106	205	15	118	39	59	80	101	86	70	35	40	954
Diarrhea	23	46	18	1	664	23	46	18	1	664	32	0	1536
IRAS	167	336	205	229	162	183	235	379	387	224	213	0	2720
MALARIA	957	1421	997	1128	575	816	770	737	649	815	297	701	9863

MOZAMBICAN POPULATION													
Cause	**JAN**	**FEB**	**MARCH**	**APRIL**	**MAY**	**JUN**	**JUL**	**AUG**	**SEP**	**OCT**	**NOV**	**DEC**	**YEAR 2005**
Malnourish						8	3	2	2	0	3	5	23
Cellulites	15	14	0	0	0								29
Arthritis	5	3	7	14	3								32
Flu	0	0	0	40	16								56
Measles						3	2	34	30	0	0	0	69
Anemia						6	6	41	11	13	6	13	96
Wound	16	64	21	43	19								163
Diarrhea						53	24	3	2	100	40	38	260
Dysentery	31	21	19	13	22	20	10	16	37	38	30	8	265
DTS	18	30	13	28	15	51	15	25	21	31	17	37	301
Conjunctivitis	13	16	36	19	6	10	6	27	19	44	61	54	311
Parasite Int	39	16	129	83	53	70	20	94	82	103	89	95	873
IRAS	82	111	182	22	90	170	150	129	172	100	80	80	1368
MALARIA	730	408	658	783	884	850	565	657	661	1010	491	387	8084


Relation of morbility Moz pop / Ref pop, Center of Maratane, Nampula, Mozambique, 2005
3.00
2.50
2.00
1.50
1.00
0.50
0.00
0.17
0.32
0.47
0.50
0.82
0.92
0.92
1.00
1.05
1.08
1.23
1.36
2.24
2.74
Diarrhea
Cellulites
Measles
IRAS
Malaria
Parasite
Dysentery
Conjunctivitis
Malnourish
Dts (p)
Arthritis
Wound
Flu
Anemia

0 - 11 MESES										RAZ ANNUAL POLIO	RAZ ANNUAL DPT/HPB
2005	**BCG**	**POLIO1R**	**POLIO1**	**POLIO2**	**POLIO3**	**DPT/HPB1**	**DPT/HPB2**	**DPT/HPB3**	**MEASLES**		
JAN	60	60	88	90	120	88	20	90	50		
FEB	111	33	59	39	19	59	39	19	27		
MARCH	154	28	63	100	90	45	25	110	78		
APRIL	92	45	90	27	21	90	77	71	51		
MAY	90	29	108	115	85	113	103	80	61		
JUNE	59	53	65	67	57	58	65	61	56		
JULY	19	20	60	58	52	59	53	55	34		
AUGUST	91	55	67	68	57	67	51	49	50		
SEPT	38	35	62	49	54	64	45	52	58		
OCT	20	16	27	14	13	27	18	13	10		
NOV	108	87	90	105	96	84	108	93	116		
DEC	52	41	78	80	70	72	77	77	46		
Total	894	502	857	812	734	826	681	770	637	0.86	0.93

	1RA DOSES		2 - 5 DOSES		Raz Annual Grav	Raz Annual W 15 - 45
	GRAV	15 - 45	GRAV	15 - 45		
2005	**VAT**	**VAT**	**VAT**	**VAT**		
JAN	210	0	90	0		
FEB	59	0	52	0		
MARCH	28	0	140	0		
APRIL	91	4	171	38		
MAY	50	0	100	0		
JUNE	57	2	68	16		
JULY	39	11	46	54		
AUGUST	27	3	23	5		
SEPT	75	4	52	13		
OCT	19	3	16	9		
NOV	115	17	91	0		
DEC	38	10	74	9		
Total	808	54	923	144	1.14	2.67

EQUAL or UP 12 MONTHS										RAZ ANNUAL POLIO	RAZ ANNUAL DPT/HPB
2005	**BCG**	**POLIO1R**	**POLIO1**	**POLIO2**	**POLIO3**	**DPT/HPB1**	**DPT/HPB2**	**DPT/HPB3**	**MEASLES**		
JAN	0	0	0	0	0	0	0	0	6		
FEB	0	0	0	0	0	0	0	0	0		
MARCH	0	0	0	0	0	0	0	0	0		
APRIL	1	0	0	1	4	0	1	4	15		
MAY	0	0	3	1	9	2	3	5	4		
JUNE	0	0	1	5	3	2	4	4	22		
JULY	0	0	3	3	1	3	2	1	6		
AUGUST	0	0	0	0	1	0	0	2	0		
SEPT	0	0	0	1	1	0	1	2	3		
OCT	0	0	0	0	0	0	0	0	0		
NOV	0	0	0	0	0	0	0	0	0		
DEC	0	0	0	0	0	0	0	0	0		
Total	1	0	7	11	19	7	11	18	56	2.71	2.57