TEULE HOSPITAL DDH MUHEZA



ANNUAL REPORT

2007

prepared by Dr Sally Edmonds

Executive summary

I would like to thank Dr Mndeme for running the hospital so effectively during my leave of absence for study. I am glad to return and to be working amongst the staff of Teule Hospital once more. The major change in staff that has occurred during 2007 has been the semi-retirement of Sylvester Chizazi who has been the Principal of the Nurse Training School for so long. We are glad that he is still with us as a tutor and able to assist his successor.

There has been a big change at District level in that the old Muheza district was split into two along the Sigi river in July and the northern district is now known as Mkinga. The community health team there is slowly being built up but there is as yet no full designated hospital so Teule will continue to support the new district for a while.

There has been a major change seen in the hospital workload as paediatric admissions have decreased drastically. This is surmised to have resulted from the successful implementation of new first line treatment (Artemisinin based dual therapy) of malaria across Tanzania.

The overall numbers of deaths appears to have stabilised at just over 1000 and the leading causes of death continue to be HIV and Malaria. It is interesting to note that just under 70% of these deaths are in people who live in Muheza district. The treatment programme for HIV / AIDS continues to grow rapidly.

A new VCT building was opened late in 2007 which is pleasant. The new MCH and Theatre building work continue and there have been assurances from GTZ that they will be completed in 2008. The water work saga also continues with additional work now being undertaken to link the new (not yet complete) GTZ supply to the wards thus ensuring the use of bore hole water when the town supply fails. Azimio ward, ICU and SCBU have all been renovated and plans for Nightingale to be done are developing.

Dr Rajabu Mallahiyo February 2008

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Staff

Senior staff

We welcome Dr Mallahiyo back from his year of study. Mr Chizazi has finally retired as the Principal of the NTS although is still with us working in the School. His place has been taken by Elizabeth Chigua who was his assistant for a number of years. Dr Mahona has returned from his year at Kibaha and three of our Clinical Officers who went for upgrading have returned as AMO's. We also welcome Dr Mkoda who has joined us from St Rafaels in Korogwe.

Medical SuperintendentRajabu MallahiyoExecutive SecretaryErnest ChamboMatronItikija MbagaAssistant MatronLaurence MbeziNTS PrincipalElizabeth ChiguaChaplainRev. MbulinyingiIT and laboratory consultantBenjamin Amos

Leonard MndemeMD (Medicine)Leonard MbagoMD General SurgeonSally EdmondsMB ChB Obstetrician

Mjema Mnkondo MD HIV / AIDS (Aids relief)

John Kifua S AMO Surgeon and Eye specialist
Martin Kiango S AMO Surgeon and Trauma specialist
Egbert Ngw'eshemi S AMO Radiology (working in paeds)

Charles Chagonia S AMO (working in anaesthetics and medicine)

John Mahona
S AMO (working in obs and gynae)
John Mkoda
S AMO (working in medicine)
Bashiri Mmbare
AMO (working in anaesthetics)
Saidi Msangi
AMO (working in medicine)
Mhina Mwagilo
AMO (working in medicine)
John Kibaja
AMO (working in surgery)
Penina Mkwema
AMO (working in obstetrics)

Total staff numbers

	2005	2006	2007
DDH Staff Total	293	488	477
Government Staff Total	55	88	82
Medical Officers	7	5	6
Assistant Medical Officers	6	4	6
Assistant Dental Officers	1	0	0
Clinical Officers	10	13	11
Dental assistant	0	1	1
Nursing officers	22	29	27
Nurse Tutors	6	7	7
Nurse / Midwives	71	41	56
Nursing Attendants	112	111	139
Hospital Chaplain	1	1	1
Physiotherapist	1	1	1
Pharmacy assistant	2	2	2
Pharmacy Attendants	5	5	5
Laboratory Technician specialist	1	1	1
Laboratory Technician generalist	2	3	1
Laboratory Attendants	8	8	8
Mortuary Attendant	1	1	1
Radiographer	0	1	1
Radiography Assistants	2	2	2
Radiography Attendants	1	1	1
Librarian	1	1	1
Watchmen	10	10	10
Kitchen Attendants	5	7	7
Laundry Attendants	4	4	3
Tailoring Attendant	1	1	1
Theatre porters	2	2	2
Autoclaving attendants	2	2	2 5
Works Department	9	11	5
Electrical Attendants	2	2	2
Plumbing Attendants	2	2	2 2 3
Drivers	3	3	3
Hospital Administrator	1	1	1
Assistant Hospital Secretary	1	1	1
Typist	1	1	1
Personal Secretary	1	1	1
Office attendant	1	1	1
Accountant	2	2	5
Accounts Clerks	1	1	0
Revenue Collectors	6	6	6
Supplies Officer	1	1	1
Supplies Assistant	2	2	2
Supplies Attendant	1	1	1
Records Technician	2	1	1

Upgrading staff

A number of staff have returned to Muheza having upgraded at various places. They are mostly enthusiastic to put what they have learned into practise and are challenging to us all to improve our knowledge and practises. Others are continuing on long training courses visiting us during holidays to gain experience.

	Name	Course	College					
Tra	Training completed September 2007							
1	Rajabu Mallahiyo	M.P.H	Muhimbili University					
2	John Tesha	Masters in Physiotherapy	South Africa					
3	John Kibaja	A.M.O.	MATC - Tanga					
4	Mhina Mwagilo	A.M.O.	MATC - Tanga					
5	Penina Mkwema	A.M.O.	MATC - Tanga					
<u>6</u>	Neema Ngoda	Diploma in Nursing	MATC - Tanga					
<u>7</u>	Jamila Mpandi	Diploma in Nursing	Kairuki University					
<u>8</u>	Raphael Chang'endo	Diploma in Nursing	Ifakara					
9	Tatu Mfuko	Certificate in Nursing	Mkomaindo - Mtwara					
Tra	nining continuing							
1	Anthony Nsojo	Masters in Microbiology	Muhimbili University					
2	Aubrey Maonga	M.D.	Kairuki University					
3	Noel Bendera	M.D.	Kairuki University					
4	Joseph Fwoma	M.D.	Bugando University- Mwanza					
5	Isabela Tenge	Certificate in Nursing	Tarime - Musoma					
6	Masanja Mhezi	A.M.O.	MATC – Ifakara					
7	Emmy Mkumba	Pharmaceutical Technician	Bugando University					
8	Neema Bocco	Stores Management	Mbeya					
Tra	nining started in 2007							
1	Anjelina Sengwaji	Diploma in Nursing	Mbeya					
2	John Kiango	Diploma in Nursing	Ifakara					

Visitors

from Overseas

Fiona Goodarzi from Hereford to assist in theatre

Carole Worlock from Hereford to assist in theatre

Mike Horton from Hereford to assist in minor theatre

Steve and Claire Scotcher from Hereford in Ophthalmology and Palliative Care

Arthur and Margaret Radnor from Hereford for plumbing

Jeremy Gray and Oliver Peney from Hereford in Medicine

Catherine Chima-Okereke from Hereford in Sexual Health

Richard and Karilyn Collins from Hereford for Medicine and Palliative Care

46 medical students and 1 nursing student from the UK have carried out an elective study period here.

to Hereford

Elizabeth Chigua – Nurse Training

Angela Kundy – Non pharmacological management of psychiatric disorders

Bashiri Mmbare – Endoscopy

Mary Leonard Rafael - SCBU

General Statistics

The hospital appears to have become a little quieter this year with fewer daily admissions and fewer deaths. However the death rate per admission has risen suggesting that we are admitting more seriously ill people. No doubt the biggest contributor to this change is that seen on the paediatric wards where there are far fewer daily admissions resulting it is suggested from the general decrease in malaria in children seen at hospital now that effective first line treatment is available in the clinics

	2005	2006	2007
Outpatients New	35751	49166	31075
Outpatients Follow up	40977	58766	48453
Admissions	16507	26498	13436
Average no. admissions daily	45.1	72.3	44.0
Bed Occupancy	286.9	416.5	
% Bed Occupancy (on 260 beds)*	110.3	149.7	117.4
Duration of stay in days	6.2	5.76	5.4
Deaths	1269	1260	1093
Deaths as % of admissions	7.68	4.76	8.1
Deliveries	3030	3074	3134
Maternal Deaths	27	36	31
Maternal Mortality Rate / 100,000 live births	891	1171	989
Neonatal Deaths	41	45	52
Perinatal Mortality Rate / 1000 live births	45	55	54
Major Surgery	1154	961	928
Minor Surgery	1654	172	179
Post Mortems	64	96	54

Disease statistics

These continue to be somewhat unreliable.

Out Patient Numbers

	Under 5	Over 5	Total
Allergies	9	16	25
Amoebiasis	0	99	99
Anaemia	176	74	250
Asthma	58	1288	1346
Bacteria disease	573	4367	940
Burn	4	1	5
Cut wound	3	0	3
Diabetes Mellitus	0	2274	2274
Diarrhoea Disease	362	255	617
Dysentry	117	169	286
Ear Infection	83	60	143
Epilepsy	0	0	0
Eye Infection	0	0	0
Fractures	0	0	0
Fungal Infection	120	336	456
Genital Ulcer Disease	0	60	60
Genital Urinary Discharge	24	260	284
Hypertension	0	1236	1236
Intestinal Worms	207	261	468
Malaria	3504	2697	6201
Malnutrition	4	0	4
Non Infection gastro intestinal	0	274	275
Obstructive Disease	167	360	527
Other Nutrition disorder	0	0	0
P.I.D.	0	373	373
Peptic Ulcers	0	902	902
Pneumonia	260	185	445
Psychosis	0	0	0
Rheumatic and Joint disease	0	255	255
Schistosomiasis	23	113	136
Skin Infection	200	373	573
Syphilis	0	0	0
Thyroid disease	0	3	3
U.R.T.I	1460	707	2167
Urinary Tract Infection (UTI)	115	422	537
Viral Infection	0	6	6

In Patient Numbers

	Under 5	Over 5	Total
Abortion	0	311	311
Allergies	0	4	4
Amoebiasis	0	5	5
Anaemia	2107	153	2260
Angina	0	0	0
Ascitis	1	5	6
Asthma	61	59	120
B.P.H.	0	52	52
Bacterial Infection	128	95	223
Burkts Lymphoma	1	12	13
Burn	17	12	29
C.V.A.	0	35	35
Carcinoma	0	14	14
CCF	20	25	45
Cholera	0	5	5
Cut wound	0	25	25
Diabetes Mellitus	0	42	42
Diarrhoea Disease	281	187	468
Dysentry	53	83	136
Ear Infection	25	8	33
Epilepsy	3	12	15
Eye Infection	0	-	0
Fibroid	0	19	19
Fractures	12	98	110
Fungal Infection	9	40	49
Gall stone	0	0	0
Genital Ulcer Disease	0	29	29
Genital Urinary Discharge	1	146	147
head Injury	0	16	16
Hernia	6	163	169
Hydrocoele	0	123	123
Hypertension	0	110	110
Intestinal Worms	21	33	54
Leprosy	0	0	0
Liver Abscess	1	3	4
Liver Cirrhosis	0	5	5
Malaria	4243	1907	6150
Malnutrition	18	1	19
Measles	20	20	40
Meningitis	14	11	25
Nephrotic Syndrome	1	10	11
Non Infection gastro intestinal	5	31	36
Obstructive Pulmonary	60	1.44	200
disease	68	141	209
Other Nutrition disorder	17	4	21
Ovarian cyst	0	15	15

P.I.D.	0	54	54
Peptic Ulcers	0	48	48
Pneumonia	779	354	1133
Poisoning	2	15	17
Psychosis	1	12	13
Retension of Urine	0	16	16
Rheumatic and Joint disease	0	77	77
Schistosomiasis	2	1	3
Septicaemia	9	19	28
Sickle Cell	6	6	12
Skin Infection	31	37	68
Snake bite	0	98	0
Syphilis	0	0	0
T.S.S.	0	0	0
Tetanus		2	2
Thyroid disease	5	16	21
Tuberculosis	2	79	81
U.R.T.I	386	149	535
Urinary Tract Infection (UTI)	30	62	92
Viral Infection	0	21	21
VVF/Fistula	0	13	13

Death Statistic

All causes

This data is collected after the morning meeting discussion about each case. The doctor responsible for the case giving the most accurate cause of death which is then noted by the secretary.

	2003	2004	2005	2006	2007
Adult Malnutrition					5
Anaemia	44	33	28	48	51
birth trauma/prematurity	23	21	18		5 5
burns		5	6	4	5
Cholera		6	4		
congenital abnormality		1	2	4	2
CVA	50	20	38	45	52
diabetes	6	2	4	10	25
diarrhoeal disease	29	25	28	19	9
Encephalitis	2	3			1
gangrene		1	2		
GI bleed		6	5		5
heart disease	68	53	53	55	35
HIV / AIDS	333	354	371	291	316
Hypoglycaemia	1	1			
Intestinal obstruction	28	6	17	11	5
liver disease		5	12	16	19
Malaria	261	161	184	195	201
malignancy	50	41	38	40	38
Marasmus/kwashiorkor	11	9	8	13	11
Measles					6
meningitis	66	40	49	16	35
obstetric complications	7	8	9	16	5
Other	3	20	25	14	15
pneumonia	69	69	57	47	74
Rabies	1	1	1		3
renal disease	7	7	11	21	11
Respiratory disease	6	6	3		
septicaemia	50	46	49	45	69
snake bite	1	4	3	3	7
TB	26	17	31	37	40
tetanus	5	8	8	7	2
Thromboembolic disease	4	3	3		5
Trauma	24	12	17	23	13
typhoid	25	7	7		
Unexplained fever	47	59	83	39	
Unknown	41	60	93	39	14
Total deaths	1288	1120	1267	1058	1093

Causes of death – top 10

	2005		2006		2007	
HIV / AIDS	371	1st	291	1st	316	1st
Malaria	184	2nd	195	2nd	201	2nd
pneumonia	57	4th	47	5th	74	3rd
septicaemia	49	7th	45	7th	69	4th
CVA	38	8th	45	6th	52	5th
Anaemia	28		48	4th	51	6th
TB	31	10th	37	10th	40	7th
malignancy	38	9th	40	8th	38	8th
meningitis	49		16		35	9th
heart disease	53	5th	55	3rd	35	10th

Age/sex

	2006			2007
	Total	M	F	Total
0-1 yr	203	90	92	182
1-4 yrs	182	79	95	174
5-14 yrs	39	17	29	46
15-64 yrs	488	262	259	521
65 + yrs	191	59	106	165
Total Result	1103	507	581	1089

Cancer sites

	2006	2007
Bladder	6	4
Bone	1	1
Bowel	1	2
Brain	1	0
Breast		1
Burkitts	1	1
Cervix	4	5
Hepatoma	6	5
Larynx	1	0
Leukaemia	2	1
Liposarcoma	1	0
Lung		1

Lymphoma	3	2
Myeloma	1	0
Neuroblastoma		1
Oesophagus	2	4
Pancreas		2
Prostate	4	3
Renal		1
Stomach	2	0
Thyroid	1	0
Unknown primary	3	1
Total Result	40	38

OI for HIV

	2006	2007
anaemia	5	29
candidiasis		7
cerebral lymphoma	2	
CM	14	23
CVA		2
Dehydration	1	2 2
Diarrhoeal disease	1	8
encephalopathy	3	1
guillain-barre syndrome	1	
haematemesis	1	
Heart disease	6	4
Herpes Zoster	1	
IRS		1
KS	9	6
Liver disease	1	6
abdo lymphoma	2	1
Malaria	8	8
malnutrition	1	
Meningitis	3	8
necrotising fasciitis	1	
PCP	26	16
pneumonia	11	21
Polyneuropathy	1	
PTB	42	44
pyomyositis	1	
septicaemia	6	14
Stevens Johnsons	1	
TB (extra pulmonary)	24	6
Toxoplasmosis	4	7

Malaria (CFR)

Year	Under 5	Over 5				
	Admissions	Deaths	CFR %	Admissions	Deaths	CFR %
2003	3278	219	6.68	821	42	5.12
2004	4310	139	3.23	1868	22	1.18
2005	5052	163	3.23	773	21	2.72
2006	4192	160	3.82	1476	35	2.37
2007	4243	177	4.17	1907	68	3.57

District of Origin

	2006	%	2007	%
Handeni	89	8.07	107	9.97
Korogwe	51	4.62	85	7.92
Lushoto	6	0.54	13	1.21
Mkinga		N/A	85	7.92
Muheza	922	83.59	745	69.43
Pangani	12	1.09	3	0.28
Tanga	23	2.09	21	1.96
Other		0	14	1.3
Total Result	1103		1073	

Surgical Statistics

Major Operations

	2005	2006	2007
Amputation	12	7	8
Anal fistula	8	4	3
Appendicectomy	27	8	10
Breast mass excision	10	1	2
BTL	102	70	42
Caesarian Sections	315	344	390
Club foot	4	14	10
Ectopic pregnancy	29	11	14
Exploratory laparotomy	44	24	38
Herniorraphy	277	233	190
Hydrocoelectomy	258	134	90
Hysterectomy	30	50	44
Orchidectomy		4	9
ORIF		31	20
Ovarian cysts	26	7	11
Prostatectomy	19	5	24
Ruptured Spleen	8	1	1
Thyroidectomy	4	5	7
VVF repair	13	8	15

Minor Operations.

	2005	2006	2007
Excision biopsy	10	25	28
D&C	37	37	10
ERPC	85	50	60
Cut wound	27	60	81

Minor Theatre.

	2005	2006	2007
Circumcision	40	16	2
Surgical Toilet		20	10
Excision		21	12
Reduction of #		40	30
Catheterisation	142	293	200
I&D	212	340	294

Obstetric Unit

Activity

	2003	2004	2005	2006	2007
Total Deliveries	2613	3046	3030	3074	3134
SVD (Vertex)	2295	2682	2686	2646	2695
Breech	37	65	64	73	52
LSCS	246	261	254	326	365
C/S rate (%)	9.41	8.57	8.38	10.61	11.65
V/E	35	38	24	29	22
Forceps	0	0	2	0	0
Twins	67	66	62	99	49
Triplets	0	2	4	1	1
Total Births	2680	3116	3100	3175	3185
Live Births	2546	2980	3002	3044	3064
Stillbirths	134	136	98	131	121
NND's	45	41	41	45	52
Abnormal Babies	3	2	0	4	0
Premature babies	80	69	82	111	73
Maternal Deaths	44	29	27	36	31
MMR (/100,000)	1684	952	891	1171	989
PNM (/1000)	67	57	45	55	54

SCBU – Joseph's Unit

The SCBU has been upgraded this year.

	2005	2006	2007
Low Apgar Score	85	75	71
Premature	82	89	74
Low Birth Weight	15	10	11
Vacuum	6	5	1
Malaria	4	0	4
Pneumonia	4	8	9
Post LSCS	0	30	20
Total Admission	242	223	190

Tumaini

	2005	2006	2007
women admitted	88	136	108
av. length of stay			
(days)	10	14	10

Maternal Deaths

Cause of death

	2003	2004	2005	2006	2007
Direct					
APH	0	1	0	2	0
HT disease	4	1	1	1	3
Ectopic	0	1	0	0	0
Obstructed labour	0	0	1	0	0
Pulmonary Embolus	3	0	1	2	1
PPH	3	3	5	4	1
Ruptured Uterus	2	2	2	3	1
Septicaemia	11	3	7	5	5
TOP	1	1	2	0	3
Sub-Total	24	12	19	17	14
Indirect					
Anaemia	5	1	1	3	10
Heart disease	3	1	1	2	0
HIV	6	8	1	7	5
Malaria	2	2	2	4	1
Miscellaneous	4	2	3	2	0
Unknown	0	1	0	1	1
Total	20	15	8	19	17
Overall total	44	27	27	36	31

Miscellaneous include:-

Liver disease, Meningitis (2006) GIT bleed, Shock ?cause, Guillain Barre (HIV), (2005), Cellulitis, Obstructed airway (Ludwigs Angina), (2004), Drug reaction, Renal Failure, Liver disease, Pneumonia, (2003).

Associated Factors

These are related to but not actually causing the death.

	2005	2006	2007
Abruption	1		
Anaemia	7	4	2
Hepatitis	1		
HIV	3		4
HT disease	2	3	
Malaria	2	2	1
Native drugs	2		
PPH	5		
Pulmonary oedema		1	
Sepsis	3	5	2
TOP	2		

Avoidable factors

These are factors identified at the maternal mortality meetings where things could have been done better. They include

	2005	2006	2007
Family level	10	3	7
Clinic level	6	4	7
Hospital level	10	6	10

Demographic details of the ladies that died

	2005	2006	2007		2005	2006	2007
Age	14-36	17-42	17-38	<12 hrs	10	9	4
P	0-6	0-6	0-8	12-24 hrs	4	4	2
				>24 hrs	13	23	25
ANC				District			
Not known	0	2	6	Muheza	21	28	26
At Teule	0	7	6	Tanga	1	1	0
ANC Mz dst	11	18	10	Handeni	4	6	0
Elsewhere	5	7	4	Korogwe	1	0	2
Pre 20/40	6	2	5	Other	0	1	3
Place of delivery				Mode of delivery			
Undelivered	6	8	4	SVD	10	19	17
Teule	11	19	16	LSCS	7	6	5
Home	9	6	3	Lap	0	1	0
Dispensary	1	3	1	Abortion	4	2	4
-				Undelivered	6	8	4
				Ectopic	0	0	1

PMTCT

	2005	2006	2007
tested positive Mum Nvp Babe Nvp	3134 368 147	4224 312 183 140	6438 465 400 305
Mum PMTCT+ Babe PMTCT+	7	58	84
	8	54	137
Mum HAART	16	76	44
Fup at 6/12	24	31	39

There has been some further expansion to outlying clinics of PMTCT services in 2007 resulting in few women coming to hospital untested, The challenge now is to improve the enrollment into care and treatment of all the pregnant women in the district known to be positive. A positive mothers club has been started this year by Hawa Kayuzi and has grown in strength remarkably with 58 women attending the club in December. Plans have been made to divide the group into two and increase the numbers of meetings per month.

RCHC

	2005	2006	2007
Ante-natal Care			
1st visit	1488	1953	1333
Revisit	2841	750	1047
Tetanus Toxoid (2nd to 5th dose)	1207	1504	1611
Child Health			
Under 1 yr 1st visit	907	1016	720
Revisit (0-5 yrs)	6583	2380	13,720
BCG	1304	1032	1304
DPT-Hb 1st	1192	1213	1353
DPT-Hb 2nd	1070	1204	1361
DPT-Hb 3rd	1100	1188	1412
Polio 1st	1192	1170	1367
Polio 2nd	1070	1185	1365
Polio 3rd	1100	1186	1402
Measles	995	879	1113
TT 1st	888	1152	1337
TT 2nd	912	946	1096
TT 3rd	180	333	358

TT 4th TT 5th	144 43	172 53	93 64
Family Planning			
1st visit	375	525	513
re-visit	3264	3280	3785
Oral contraceptives	2664	2326	1989
Depo-Provera	2878	3130	3656
IUCD	11	18	17
Condoms	1179	2083	2162
Minilap BTL	48	90	81

VVF Surgery

We are lucky at Teule Hospital to be able to offer surgery for the repair of this devastating consequence of obstructed labour. Dr Mahona has been away for most of the last year but still was able to continue the service, returning at intervals to operate on cases selected. Now that he has returned full time we hope that the service will grow further.

	2005	2006	2007
VVF repair	16	15	19
RVF repair	0	1	2

VVF = Vesico-vaginal fistula (a hole between the bladder and the vagina developing after prolonged obstructed labour and leading to incontinence)

RVF = Recto-vaginal fistula (a similar problem but the hole is between the rectum and the vagina)

The Diana Centre

HIV screening

Reason for testing	Number Tested	Number positive	% positive
2005			
PMTCT	3134	368	12%
Blood transfusion	2706	147	5%
VCT	8943	1096	12%
Ward diagnosis	1490	807	54%
Total	16273	2418	
2006			
PMTCT	4224	312	7%
Blood transfusion	2716	166	6%
VCT	4213	1218	29%
Ward diagnosis	173	52	30%
Total	11326	1748	
2007			
PMTCT (Teule)	2363	181	8%
PMTCT (Mhz district)	6438	465	7%
Blood transfusion	2995	143	5%
VCT + Ward Adult	5595	1541	28%
VCT + Ward Child	521	160	31%
Total	15549	2490	

Anti-Retroviral treatment

CTC Enrollment status to December 2007

	2004	2005	2006	2007
Adults enrolled at CTC	1055	2077	3605	5038
Children enrolled at CTC			443	623
Adults on ARV Therapy	133	548	1304	2099
Children on ARV Therapy	32	83	181	263
Cumulative Number of Deaths on ARV (Since on			98	203
October 2005)				
Home Visits		302	140	166
Staff members enrolled to the CTC	21	28	38	43
Number enrolled at Maramba Satellite Clinic			57	108
Number enrolled to Amani satellite Clinic			25	28

This is the forth year of funding by PEPFAR via the AIDSRELIEF project. Following VCT clients are seen by the trained ART staff team for care and treatment. We still conduct the two satellite

clinics at Maramba and Amani to improve access to treatment. Patients follow up for adherence has been done through out the year by sending the adherence staff team to the community twice a week. One of the biggest tasks achieved was the formation of the patients' community groups so that the patients can follow up one another within their communities. So far there are 20 positive patients' community groups formed. Community mobilization is also done twice a month to different villages for raising awareness on early HIV testing and access to care and treatment.

World Food Programme

This is the support that is given to patients from the food insecure households on their initial six months of being put on Anti Retro Viral Therapy. Food is meant for improving the health status of the patients and their families and improve adherence to treatment because studies were done and found that most patients from the poor families could not take drugs on empty stomachs.

COMODITY	FEB 2006	DEC2006	2007
Maize (Kgs)	135,000	101,250	117,450
Pulses (Kgs)	18,000	13,500	15,650
Corn Soya Blend (CSB) in Kgs	36,800	27,000	30,330
Vegetable Oil (Kgs)	7,912	5,620	7,421.6
Total	197,300	147,370	170,771.6
Beneficiaries:			
Male	96	28	85
Female	274	97	173
Children	74	35	27
Total	444	160	285

Other Nutritional support

ITEM	COST(TSH)
Nido	1,322,000/=
Ulezi	470,000/=
Lactogen	1,920,000/=

Muheza Hospice Care

The appointed Medical director of MHC who succeeded Dr. Karilyn Collins, Dr. Sandya Holkar resigned in Mid June 2007. Efforts are being made to appoint another Medical Director. Muheza Hospice Care (Diana Centre) provides palliative care services for patients with incurable diseases and also plays a role of being a CTC for the HIV/AIDS patients at Muheza DDH

Educational Activities

Social Worker Angela Kaiza has finished her Diploma Course in Palliative Care. Staffs working in the CTC have attended seminars on care of Paediatric HIV, Monitoring and Evaluation activities, HIV and Palliative Care. Also Muheza Hospice Care conducts teaching sessions for the 2nd and 4th year students at the Muheza Nursing School to equip them with some knowledge on Palliative care.

Other Activities

Some staff of Muheza Hospice Care attended the African Palliative Care Association Conference in September 2007 which aimed at the advocacy of Palliative Care services in Africa and Worldwide

Kids Club continues every third and fourth Fridays of the month and on 1st December 2007 a highly successful outing to Tanga Yacht club was organized for 68 children attending the CTC. Both World Hospice Day and World Aids day were celebrated in 2007. A one day palliative care workshop attended by 43 hospital members of staff and 25 VHW followed by an afternoon of entertainment for World Hospice and Palliative Care Day. For World's AIDS Day the District held celebrations and educational activities in Magila which were attended by members of the Diana Centre, MDDH AIDSRelief Project Staff, Axios, SHDEPHA+ and many other groups. Fares continue to be provided to poor Cancer patients from within Muheza district to Ocean Road. In 2007 total of 8,22,650 T shillings was spent to support Cancer patients only for fare and other social support.

Specialist Departments

There continue to be numerous specialist departments within the hospital despite the problems of staff shortages. The dedication of less qualified but experienced personnel is of great importance.

Dental department

There has been a significant increase this year in the number of teeth that have been treated conservatively which is encouraging. A few referrals have been necessary due to a lack of staff and equipment relating to the particular problem presenting.

	2005	2006	2007
Adults	3254	4252	3892
Children	881	69	509
Total attendances	4135	4321	4401
Diagnoses			
Caries	3564	3419	3613
Periodontal disease	191	162	160
Trauma	46	38	47
Neoplasm	12	0	16
Others	668	583	551
Treatment			
Extraction	3915	3800	3912
Conservation	143	154	253
Others	299	295	124
Scaling	18	41	52
Surgery	42	31	57
Referred	0	0	3

Diabetes

	2005	2006	2007
Male		842	761
Female		972	1038
Child		1	1
Total seen	1556	1815	1799
New diagnosis male		52	46
New diagnosis female		43	61
Total new	82	95	107
Type 1	24%	20%	23%
Type 2	76%	80%	77%
Hypertension	24%	30%	30%

Eye department

This is ably run by Sister Scholastica. Every month an Ophthalmologist from Tanga comes to conduct a busy clinic often lasting until 6 or even 8 pm. Operations booked at the clinic are carried out in tanga over the following week.

	2005	outreach	hospital	outreach	hospital
	2005	2006	2006	2007	2007
New cases	1705	2221	2183	2623	2164
Reattendances	272	1208	1585	1041	1637
Total	1977	3429	3768	3664	3801
Operations					
BTRP	24	0	39	14	20
Cataract	366	218	0	146	108
Dacryocystorhinostomy	-	5	0	0	0
Glaucoma	20	7	0	14	11
Remove foreign body	-	2	19	15	23
Squint	-	2	0	2	0
Trauma	-	3	13	0	0
Other	37	-	-	17	12
Other Minor		74	360	106	325
Total operations	447	311	431	314	499

Intensive Care Unit

This is used by all clinicians in the hospital but is reviewed daily by the anaesthetists. (Figures for 2007 only).

	Male	Female	Died	Total
CVA	7	10	8	17
Diabetes	5	10	1	15
Head Injury	9	1	2	10
Hypertension	5	7	2	12
Malaria	5	12	8	17
Meningitis	1	3	2	4
Pneumonia	2	1	2	3
Snake bite	70	49	1	119
Totals	104	102	26	197

Malnutrition Programme

This programme continues actively on Hills ward. The children stay for a prolonged period which give a chance for health education of the mothers in the broadest sense, including diet, hygiene and HIV. Initially feeding is 2 hourly and attention to vitamin A prophylaxis, immunizations and malaria prevention with bed nets is given. Progress is monitored with twice weekly weighing and monthly follow up continues post discharge. We continue to be grateful for the sponsorship of Medicines for Muheza enabling this programme to continue.

	2005	2006	2007
Kwashiokor	27	9	6
Maramus	27	30	16
Marasmic-Kwashiokor	0	5	5
Maramus related to HIV	18	18	25
Total	72	62	52
Admissions	72	62	52
Deaths	5	6	12
Absconders	9	8	5
Improved	58	48	35
Total discharged	72	62	52

Mental Health Programme

The team of Psychiatric nurses is ably lad by Margaret Mhina. There have been ongoing problems this year with the supply of psychotropic drugs which appear to be under-requested by pharmacy.

	2005	2006	2007
Acute confusional state		4	6
Acute Psychosis	16		
Alcohol Abuse	2	2	
Anxiety	10	8	13
Bipolar disorder	17	15	6
Child disorder	1		
Delirium	3		
Dementia	3	5	2
Depressive disorder	26	9	9
Drug Abuse	10		1
Epilepsy	382	174	153
Hyperkinetism		2	
Mental retardation	2	6	3
Schizophrenia	67	71	58
Unexplained somatic	12		15
Total	551	296	266

Neonatal Unit Jenner

	2005		2006		2007	
	admissions	deaths	admissions	deaths	admissions	deaths
Total no of admissions	64	7	42	7	35	1
Abdominal wall defects	2					
Anaemia			3			
Congenital pyloric stenosis	1					
Imperforate anus				1	1	
Malaria	14	2	18		3	
Meningitis			2	2	1	
Neonatal sepsis	22	3	7	3	17	1
Physiological jaundice			1		3	
Pneumonia	9		4		2	
Prematurity	1	1				
Tetanus	1	1		1	2	
Umbilical sepsis	8					
Underweight			6		1	
Other	4		1		5	
Unknown	3					

TB and Leprosy

It is encouraging to note that the number of people diagnosed with TB who have undergone HIV screening is continuing to rise year by year. Menwhile the total number especially of sputum negative TB has fallen which may indicate better diagnosis of other conditions.

	_		
TB	2005	2006	2007
PTB sputum +ve	242	343	215
PTB Sputum -ve	600	515	304
Extra- pulmonary TB	115	131	99
Total	957	989	618
Cure rate (Jan – Mar)		89%	85%
HIV screened	544	696	549
rate	57%	70%	83%
HIV positive	455	446	324
rate	84%	64%	59%
Leprosy			
Attendance	134	120	69
New diagnosis			32
IP	4	3	60
OPD	13	10	5
MB		40	25
PB		17	10

Physiotherapy

	2005	2006	2007
Arthritis	76	90	106
Back pain	320	113	334
Joint pain			308
Neck pain	105	35	103
Other pain			107
Burns			67
Contractures			234
Fractures			196
Spinal cord injury	1	4	11
Brain injuries			13
Paralysis other			129
Hemiplegia	42	49	117
Cerebral Palsy	88	64	139
Brain lesions			7
Talipes	100	87	132
Spinal cord lesion			26
Other	0	0	194
Total	732	442	2223

Pain other includes – muscle, nerve or limb of unknown origin

Paralysis other includes – Erb's palsy, single limb paralysis, facial palsy and that related to HIV Other includes – joint or limb weakness, dislocation, bone disease, cellulitis and congentical malformations

The physio department has welcomed the return of John Tesha and the expertise he brings. The workload has increased enormously this year and better relationships with other departments have been established. There has also been an improvement on the quality of care offered, with more teaching of preventative measures as well as treatments being given. The staff – patient relationships have improved.

Diagnostic Services

X ray department

	2005	2006	2007
Chest	2449	3796	3456
Bones	860	2975	2765
Abdomen	62	72	69
Barium Studies	0	0	3
Total	3371	6843	6293

USS

	2005	2006	2007	
Males	361		267	
Females	814		942	
Obstetric	316	459	74	
Gynae		329	241	
Other		862	824	
Total	1491	1650	2348	

ECG

	2005	2006	2007
Adults	219	140	80
M		69	37
F		71	43
Children	78	25	18
Total	297	165	98

Laboratory Activity

	2005		2006		2007	
	Number	Positives	Number	Positives	Number	Positives
Haematology section.						
Leucocyte counts	304		583		804	
Full Blood Picture			181		227	
L E cells	92		1		0	
Sickle cell test	26	8	83		183	14
B/Clotting time	27		13		22	
Haemoglobin (<7g/dl)	48760	18127	53721	19420	48653	18962
Burket lymphoma cell	14		19	17	0	
Sperm count	104		203		212	
Blood transfusion						
Blood grouping	4747		5661		6309	
Cross match	3102		3225		3314	
Blood units donated	2332		2436		2866	
Blood donor screened	47.47	107	2716	166	2005	1.40
HIV Blood received from	4747	197	2716	166	2995	143
KCMC			72		154	
Clinical Chemistry						
Blood glucose	795		4591	1764	532	113
Blood Creatinine	1112		1457		1381	
Liver fuction test	919		1087		1467	
Bilirubun test	0		291		0	
Blood urea	8		224		0	
Blood serum protein	87		27		27	
Parasitology section						
Blood smears	37824	12436	32640	10741	19500	4840
Night blood film	112	3	92	9	67	5
Stool routine	9720		7430		4884	
Hookworm ova		1622	983		804	
Ascaris ova		1420	727		534	
Giardia lumblia		197	201		163	
Strongyloides larva		26	37		39	
Trichiuris trichura		7	5		0	
Sch manson		1	2		0	
E .histolytica		2	3		0	
Leucocyte		1212	787		932	
Erythrocyte		997	622		584	
Urine routine	1724		1800		1961	
Trich vaginalis		104	97		73	
Sch haematubium		196	163		172	
Leucocyte		388	277		821	
Erythrocyte		388	198		562	
Urine protein		892	907		930	523
Urine glucose		919	932		423	219
Urine pregnancy		733	531	232	2337	1272
Skin snip			7	3	18	2

Brucella 0 0 0 Helicobactor 0 0 0 CD 4 Counts 3337 5695 6641 Microbiology section	17 0 0
Helicobactor 0 0 CD 4 Counts 3337 5695 6641 Microbiology section	
CD 4 Counts 3337 5695 6641 Microbiology section	0
Microbiology section	
Sputum AFB 5746 236 5994 239 5304 21	
	10
Skin smear 0 1 pos 1 1 4	1
HVS/US/CX 117 213 194	
Trich vaginalis 67 73	
Yeast cells 43 4	
Body fluids (AFB) 215 9 420 7 38	1
Gram stain 420 406	
Gram pos diplococci 60 76	
Yeast cells 18 4	
Gram negative rods 48 184	
Total protein 389 185	
Glucose 387 185	
Cultures 3201 4385 1884	
Rectal swab 259 65 109 17 27	1
Blood 1154 145 2716 375 238	
Stool 895 44 409 11 853	
Urine 400 56 234 42 383	
CSF 425 53 455 49 185	
HVS/US/CX/PUS 75 14 156 33 194	
Isolates	
Salmonella sp 84 10 44	
Shigella sp 15 5 13	
Staphylococci aureus 77 28 21	
Vibrio cholarae 65 17 27	1
Proteus sp 40 20 14	
Klebsiella sp 37 21 18	
E. coli 14 33 34	
N .gonorrheae 0 0	
Pseudomonas sp 14 14 25	
Streptococci	
pneumoniae 21 66 10 Haemophylus	
influenzae 21 61 5	
Streptococci pyogens 21 12	
Candidas sp 5 13 8	
Cryptococci	
neoformans 21 22 13	

Chaplains Report

A word of Thanks

Looking back to the year 2007 there is a lot we need to thank God for. We give thanks for the work done in our chapel: the inner walls have been repainted, there is new carpeting, there are fans put up and recently we have seen new ceiling boards put up. We also give thanks for the erection of our St Luke's rest and read shelter. We give thanks to all who made it possible for there to be gifts to be distributed to mothers and their children in the wards at Christmas time. I do not have enough words to express my gratitude to all those that have enabled us to do so much.

Services in Chapel

Holy Communion services are conducted in kiSwahili on Tuesdays, Thursdays and Sundays and in English on Wednesdays and Fridays.

Visiting of patients

This is a regular daily event with at least an hour morning and afternoon spent on the wards. Extra visits occur whenever requested by ward staff. There are at least 12 of these each week.

Retreat and Seminar

We had one quiet day spent in the chapel with time for pray and feeding on the word of God. 22 people attended this. We had a seminar on HIV AIDS and topics related to spiritual and economic deficiency. There were 44 participants.

Special events

Towards the end of the year we had the pleasure of the Bishops presence for a service which included a confirmation and blessing of our rest and read shelter. We also had the pleasure of our Catechist Sylvester Chizazi being ordained deacon. Other events included 8 baptismal services and one wedding.

I wish you all a very Happy New Year

Rev Canon Mattiya E Mbulinyingi (Chaplain to Teule Hospital)

Referrals onwards

	2005	2006	2007
Muhimbili National Hospital	78	33	65
Kilimanjaro Christian Medical Centre	144	107	68
Ocean Road Cancer Institute	13	31	30
Bombo Regional Hospital	41	30	29
Lutindi Mental Hospital	0	12	4
Mirembe Mental Hospital	0	0	4

Research

The Severe Febrile Illness in children study completed in June. This study examined 3800 children admitted with a fever to the hospital over 12 months. All children were tested for malaria, HIV, and bacterial infections. The results are still being analysed and a number of papers are expected to be published from this in the next few years. The hospital has also been taking part in the African Quinine vs Artesunate Study for the treatment of severe malaria in children (Aquamat). This is a large multi-site study involving sites throughout the continent. Of the 10+ sites in the study, Teule recruits the most patients, a sign of the heavy burden of malaria in this area. This study is likely to last at least another couple of years in order to reach a significant conclusion on the relative effectiveness of the two drugs. In addition to this the hospital continues to be a Ministry of Health/WHO surveillance site for paediatric bacterial meningitis. A cooperation with a variety of organisations has allowed this surveillance to be expanded to include blood culture on severely ill children, thus continuing, at least in part, the service we offered to our paediatric patients during the SFI study.

Income and Expenditure

INCOME	2005	2006	2007
Ministry of Health	406 220 744	(11 510 440	062 260 224
Personal Emoluments	406,320,744	611,512,442	863,368,324
Other charges	48,739,322 89,282,755	40,062,752 75,562,193	48,686,675 77,654,082
Drugs Basket Funds	50,335,050	54,114,585	43,816,000
Cost Sharing	126,359,420	133,135,097	149,723,893
Sub-Total	721,038,291	914,387,069	1,183,239,974
Sub-1 otal	721,050,271	714,507,007	1,100,200,074
Over Seas support			
Medicines for Muheza	82,130,227	128,812,993	124,850,769
USPG	11,724,353	13,580,000	17,222,060
Hereford Link	6,086,097	15,730,147	9,606,000
GMP/MOMS Project	25,983,941	17,923,101	3,504,866
GTZ	<u>1,200,000</u>	900,000	<u>0</u>
NetSpear	0	0	240,000
Danish students	0	0	3,282,682
Sub Total	127,124,618	176,946,241	158,706,377
Hospital Income			
Rent and Canteen	1,565,402	4,876,945	5,852,334
Cesspit	1,025,000	2,570,000	2,300,000
Salaries Deductions	4,303,558	2,404,048	6,902,585
Sub Total	6,893,960	9,850,993	15,054,919
	2,2,2,2	2,000,000	
Grand Total	855,056,869	1,101,184,303	1,357,001,270
EXPENDITURE			
1001 - Personal Emoluments	406,320,744	611,512,442	863,368,324
1202 - Transport and Travelling	4,560,750	5,651,000	5,933,550
1302 - Office and General Expenses	12,605,788	17,478,767	4,534,461
1303 - Telephone and Fax	4,877,666	4,318,535	27,959,944
1304 - Electricity	25,417,874	26,435,510	7,400,144
1305 - Water	4,408,980	6,430,620	1,221,100
1306 - Uniforms	1,221,000	1,174,583	453,000
1309 - Postage			27 1 42 275
1402 - Plant Vehicle and Craft	362,200	482,200	27,143,375
4 7 4 4 4 5 5 5 5 5 5 5	25,605,255	39,068,340	510,000
1540 - Post Mortem charges	25,605,255 212,400	39,068,340 126,000	510,000 4,926,000
1611 - Minor works	25,605,255 212,400 6,283,350	39,068,340 126,000 4,170,000	510,000 4,926,000 9,320,000
1611 - Minor works 1404 - Technical Equipment	25,605,255 212,400 6,283,350 3,300,000	39,068,340 126,000 4,170,000 6,600,000	510,000 4,926,000 9,320,000 17,452,930
1611 - Minor works1404 - Technical Equipment1503 - Hospital Diet	25,605,255 212,400 6,283,350 3,300,000 16,982,980	39,068,340 126,000 4,170,000 6,600,000 14,783,940	510,000 4,926,000 9,320,000 17,452,930 2,882,000
1611 - Minor works1404 - Technical Equipment1503 - Hospital Diet2002 - Conference, Seminar	25,605,255 212,400 6,283,350 3,300,000 16,982,980 2,784,630	39,068,340 126,000 4,170,000 6,600,000 14,783,940 2,646,730	510,000 4,926,000 9,320,000 17,452,930 2,882,000 15,517,885
1611 - Minor works 1404 - Technical Equipment 1503 - Hospital Diet 2002 - Conference, Seminar 2104 - In Service Training	25,605,255 212,400 6,283,350 3,300,000 16,982,980 2,784,630 4,984,588	39,068,340 126,000 4,170,000 6,600,000 14,783,940 2,646,730 12,471,709	510,000 4,926,000 9,320,000 17,452,930 2,882,000 15,517,885 122,553,082
1611 - Minor works1404 - Technical Equipment1503 - Hospital Diet2002 - Conference, Seminar	25,605,255 212,400 6,283,350 3,300,000 16,982,980 2,784,630	39,068,340 126,000 4,170,000 6,600,000 14,783,940 2,646,730	510,000 4,926,000 9,320,000 17,452,930 2,882,000 15,517,885

Clearing forwarding charges Insurance Audit Fees Double duty Sub Total	1,123,000 2,510,004 1,000,000 = 667,699,461	2,470,000 1,912,000 1,200,000 <u>782,000</u> 901,868,264	1,696,920 2,297,870 1,200,000 <u>5,929,134</u> 1,132,942,347
EXPENDITURE - BASKET FUND: IMCI – Two days training on Management of childhood febrile illness including malaria to 20 strategic personnel HIV/AIDS/STD one day training IMCI one day training on 20 participants clinical officers and nurses on Management of the			1,090,000 464,000
Neonate Hospital Board of Governors Maintenance of Hospital Equipment			608,000 4,520,000 3,000,000
Patient Records / card / files Conduct HMT and Hosp. Planning			10,224,000
team Electrical suction pumps 6 Air conditioners 4 Office computers 2 Bed side lockers 40 Bed mattresses 28 Sub Total	50,336,050	48,145,854	1,106,000 1,500,000 2,800,000 4,000,000 1,944,000 980,000 32,236,000
Sub Total	30,220,030	10,113,031	22,220,000
EXPENDITURE OF GRANTS Extra duty allowance Training Hereford Seminar of PMTCT Renovations Azimio Ward Drugs and Medical supplies Container Vehicle maintenance (private gift) Maintenance of Pharmacy Water supplies Sub Total	94,717,548	47,884,000 39,519,260 238,325 5,365,000 20,772,000 22,283,720	91,679,699 30,773,000 1,281,900 3,611,000 24,942,500 1,875,000 1,875,000 265,000 1,525,000 157,640,019
Grand Total	812,753,059	1,086,076,423	1,322,818,366

Conclusion

Teule hospital continues to provide a caring and comprehensive service to the people of Muheza district. We are grateful to many for their support of this hospital and the people it serves. Most of

all we are grateful to our glorious Lord Jesus Christ whose example in love and service we try to follow.						