# 2013 Annual Report



#### **TABLE OF CONTENTS**

**SECTION ONE:** INTRODUCTION AND STATISTICAL REPORT

#### **Foreword**

List of Tables List of Figures List of Abbreviations and Acronyms Brief History Biostatistics

#### **SECTION TWO: DEPARTMENTAL REPORTS**

Surgical Sub-BMC Allied Surgery Sub-BMC Accident Centre Sub-BMC Reconstructive Plastic Surg

Reconstructive Plastic Surgery & Burns Sub-BMC

Child Health Sub-BMC

Obstetrics & Gynaecology Sub-BMC

Polyclinic

Emergency Medicine Sub-BMC (SME)

Anaesthesia Sub-BMC Laboratory Sub-BMC

Radiotherapy and Oncology Department

Radiology Sub-BMC

Physiotherapy Department

Dietherapy Department

Psychiatry SUB-BMC

#### **SECTION THREE:** DIRECTORATES & SUPPORT SERVICES

Central Sterile Supply Dept. (CSSD)

Nursing Directorate Social Welfare Unit Engineering Directorate Public Relations Unit Supplies Unit Laundry Unit

Security

**SECTION FOUR:** FINANCIAL REPORT Total Revenue Inflow by source of funding Expenditure according to source of funding



#### LIST OF ABBREVIATIONS & ACRONYMS

AMA - Accra Metropolitan Assembly
ADHA - Additional Duty Hours Allowance

ATAC - A Haemacount 16 (Haematology Cell Counter)

APH - Ante Partum Haemorrhage

APTT - Activated Partial Thrombosplastin Time

ART - Antiretroviral Therapy
A/C - Accident Centre
BBA - Born Before

Arrival

BID - Brought in Dead

BMC - Budget Management Centre

B/F - Blood Film

CACD - Controller and Accountant General's Department

CCS - Cervical Cerclage Stitch

CHRAJ - Commission for Human Rights and Administrative

Justice

CHS - College of Health Sciences
C/S - Culture and Sensitivity
CS - Caesarian Section
CRW - Children Recovery Ward
CSF - Cerebrospinal Fluid
CTU - Cardiothoracic Unit

CT Scan - Computerised Tomographic Scan

DEP'T - Department

DF - Development Fund

DTC - Drug and Therapeutics Committee

DPF - Donor Pooled Fund

DMLT - Diploma in Medical Laboratory Technology

ENT - Ear, Nose and Throat

ESR - Erythrocyte Sedimentation Rate FMHC - Free Maternal Health Care

FP - Family Planning
FBC - Full Blood Count
FRW - Female Recovery Ward

FNAC - Fine Needle Aspiration Cytology

GHS - Ghana Health Service
GMA - Ghana Medical Association
GoG - Government of Ghana

GUSS - Ghana Universal Salary Structure G6PD - Glucose-6-Phosphate Dehydragenase

GU - Genito-Urinary GYNAE - Gynaecology

HbE - Haemoglobin Electrophoresis

HVS - High Vaginal Swab ICU - Intensive Care Unit



IGF - Internally Generated Fund

IPPD - Integrated Personnel Processing Database

IUD - Intra Uterine Death

KBTH - Korle Bu Teaching Hospital

LA - Local Anaesthetic

LPO - LOCAL PURCHASE ORDER
MAC - Medial Advisory Committee

MFU - Male Fevers Unit
MOF - Ministry of Finance
MoH - Ministry of Health

MRI - Magnetic Resonance Imaging

MRW - Male Recovery Ward

NHIS - National Health Insurance Scheme
NICU - Neonatal Intensive Care Unit

NO - Nursing Officer

NYEP - National Youth Employment Programme

O & G - Obstetrics and Gynaecology OPD - Out-Patient Department

PACCEP - Parents Association of Children with Cerebral Palsy

PID - Pelvic Inflammatory Diseases
PIN - Personal Identification Number

PMCT - Prevention of Mother to Child Transmission

PNO - Principal Nursing Officer PPH - Post Partum Haemorrhage

MP - Malaria Parasite
PT - Prothrombin Time

QBC - Quantitative Buffy Coat Analysis

RE - Routine Examination ARVs - Anti Retrovirals

RPSB - Reconstructive Plastic Surgery and Burns

SA - Semen Analysis
SFC - Serous Fluid Cytology
SIS - Staff Information Sheet
SNO - Senior Nursing Officer
SME - Surgical Medical Emergency
SUB-BMC - Sub-Budget Management Centre

SW6 - Surgical Ward Six

SVD - Spontaneous Vaginal Delivery
UGMS - University of Ghana Medical School

VAT - Value Added Tax WBC - White Blood Cells



#### **BRIEF HISTORY**

The Korle Bu Teaching Hospital has evolved from a modest 192-bed capacity Hospital to become the national referral Centre in Ghana and the third largest hospital in Africa. The Hospital, as at 2013, has 2,000 beds, 21 clinical and diagnostic Departments/Units and three "Centres of Excellence". Currently, it has over 4,000 medical and paramedical staff with an average daily attendance of 1,500 patients, about 250 of which are admitted daily for further management.

"Korle Bu" in Ga parlance which means 'the valley of the Korle lagoon', was established on October 9, 1923 as a General Hospital to address the health needs of the indigenous people under the administration of Sir Frederick Gordon Guggisberg, the then Governor of the Gold Coast.

By 1953, population growth and the efficacy of hospital-based treatment triggered a surge in hospital attendance. The demand for this form of treatment rose so high that the then government was compelled to set up a taskforce to study and make recommendations on how the Hospital could be expanded to meet the rising patient numbers.

The recommendations of the taskforce were accepted by the government and their implementation resulted in the construction of new structures, such as the Maternity, Medical, Surgical and Child Health blocks. This increased the Hospital's bed capacity to 1,200.

Korle Bu Hospital became Korle Bu Teaching Hospital in 1962 when the University of Ghana Medical School (UGMS) was established for the training of medical doctors. Currently, the UGMS and five other constituent schools are subsumed under the College of Health Sciences to train an array of health professionals. All the institutions of the College undertake their clinical training and research in the Hospital.

At present, the Hospital has seven Directorates which are Medical Affairs, Nursing, Pharmacy, Finance, Engineering, Administration and Human Resource.

The clinical and diagnostic departments are Medicine, Child Health, Obstetrics and Gynaecology, Pathology, Laboratories, Radiology, Anaesthesia, Surgery, Polyclinic, Accident Centre and the Surgical/Medical Emergency as well as Pharmacy. It also provides sophisticated and scientific procedures in various fields such as Neuro-surgery, Dentistry, Eye, ENT, Renal, Orthopaedics, Oncology, Dermatology, Cardiothoracic, Radiotherapy, Radiodiagnosis, Paediatric Surgery and Reconstructive Plastic Surgery and Burns.

The Reconstructive Plastic Surgery and Burns Centre, the National Cardiothoracic Centre and the National Centre for Radiotherapy and Nuclear Medicine are the three "Centres of Excellence" which draw a good number of clients from neighbouring countries such as Nigeria, Burkina Faso, Togo, among others.

Korle Bu Teaching Hospital continues to lead the way when it comes to the introduction of



specialised services. It was the first in the West Africa sub-region to carry out kidney transplantation. It was the first hospital in Ghana to carry out ureteroscopy, a surgical intervention which uses an endoscope to remove stones in the urinary tract.

Other specialised services we offer include brachytherapy service for the treatment of prostate cancer and keyhole surgery. Plans are underway to venture into molecular testing and employ the use of cutting edge technology in the delivery of many of our services.

Korle Bu continues to expand its infrastructure to meet the increasing number of patients and clients. Projects such as the construction of the Moorefield's Eye Hospital, Blood Bank, extension of the MRI/CT Scan Centre, refurbishment of the Paediatric theatre and the retooling of the Catering and Laundry Department, are all parts of the grand plan to offer a wider spectrum of specialist care to position Ghana as the hub of health tourism within the West Africa Sub-region.

#### **THE STRUCTURE**

With the promulgation of the Act 525 of 1996, the Hospital has been conferred with the powers to operate as a semi-autonomous organisation. It draws direction from a Management Board charged with the responsibility of giving broad policy guidance for the Hospital's smooth administration.

The daily administration of the Hospital is vested in the Chief Executive, who is assisted in his duties by seven Directors. The Directors are for Medical Affairs, Nursing Services, Finance, Administration, Human Resources, Pharmacy and General Services.

Administrative power is vested in the Budget Management Centre (BMC) which is headed by the Chief Executive to ensure the smooth and effective operation of the Hospital. Administrative power is further devolved to the departments referred to as the Sub-Budget Management Centres (Sub-BMCs). The Sub-BMCs include the Obstetrics and Gynaecology, Medical, Surgical, Accident Centre, Plastic Surgery and Burns Centre. The rest are the Pathology, Child Health, Polyclinic, Laboratory, Anaesthesia, Radiology, Psychiatry and Allied Surgery Sub-BMCs.

#### **MISSION**

"We are committed to provide quaternary health care facilities and services, training, research, outreach and advocacy for clients within and outside Ghana".

#### **VISION**

To become the preferred centre of excellence and innovation for specialist healthcare provision, training, research and advocacy in Ghana and West Africa.

#### **CORE VALUES**

- Customer satisfaction
- Respect for one another and the rights of our clients
- Commitment to excellence and innovation
- Commitment to a healthy environment
- Excellent stewardship of all resources
- Transparency and accountability



#### **OBJECTIVES**

- To improve continuously the quality of healthcare and enhance clients/patients satisfaction in a cost effective manner
- To enhance KBTH's contribution to the MoH's effort at cost-effective, quality healthcare delivery, training, research and advocacy
- To improve the technical and managerial skills, knowledge, competences and capabilities of all staff
- To boost staff morale, commitment and satisfaction through motivation
- To enhance the Hospital's ability to attract and retain adequate and competent staff
- To make efficient use of the unique competencies and capabilities of the Medical and other allied health personnel
- To ensure positive and mutually beneficial relations with external collaborators, donors, NGOs, other organisations and individuals
- To improve relations with the general public and immediate community and capacity for monitoring and evaluation



#### **BOARD OF DIRECTORS – KORLE BU TEACHING HOSPITAL**

MEMBERS OF THE KORLE BU BOARD

Mr. Edward Annan - Board Chairman

Mrs. Victoria Kuma-Mintah - Member Mr. Godfred Ahianyo - Member

Rev. Albert Okpoti Botchway - Ag. Chief Executive, Member

Prof. Yao Tettey - Member (Co-opted)

Prof. Grace Parkins - Member
Prof Jennifer Welbeck - Member
Mrs. Elizabeth Bruce - Member
Mr. E. Anan-Kakabaah - Member
Mrs. Victoria A. Quaye - Member
Mr. Nuru-deen Mohammed - Member

#### THE CHIEF EXECUTIVE AND THE DIRECTORS

Ag. Chief Executive - Rev. Albert Okpoti Botchway

Director of Medical Affairs (Ag.) - Dr. Samuel Asiamah
Director of Pharmacy - Mrs. Elizabeth Bruce

Director of Administration - Mr. Nuru-deen Mohammed
Director of Nursing Services - Mrs. Victoria A. Quaye
Director of Human Resource - Mr. T. A. Mahmoud
Director of Finance - Mr. E. Anan-Kakabaah
Director of General Services - Mr. Isaac Owusu Adjakwah

#### **POSTAL ADDRESS**

KORLE BU TEACHING HOSPITAL P.O. BOX KB77 KORLE BU ACCRA

Fax: 0302 667759

Email: info@kbth.gov.gh, pr@kbth.gov.gh Website: www.kbth.gov.gh

TELEPHONE EXCHANGE NUMBERS

0302- 673031-6/ 665740/ 665401/ 674075/ 664650/ 674061 - 5, 9/ 674070 - 5 / 665470



#### **FOREWORD**

The year started with very bright prospects but ended with some unforeseen challenges that Board and Management had to focus attention on. The implementation of the equipment replacement project also continued and some theatres and other clinical facilities benefited from it.

In spite of the retooling works that saw the suspension of routine work in some theatres, patient numbers grew by 0.7% over the previous year. Clinically, Korle Bu witnessed the introduction of new facilities to improve the delivery of care. A new chemotherapy suite at the Surgical Block and the Paediatric Oncology Unit were renovated by Vodafone Ghana besides the slew of new equipment provided by Government under the National Equipment Replacement Project. The retooling project is set to continue in 2014 and it is expected that 13 of the 22 theatres across the Hospital will receive a facelift.

Great strides were made in migrating staff on the Internally Generated Funds (IGF) payroll. This feat was, however, eroded when delays in mechanising newly appointed clinical staff triggered agitations, forcing the Hospital to take up the payment of the arrears and monthly salaries of the affected staff. This action was unplanned and it began to weigh heavily on the finances of the Hospital.

It is important that the necessary approvals and processes are initiated to complete the stalled attempts to mechanise these staff. This will lift the burden of paying the salaries and arrears of the staff, which the Hospital undertakes with great difficulty. In addition, the Hospital will be able to resume programmes it outlined to expand and improve clinical services if these clinical staff are migrated onto the Government of Ghana (GoG) payroll.

The Board and Management wish to commend the Minister of Health for the support in the provision of new equipment and facilities. Staff of the Hospital - the Sub-BMC Heads, Unit Heads, staff and all our key stakeholders must also be commended for their contribution in the Hospital's performance in 2013. The diagnostic services should also be commended for the role they played in ensuring the accurate diagnosis of ailments which were presented at the Hospital.

It is the expectation of Management that all stakeholders will continue to help and support the Hospital to carry out its mandate and plans for the future. Korle Bu Teaching Hospital already plays a significant role in care provision in the Sub-region and it is only through the rededication of staff to work hard that we can sustain and improve this role.

BY MANAGEMENT



#### STATISTICAL REPORT

#### **INTRODUCTION**

It is once again time to give account of patient care activities that took place in the Hospital during the year 2013. The Hospital runs a 24-hour a day service and as such activities in the Hospital were generally smooth as ever.

Every attempt has been made to cover these activities in the Outpatient and Inpatient service areas during the year. Some of the events have been summarised into tables and charts which carry a lot of information. It is our humble wish that the reader would take a critical look at them to bring out facts and information that were not commented upon in the write-up.

An attempt has been made, where possible, to put years', 2012 and 2011 figures sideby-side those of the year under review for easy comparison and assessment.

#### **OUTPATIENT ATTENDANCE**

#### A. OUTPATIENTS – 2013

	NEW		OLD		TOTAL	
AGE GROUPS	Male	Female	Male	Female	Male	Female
Under 1 Year	3,095	2,787	4,769	5,147	7,864	7,934
1 - 4 Years	4,666	3,388	6,537	4,670	11,203	8,058
5 - 14 Years	4,872	4,200	8,142	6,422	13,014	10,622
15 - 44years	17,809	41,605	25,080	84,962	42,889	126,567
45 - 59years	6,400	9,862	21,981	37,189	28,381	47,051
60 Years And Above	5,362	6,766	22,371	27,305	27,733	34,071
All Ages	42,204	68,608	88,880	165,695	131,084	234,303
Totals		110,812		254,575		365,387

With the exception of the month of April which saw a fall in outpatient attendance due to the brief industrial action by Doctors that month, the inflow of patients to the Hospital continued virtually all year round. On the whole, the Hospital recorded 365,387 total OPD attendance as against 362,775 in 2012 and 317,122 in 2011. This represents 0.7% (2,612) over that of the year 2012 and 15.2% (48,265) more than year 2011.

Out of this total attendance, 30% (110,812) were new cases and 70% (254,575) were follow-ups. The female/male ratios also followed the usual tradition with 64% (234,303) of outpatient attendance attributed to females whilst 36% (131,084) were males.

The under one year olds, being the least attending age group, constituted 4.3% (15,798) of the total OPD attendance representing an increase of 13.1% (1,833) from that of the previous year's 3.8% (13,965). The 15-44 years group topped the attendance with 46.3% (169,456) of the total attendance. The average daily OPD attendance for the year 2013 was 1,001 as against 995 and 881 average daily OPD attendance in years 2012 and 2011 respectively.

The Hospital saw about 9,234 new patients every month as compared to 21,214 follow-up (old) patients for the same period. The highest monthly attendance occurred in October, registering 34,313 patients.

#### MONTHLY OUTPATIENTS ATTENDANCE - 2013

	New			Old			Grand
Month	Male	Female	Total	Male	Female	Total	Total
January	3,996	6,894	10,890	7,913	14,890	22,803	33,693
February	3,746	5,895	9,641	8,143	14,209	22,352	31,993
March	3,640	5,922	9,562	7,350	13,763	21,113	30,675
April	1,499	2,474	3,973	3,710	8,069	11,779	15,752
May	3,050	4,854	7,904	7,057	13,147	20,204	28,108
June	3,533	5,729	9,262	8,279	14,396	22,675	31,937
July	4,012	6,538	10,550	8,168	15,232	23,400	33,950
August	3,935	5,890	9,825	7,818	14,851	22,669	32,494
September	3,360	5,612	8,972	7,643	14,532	22,175	31,147
October	3,980	7,165	11,145	8,032	15,136	23,168	34,313
November	3,942	6,197	10,139	7,877	14,795	22,672	32,811
December	3,511	5,438	8,949	6,890	12,675	19,565	28,514
TOTALS	42,204	68,608	110,812	88,880	165,695	254,575	365,387

Among the departments, the Polyclinic, which is the primary health care annexed to Korle Bu Teaching Hospital, topped the OPD attendance with 60,821 patients. The second position was taken by Maternity which saw 50,743 patients during the year. Department of Medicine and Child Health took the  $3^{rd}$  and  $4^{th}$  positions with 36,082 and 27,810 OPD attendance respectively. The Audiology Centre recorded the least annual OPD attendance of 2,135 patients as evidenced in the Table below.

RANKING	DEPARTMENT	NEW	OLD	TOTAL
1	Polyclinic	39,497	21,324	60,821
2	Maternity	14,135	36,608	50,743
3	Medicine	3,545	32,537	36,082
4	Child Health	8,399	19,411	27,810
5	Surgery	4,915	18,722	23,637
6	Diabetic	1,093	21,839	22,932
7	Fevers	1,054	21,426	22,480
8	Gynaecology	8,444	13,978	22,422
9	СТИ	2,018	14,863	16,881
10	Casualty	13,251	1,280	14,531
11	ENT	4,656	9,809	14,465
12	EYE	2,198	12,035	14,233
13	Orthopaedic	1,351	9,825	11,176
14	GU	1,161	8,825	9,986
15	Physiotherapy	0	6,330	6,330
16	Dental	2,503	3,563	6,066
17	Chest	581	2,076	2,657
18	Audiology	2,011	124	2,135
TOTAL		110,812	254,575	365,387

#### THE POLYCLINIC

A total of 60,821 outpatients was seen in the course of the year as against 72,371 in year 2012 and 54,571 in year 2011 attendance figures. Of the total annual OPD attendance, 65% (39,497) were new cases whilst 35% (21,324) were old (follow-up) ones.

P	oly A. Ol	JTPATIE	NTS - 2	013.		
	NEW		OLD		TOTAL	
AGE GROUPS	Male	Female	Male	Female	Male	Female
Under 1year	393	414	137	120	530	534
1 - 4 years	1,310	1,162	468	346	1,778	1,508
5 - 14 years	1,555	1,542	538	506	2,093	2,048
15 - 44years	7,173	11,832	2,643	4,848	9,816	16,680
45 - 59years	2,882	5,135	1,815	4,244	4,697	9,379
60 Years And Above	2,514	3,585	1,993	3,666	4,507	7,251
All Ages	15,827	23,670	7,594	13,730	23,421	37,400

The gender ratio for the Polyclinic was not that different from that of the general female/male OPD attendances. Thirty-nine percent (39%, 23,421) of the annual attendance was attributed to male and 61% (37,400) for female. Again, as compared to the year 2012 and 2011, there were more females than males as the 2012 rates stood at 39% (27,900) males against 61% (44,471) females and 62% (33,886) females against 38% (20,685) males in 2011. The average monthly OPD attendance at the Polyclinic was 5,068 as against 6,031 in 2012 and 4,548 in 2011. The daily average OPD attendance was 166 compared with 198 in year 2012 and 150 in the year 2011.

#### INPATIENT ATTENDANCE

There were 48,252 admissions in 2013 as against 50,189 in the year 2012 and 50,010 in the year 2011. This represents a decrease of 3.8% (1,937) over the number of admissions in 2012. The average monthly admission for 2013 was 4,021 whilst the average daily admission for 2012 was 132 patients.

There were 39,289 discharges and 3,421 deaths during the year under review. The number of deaths recorded in 2013 decreased by 10% (379) from the number of deaths recorded in 2012.



	Admissions	Discharges	Deaths
Month			
January	4,362	3,319	296
February	3,936	3,207	286
March	4,303	3,560	334
April	2,844	2,681	261
May	3,505	2,533	242
June	4,098	3,290	278
July	4,402	3,595	265
August	4,299	3,590	296
September	4,055	3,242	314
October	4,411	3,510	292
November	4,039	3,344	275
December	3,998	3,418	282
TOTAL	48,252	39,289	3,421

Although female admissions far out-numbered their male counterparts, there was a higher number of male mortality. The highest monthly admission of 4, 411 was recorded in October and 2,844, which was the lowest, in April. The highest monthly number of deaths (334) occurred in March. The lowest number of deaths, in 2013 was, however, recorded in May. On the average, at least nine patients died every day in the Hospital during the year 2013. This represents a 10% (1) decrease with respect to 2012 average daily deaths, which stood at 10 patients.

KORLE BU TEACHING HOSPITAL- BED OCCUPANCY RATES - 2013

					1	1					I		
Turn Over Inter.	11.6	6.3	8.0	7.3	3.4	-4.5	86.0	14.4	-1.4	3.2	3.0	9.0	-5.7
Turn Over per Bed	20.4	32.6	10.7	8.6	28.1	13.2	3.5	8.6	125.7	14.6	22.9	20.4	25.3
Av L of Stay	6.3	4.9	26.1	35.2	9.6	32.1	17.6	22.9	4.3	21.8	12.9	8.9	20.1
Av Daily Occp	9.1	10.9	18.3	19.8	17.7	28.9	7.1	8.6	44.4	16.5	8.1	5.0	4.2
dnɔɔO	35.0	43.6	76.6	82.9	74.1	116.1	17.0	61.3	148.4	87.0	81.0	49.9	139.3
Pat Days	3,321	3,976	6,714	7,258	6,493	1,0594	2,600	3,133	16,250	6,035	2,957	1,820	1,525
Avail- Bed Days	9,490	9,125	8,760	8,760	8,760	9,125	1,5330	5,110	10,950	6,935	3,650	3,650	1,095
% Death	3.2	1.0	4.3	3.0	5.6	3.1	0.7	0.8	11.2	4.5	1.4	2.0	32.9
Deaths	17	8	11	9	42	10	Н	П	862	14	4	4	28
Disch	514	908	246	200	632	320	147	136	2908	263	225	200	48
Adm.	527	815	253	203	747	322	151	125	2992	314	279	200	82
Bed	26	25	24	24	24	25	42	14	30	19	10	. >	8
Ward	<	В	U	Q	ŋ	I	н	z	S/M EMERG	A/C MALE	A/C FEMALE	AMENITY CASUALTY	ICU
Ö	++	2	8	4	2	9	7	8	6	10	11	12	13

#DIV/0!	#DIV/0!	#DIV/0!	4.2	3.7	3.9	17.7	23.7	1.2	0.1	9.2	76.9	6.3
0.0	0.0	0:0	23.5	25.0	22.0	12.4	7.8	36.5	12.1	13.3	3.2	26.9
#DIV/0i	#DIV/0i	#DIV/0i	11.3	10.9	12.7	11.6	23.3	8.8	29.9	18.4	38.4	7.3
0:0	0.0	0.0	24.0	22.3	25.9	14.2	20.8	13.1	67.5	2.7	2.0	16.1
0.0	0.0	0.0	72.9	74.7	76.3	39.6	49.6	87.9	99.5	8.99	33.3	53.9
0	0	0	8,777	8,178	9,464	5,207	7,601	4,810	24,700	975	729	5,900
9,855	1,0585	7,300	1,2045	10,950	12,410	13,140	15,330	5,475	24,820	1,460	2,190	10,950
i 0/AIG#	i 0/AIQ#	i 0/NIQ#	21.3	21.3	17.6	16.0	25.3	47.6	9.3	i 0/\\IQ#	450.0	6.6
0	0	0	165	162	135	72	85	566	75	53	18	81
0	0	0	612	289	612	375	241	281	751	0	П	726
0	0	0	773	761	767	451	336	559	810	0	4	816
27	29	20	33	30	34	36	42	15	89	4	9	30
~		Σ	MED 1	MED 2	MED 3	MED 4	ADULT	MFU	PLASTIC SURG.	1ST FL. THEATRE REC.	CCT/I	СТО
14	15	16	17	18	19	20	21	22	23	24	25	26



6.2	10.2	9.4	12.0	6.6	59.3	8.8	1.7	6.0	5.2	2.5	-3.3	148.2	2.9	4.0
14.0	20.0	19.8	16.9	18.4	5.4	18.3	36.7	36.1	25.7	33.9	63.6	2.2	51.6	46.8
20.0	8.1	9.0	9.7	6.6	8.4	11.2	8.3	9.5	9.0	8.3	9.0	20.2	4.2	3.8
29.0	16.7	18.6	16.9	18.9	4.7	23.5	19.9	22.7	16.5	30.6	62.8	0.7	8.9	9.3
76.4	44.1	49.0	44.7	49.8	12.4	56.1	83.3	91.1	63.5	76.6	157.4	12.0	59.3	49.2
10,599	6,113	962'9	6,196	806'9	1,714	8,599	7,301	8,314	6,023	11,182	22,986	263	3,244	3,409
13,870	13,870	13,870	13870	13870	13,870	15,330	8,760	9,125	9,490	14,600	14,600	2,190	5,475	6,935
5.7	5.7	6.7	6.3	4.8	3.1	8.8	3.1	2.6	7.1	4.8	17.3	46.2	13.8	11.3
31	43	52	40	35	9	89	28	24	47	65	468	9	127	116
200	716	669	602	999	199	200	852	879	620	1290	2074	7	647	774
542	755	780	634	726	194	772	893	918	662	1359	2702	13	919	1,025
38	38	38	38	38	38	42	24	25	26	40	40	9	15	19
SW. 1	SW. 2	SW. 3	SW. 4	SW. 5	SW. 6	P.1	P.2	P. 2A	P.3T	BABIES	NICU	CHILDREN 'S FEVERS	MRW. POLY.	FRW.
27	28	59	30	31	32	33	34	35	36	37	38	39	40	41
	•				-1							•		



								1
	11.7	73.4	137.5	6.0	1.0	0.4	2.8	1.1
	25.1	1.8	2.0	57.0	61.3	57.2	53.1	59.3
	2.9	135.2	45.0	5.5	5.0	6.0	4.1	5.0
	3.8	7.8	3.4	35.8	35.1	39.5	25.7	39.1
	19.8	64.8	24.6	85.4	83.8	94.2	59.9	81.7
	1,373	2,839	1,259	13,085	12,851	14,442	962'6	14,313
	6,935	4,380	5,110	15,330	15,330	15,330	15,695	17,520
	3.5	0.3	0.0	0.3	0.3	4:1	0.1	0.3
	18	15	0	м	4	17	1	3
	459	9	28	2,389	2,570	2,384	2,284	2,845
	511	4,442	3,513	1,079	1,217	1,177	1,022	1,120
	19	12	14	42	42	42	43	48
POLY.	CRW. POLY.	1ST FLOOR LABOUR	2ND FLOOR LABOUR	MAT. 1ST FLOOR	MAT. 2ND FLOOR	MAT. 3RD FLOOR	MAT. 4TH FLOOR	MAT. 5TH FLOOR
	45	43	4	45	46	47	48	49



5.0	27.6	8.3	966.2	62.5	353,646	565,750	7.1	3,421	39,289	48,252	1,550		KORLE BU HOSPITAL
10.5	25.5	3.8	9.0	26.5	3,290	12,410	0.3	3	865	874	34	WARD E	53
3.1	40.6	5.9	19.8	0.99	7,229	10,950	2.7	34	1,183	30 1,240 1,183		CHENARD ANNEX	52
9.8	21.7	7.0	36.0	41.5	13,165	31,755	2.5	47	1,904 1,844		87	CHENAR D A	51
16.8	17.0	4.7	4.8	21.7	1,740	8,030	0.0	0	374	294	22	MAT. 6TH FLOOR	20
												MAT.	

Fifty-three (53) wards with a total bed complement of 1,550 were functional during the year 2013. The bed distribution ranges from 87 in Chenard 'A' to three (3) in the Intensive Care Unit (ICU).

The Available Bed Days during the year was 565,750 and the Patient Days was 353,646. The Percentage Bed Occupancy was 62.5% during the year under review as against 66.1% in 2012 and 65.1% in 2011. The Average Daily Bed Occupancy was 966 (1,012 for 2012) and the Average Length of Stay during the year was 8.3 days, the same as year 2012. Length of stay in individual wards, however, varied from as high as 135.2 days at the First Floor Labour Ward to 2.9 days at the Polyclinic Children's Recovery. The Turnover Per Bed and Turnover Interval were 27.6 patients (29.2 patients in 2012) and 5.0 days (4.2 days in 2012) respectively.

A number of wards had occupancy rates higher than 100%. This was due to the high inpatient admissions, which exceed the bed complement of the various wards. In other words, there were more patients admitted to the ward than beds. Examples of such wards included Ward 'H' - 116.1%, S/M Emergency - 148.4%, ICU - 139.3% and NICU - 157.4%.

The Neonatal Intensive Care Unit (NICU) ward achieved the highest percentage occupancy of 157.4% during the year under review. The children's fever ward achieved the lowest percentage occupancy of 0.7%.

The highest turnover per bed was recorded by the Surgical/Medical Emergency ward with 126 patients per bed during the year 2013, as against 182 patients in 2012.



#### OPERATIONS, 2013

NO.	THEATRE	MAJOR	MINOR	TOTAL
1	Obstetric	4,999	157	5,156
2	Endoscopy	3,092		3,092
3	Casualty		2,283	2,283
4	1st Floor Surgical	1,827	452	2,279
5	Eye	649	1,072	1,721
$\epsilon$	Plastic Surgery	698	626	1,324
7	Orthopaedic	658	554	1,212
8	Gynae.	964	116	1,080
9	Accident Centre	763	77	840
10	Neuro.	442	199	641
11	. ENT	555	9	564
12	Cardio-Thoracic	277	286	563
13	Gento-urinary	356	94	450
14	Child Health	327	118	445
15	Maxillo-Facial		342	342
16	Laparoscopy			0
	TOTAL	15,607	6,385	21,992

A total of 21,992 operations was performed as against 24,180 in 2012 and19, 889 in 2011. This figure represents a decrease in the number of operations done in the previous year by 9% (2,188). The Obstetric theatre topped the ranking of total operations in the year by performing 5,156 operations.

The Endoscopy and Casualty Theatres, performing 3,092 and 2,283 operations, occupied the second and third positions in respect of total operations respectively. On the average, 60 operations were carried out a day during the year 2013 as compared to 66 in 2012 and 55 for the year 2011.

Out of the total annual operations performed, 15,607 (71%) were major operations whilst 6,385 (29%) were minor operations. Obstetric, Endoscopy and First Floor Surgical theatres occupied the top three positions in the ranking of major operations as shown in the table below.



#### MAJOR OPERATIONS - 2013

NO.	THEATRE	MAJOR
1	Obstetric	4,999
2	Endoscopy	3,092
3	1st Floor Surgical	1,827
4	Gynae.	964
5	Accident Centre	763
6	Plastic Surgery	698
7	Orthopaedic	658
8	Eye	649
9	ENT	555
10	Neuro.	442
11	Genito-urinary	356
12	Child Health	327
13	Cardio-Thoracic	277
14	Casualty	
15	Maxillofacial	
16	Laparoscopy	
TOT	AL	15,607

#### MINOR OPERATIONS - 2013

NO.	THEATRE	MINOR
1	Casualty	2,283
2	Eye	1,072
3	Plastic Surgery	626
4	Orthopaedic	554
5	1st Floor Surgical	452
6	Maxillofacial	342
7	Cardio-Thoracic	286
8	Neuro.	199
9	Obstetric	157
10	Child Health	118
11	Gynae.	116
12	Genito-urinary	94
13	Accident Centre	77
14	ENT	9
15	Endoscopy	
16	Laparoscopy	
TOT	AL	6,385

The average daily major operations performed in the Hospital in 2013 were 43 cases per day as against 44 in the year 2012 and 32 in 2011. The Casualty, Eye and Plastic Surgery theatres performed a total of 3,981 minor cases, representing 62.3%. The average daily minor operations performed in the Hospital were 18 as against 23 in the year 2012 and 24 in year 2011, as shown in the table below.



#### MIDWIFERY RETURNS

			INFA	NTS		TO	ΓAL		
TYPE OF BIRTH		MA	<b>LE</b>	FEM	ALE				
	NO. OF	LIVE	STILL	LIVE	STILL	LIVE	STILL	MAT.	NEONATAL
	MOTHERS	BIRTHS	BIRTHS	BIRTHS	BIRTHS	BIRTHS	BIRTHS	DEATHS	DEATHS
TOTAL	11,186	5,814	266	5,323	244	11,137	510	85	16

During the year under review, 11,186 mothers gave birth to 11,647 babies in the Hospital. The number of mothers who delivered increased by 8.8% (908) on the figure for the previous year (10,278) and the total number of live babies born also increased by 10% (530) on that of 2012. On the average, 31 mothers were delivered daily and 31 live babies were born daily. The total number of boys delivered constituted 52.2% (5,814); the remaining 47.8% (5,323) were girls. There were a total of 11,137 (95.6%) live births and 510 (4.4%) still births.

A total of 4,805 caesarean operations was performed as against 4,063 in year 2012 and 4,040 in the year 2011. This gives an average of 13 daily caesarean operations, as against 11 cases each in the years 2012 and 2011. The caesarean section rate for 2013 was 43%. Caesarean sections performed in the year, represents a total of 21.8% of total operations (including all minor and major cases) carried out by the Hospital.

The total number of maternal deaths for the year 2013 was 86 as against 85 in year 2012 and 119 in the year 2011. There were 16 neonatal deaths.

#### ANALYSIS OF BIRTH ACCORDING TO WEIGHT - 2013

UNDER 2.3 KG		OVER	R 2.3 KG
LIVE BIRTHS	STILL BIRTHS	LIVE BIRTHS	STILL BIRTHS
1,693	233	9,444	277

Out of the total births recorded in the year, 17% (1,926) weighed less than 2.3kg whilst 83% (9,721) weighed more than 2.3kg.



KBTH - MDWIFERY RETURNS: MONTHLY CLINICAL ATTENDANCE - 2013

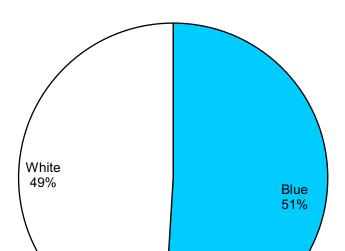
MONTH	NEW ANTENATAL	OLD ANTENATAL	POSTNATAL	TOTAL
JANUARY	1,361	1,975	1,584	4,920
FEBRUARY	1,207	1,674	1,487	4,368
MARCH	1,352	1,970	1,542	4,864
APRIL	779	1,009	1,580	3,368
MAY	1,108	1,294	1,223	3,625
JUNE	1,272	1,143	1,378	3,793
JULY	1,352	1,597	1,800	4,749
AUGUST	1,190	1,842	1,607	4,639
SEPTEMBER	1,065	1,495	1,555	4,115
OCTOBER	1,179	1,554	1,591	4,324
NOVEMBER	1,113	1,538	1,503	4,154
DECEMBER	1,162	1,426	1,238	3,826
TOTAL	14,140	18,517	18,088	50,745

There were 14,140 new antenatal cases in 2013 as against 13,270 in 2012 and 13,155 in 2011. The old antenatal cases recorded were 18,517 in the year under review as against 17,368 Old cases in 2012 and 19,594 in 2011. The clinic also recorded 18,088 postnatal cases as compared with 16,088 in 2012 and 15,795 in 2011. The total number of cases seen at the clinic was 50,745. The highest monthly attendance of 4,920 occurred in January whilst the least attendance of 3,368 occurred in April.

### CONDITIONS/DEFORMITIES IN NEW BORN BABIES

NO.	Asphyxia	
1	Blue	169
2	White	230
TOTAL		399
NO.	Deformities	
1	Hydrocephalus	22
2	Extra Digits	9
3	Spina Bifida	6
4	Cleft Palate	4
5	Anencephaly	4
6	TalipesDosalis	3
7	Omphalocele	3
8	Hydronephrosis	3
9	Exomphalos	3
10	DOWN Syndrome	3
11	Anchondroplasia	3
12	Swollen Genitals	2
13	Mycrocephalus	2
14	hydrops-fetalis	2
15	Gross Abnormality	2
16	Foetus papyraceous	2
17	Umbilical Hernia	1
18	Siamese Twins	1
19	Hyperaemic	1
20	Hand Deformity	1
21	False tooth	1
	TOTAL	78

There were 399 cases of asphyxia conditions found in the newborn babies out of which 49% were white and the remaining fifty-one (51%) blue.



#### ASPHYSIA IN THE NEW BORN

#### Figure 1

Hydrocephalus was the most occurring deformity found in the newborn, recording 22 cases, followed by nine (9) cases of extra digits. Spina Bifida recorded 6cases, Cleft Palate and Anencephaly recoded 4 cases each. Cephal Haematoma conditions recorded two (2) cases each. The remaining conditions recorded one (1) case, each as indicated in the table above. In all, seventy-eight (78) babies were born with various forms of deformities during the year under review as against 50 in 2012 and 24 in the year 2011.

#### **CONCLUSION**

This report covers most of the activities that took place in the Outpatient and Inpatient areas of the Hospital during the year 2013. It is highly recommended that the report should be read with reference to the charts and tables which may contain more information than has been written.

The focus of the Biostatistics Department is now on computerisation and networking where data would be entered at source and disease classification and coding done electronically.

This process, when achieved, would in no doubt improve data collection and management in the hospital in the very near future.



#### **SURGICAL SUB-BMC**

#### **INTRODUCTION**

The Surgical Sub-BMC provides surgery and consultancy services as well as training and research. It provides consultancy, diagnostic and theatre services in Neurological surgery, General Surgery, Paediatric Surgery, Endoscopy, Laparoscopy, Vascular and Genito—Urinary Services. The Sub-BMC has a bed capacity of 262.

#### **PLAN ACTIVITIES**

- Improve OPD services
- Provide adequate equipment for endoscopy & in-patient services
- Computerize consumable management
- Renovate infrastructure
- Improve inpatient service
- Improve knowledge base of staff
- Improve theatre services

PRIORITY AREA	ACTIVITIES	IMPLEMENTATION
Improve OPD services	Reduce duration for clients to access service.	Appointment system was initiated and being improved gradually.
	Construct new structure for OPD, breast clinic and endoscopy services	
Improve endoscopy services	Increase equipment base	Equipment list had been prepared for endoscopy and some tools /
	Increase number of services provided	equipment was supplied for inpatient service under the Ministry of Health retooling exercise.
Improve Revenue generation and mobilization	Ensure efficient management of consumables	Itemised billing is being practiced.
	Deploy software for data management	Software is being developed for data management.
Improve maintenance of infrastructure / equipments	Implement effectively the planned preventive maintenance policy	Renovation works were carried out in Surgical Wards One and Two as well as Ward G (Urology Unit).
Improve in-patient services	Equip the wards	The various wards were equipped by the Sub-BMC
	Develop policy on infection control	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Improve human resource development	Organize capacity development programmes	Some members of staff were sponsored to attend several capacity building workshops.
		Hospitality Manager was appointed by Central Management.
Improve theatre services	Ensure efficient use of time resource	Paediatric Theatre of the Department was refurbished.
	Equip the theatre	Department was returbished.
	Efficient data management	



#### **SERVICE PERFORMANCE**

Various services were provided by the Sub-BMC during the year under review. These are summarized in the tables below.

#### **ATTENDANCE**

The year under review recorded a total of 37,460 OPD attendances representing a 18.6% increase over the previous year. Attendance of Endoscopy Services recorded a total of 3,092 representing a decrease of 16.9% (631) over the previous year. Details are presented in Table 2 below.

Table 2: Attendance

SERVICE INDICATOR	2013	212
ATTENDANCE (OPD)	37,460	31,568
ATTENDANCE (ENDOSCOPY)	3,092	3,723

#### **INPATIENT SERVICES**

During the year under review a total of 5,251 patients was admitted representing 9.9% (524) decrease over the previous year's figure. A number of 345 deaths were recorded. This represented 6.6% of the total number of admissions, whilst 28 patients absconded from the wards. Details are presented in Table 3 below.

Table 3: Admissions and Discharges

SERVICE INDICATOR	2012	2013
ADMISSIONS	5,775	5,251
DEATHS	356	345
ABSCONSION	35	28

#### **THEATRE SERVICES**

A total of 3,891 operations was performed during the year under review representing a reduction of 26.6% over the previous year's figure; 1,424 major operations were done representing 36.6% of total operations whilst a total of 678 minor operations were done representing 17.4% of total operations. Emergency operations represented 46%. The details are represented in Table 4 below.

Table 6: Operations Performed

SERVICE INDICATOR	2012	2013
MAJOR OPERATIONS	1,941	1,424
MINOR OPERATIONS	826	678
EMERGENCY	2,307	1,789
TOTAL	5,074	3,891

#### **Pharmacy Unit**

The surgical pharmacy provides pharmaceutical services to both in and out patients. It also provides ward and clinical pharmacy services to inpatients and the theatres. The Unit also provided drug information services to the department. The Table below shows the top ten most dispensed drugs at the pharmacy in the year 2013.

Table 7: Top Ten Most Dispensed Drugs

	DRUG	FREQUENCY	% OF TOTAL FREQUENCY
1	Inj Pethidine 100mg	5,001	10
2	IV. Normal Saline 500ml	2,723	6
3	IV. Ringers Lactate 500ml	1,850	4
4	Tab Paracetamol 500mg	1,601	3
5	Cap Naklofen (diclofenac) Duo 75mg	1,373	3
6	Syp TOT Haema (ferrous glucon, Cu, mag)	1,121	2
7	Tab Morphine 10mg R	1,101	2
8	Tab Metronidazole 200mg	852	1
9	Tab Soluble Aspirin 75mg	830	1
10	IV. Metronidazole 500mg	711	1

Table 4: Top Ten Causes of Admission

Ranking	Case	NO. Of Cases
1	Hernia	398
2	Acute Appendicitis	303
3	Breast Cancer	232
4	Goitre	189
5	Intestinal Obstruction	142
6	Haemorrhoids	122
7	Other cancers	108
8	Cellulitis	92
9	Git Bleeding	86
10	Peritonitis	60

Table 5: Top Seven causes of Death

Ranking	Case	NO. Of Cases
1	Cancer Related Death	219
2	Git Bleeding	21
3	Perforated Ulcer	19
4	Splenic Injury	16
5	Subdural Empyema	15
6	Hydrocephalus	12
7	Obstructive Hernia	7

Note: Cancer related Deaths comprises of CA Bladder, Cancer Metastasis, Gastric Cancer and Advanced CA Breast.



## ACHIEVEMENTS OF THE DEPARTMENT Korle Bu Teaching Hospital Awards 2013

The Department did very well in governance and management systems, staff commitments and service delivery during the year under review. The department was awarded in the following:

- Overall Best Sub-BMC of the year
- Overall best worker went to a Principal Nursing Officer of the Department
- Overall best orderly of the Hospital of the year
- CEO Best Award for Head's of Department of the year
- DNS Award of the year: Staff Nurse of the Department

#### **Training**

Some members of staff were sponsored to attend several capacity building workshops;

- Health Administration and Management at GIMPA
- Patient safety workshop at MSSI
- Workshop on palliative care
- Workshop on reconstitution of IV medication by Pharmacy
- Workshop on Administration and storage on Nexium / Meronem by Astra ZENECA
- Refresher Infection Control training

#### Research

The Sub-BMC conducted various researches during the year under review. Research publications in peer-reviewed international journals by members of the surgical Sub-BMC in 2013 comprise;

- Alfred E. Yawson AE, Hesse AJ. Hand Hygiene practices and resources in a teaching hospital in Ghana. J Infect Dev Ctries 2013; 7 (4): 338-347. Doi:10.3855/jidc.2422
- Yawson AE, Hesse AJ, Amoo PK, Reindorf AC, Seneadza HNA, Baddoo AN.
   In the eyes of the Beholder: Assessment of Clients on Health Care Delivery in a Large Teaching Hospital in Ghana. West African Journal of Medicine.2013; 13 (1): 31-39
- Brakohiapa EK, Armah GE, Clegg-Lamptey JNA, Brakohiapa WO. Pattern of Breast Diseases in Accra: review of mammography reports. Ghana Med J, 2013:47 (3); 101–6.
- Der EM, Clegg-Lamptey JN, Gyasi RK, Anim JT. Positive margins in clinically diagnosed and excised benign breast lump: a five year retrospective study at the Korle Bu Teaching Hospital, Ghana. JMed Biol Sc. 2013: 2(3); 21-5
- Cleary J, Ddungu H, Distelhorst SR, Ripamonti C, Rodin GM, Bushnaq MA,
   Clegg-Lamptey JN, Connor SR, Diwani MB, Eniu A, Harford JB, Kumar S,
   Rajagopal MR, Thompson B, Gralow JR, Anderson BO. Supportive and
   palliative care for metastatic breast cancer: Resource allocations in low- and



- middle-income countries. A Breast Health Global Initiative 2013 consensus statement. Breast. 2013 Oct; 22 (5): 616-27.
- Der EM, Quayson, SE, Clegg-Lamptey JN, Wiredu EK, Ephraim RKD, Gyasi RK. Thyroid disorders in Accra, Ghana: a retrospective histopathological study at the Korle Bu Teaching Hospital. JMed Biol Sc. 2013: 2 (1); 1-7
- **Bediako-Bowan AA, Dakubo JC, Asempa M**. Spontaneous extra-hepatic bile duct perforation postpartum. Ghana Med J. 2013 Dec; 47 (4): 204-7.
- Raskin L, Dakubo JC, Palaski N, Greenson JK, Gruber SB. Distinct molecular features of colorectal cancer in Ghana. Cancer Epidemiol. 2013 Oct; 37 (5): 556-61
- **Dakubo JC, Naaeder SB**, Tettey Y, Gyasi RK. Pathology and the surgical management of goitre in an endemic area, initiating supplementary iodine nutrition. West Afr J Med. 2013 Jan-Mar; 32 (1): 45-51.
- Mensah JE, Ampadu KN, Kyei MY, Edusei B. Bladder exstrophy associated with complete urethral duplication: Bladder can be augmented with dorsal urethral mucosa. African Journal of Urology (2013) 19, 99–101
- Mensah JE, Asante EK, Kyei MY, Toboh B. Contemporary Evaluation and Treatment of Male Urethral Stricture Disease in West Africa. Curr Bladder Dysfunct Rep. 2013 DOI 10.1007/s11884-013-0185-8
- Mensah JE, Asante EK, Appeadu Mensah W, Glover-Addy H.
   Continent cutaneous diversion for bladder exstrophy in adults. African Journal of Urology (2013) 19, 94–98.
- Yarney J, Vanderpuye V, Mensah JE. Clinicopathologic features and determinants of Gleason score of prostate cancer in Ghanaian men Urologic Oncology: Seminars and Original Investigations 31 (2013) 325–330
- Kyei MY, Mensah JE, Gepi-Attee S, Kwami D, Ampadu K, Asante E, Klufio GO, Yeboah ED. Outcomes after Radical Prostatectomy in Ghanaians: A Surgeon's Early Experience. ISRN Urol. 2013 Apr 24;2013:832496. Doi: 10.1155/2013/832496.

#### **Construction and Renovation**

The department undertook a series of developmental projects;

- Refurbishment of Ward G (Urology Unit) sponsored by Metropolitan Life Insurance Company and undertaken by Runbelows Company
- Refurbishment of Surgical Ward One by Jehovah Witness which is still on going
- Constructed Office for Information Technology Unit of the Department
- Construction of a walkway from Surgical to CSSD and Cardio-Unit



- Construction of Doctors Office
- Acquired additional water reservoir and water pumps
- Constructed office for NHIS/RECORDS
- Renovation of Surgical Ward Two and Creation of Chemo Suit
- Newly Constructed satellite store for the Department
- Renovation of Paediatric Theatre

#### **CHALLENGES OF THE DEPARTMENT**

Below are some major challenges encountered during the year under review;

- Inadequate funds to carry out planned activities.
- Lack of a Secretariat for the Sub-BMC affecting administrative activities.
- Overcrowding of visitors and outpatients at the ground floor, especially during clinical hours.
- Structural defects as a result of long usage of the building.
- Inadequate equipment/working tools.
- Interruption of water supply.
- Breakdown of equipment affecting service delivery at Endoscopy Unit.

BUDGET GH¢ ACTUAL GH¢

### FINANCE AND BUDGET INCOME BUDGET RETURNS

CATEGORY

	2013	2013
OUT OF POCKET	2,101,189	1,852,776
NHIS	2,118,241	1,815,639
INTRAMURAL	100,000	51,536
OTHERS	70,000	-
TOTAL	4,389,430	3,719,950
EXPENDITURE BUD CATEGORY	GET RETURNS BUDGET GH¢ 2013	ACTUAL GH¢ 2013
COMPENSATION OF		
EMPLOYEES	234,174.40	198,063.75
GOODS & SERVICES	1,771,133.68	1,194,534.40
FIXED ASSETS	572,977.10	101,902.76
TOTAL	2,578,285.18	1,494,500.91

In summary the Sub-BMC recorded an income of  $GH$^3,719,950.00$  during the year. The expenditure was  $GH$^1,494,500.91$ .

#### **WAY FORWARD**

- To continue renovation of the infrastructure / equipping of Sub-BMC.
- Reduce duration for clients to access services.
- Provide adequate equipment for endoscopy services.
- Computerize consumable management.
- Improve knowledge base/motivate staff.
- Quality improvement activities.
- Improve theatre time management.
- Conduct research.
- Canvas actively for financial support.

#### **CONCLUSION**

The year was fruitful, although there was industrial unrest by doctors and breaking down of equipment, thereby affecting services at the endoscopy unit. We express our gratitude to the Korle Bu Management and other Institutions for their support during the year under review.



#### **ALLIED SURGERY SUB-BMC**

## **INTRODUCTION**

The Allied Surgery Sub-BMC comprises the E.N.T Unit including Audiology Centre, Eye Unit, Dental and Maxillofacial Unit. It was formed and commenced operations as a distinct management unit in 2011.

The Sub-BMC provides services for In and Outpatients as well as training of Doctors and Nurses by making its facility available to institutions within the Hospital and other accredited institutions:

- College of Health Sciences-University of Ghana
- Ghana College of Physicians and Surgeons
- West African College of Surgeon
- Nursing Training Institutions (Public and Private)
- ENT Nursing School
- Peri-Operative Nursing School
- Ophthalmic Nursing Training School.

## **SERVICES PERFORMANCE**

## **SERVICES PROVIDED (ENT UNIT)**

The Ear, Nose and Throat Unit registered a total of 14,470 O.P.D (General) cases in 2013, a reduction of 4,509 (11.60%) cases of that of 2012 as well as 35.11% less of 2013 target of 19,200 cases-reference table 1 below.



**TABLE: E.N.T O.P.D (General)** 

MONTH	2011	2012	2013	2013 TARGET	2014 TARGET
January	1,302	1,265	1,460		
February	1,228	1,211	1,267		
March	1,477	1,497	1,252		
April	1,184	1,220	370		
May	1,322	1,508	933		
June	1,293	1,333	1,353		
July	1,113	1,164	1,435		
August	1,398	1,632	1,346		
September	1,427	1,428	1,362		
October	492	1,629	1,544		
November	1,268	1,468	1,273		
December	1,195	1,014	875		
Total	14,699	16,369	14,470	19,200	19,200

## SERVICES PROVIDED BY THE AUDIOLOGY UNIT

Audiology O.P.D achieved an increment in the number of cases from 1,991 in 2012 to 2,134 in 2013 an increment of 71.82% and was able to achieve 97.00% of the 2013 target of 2,200 cases. The target for 2014 is 2,400 as shown below.

**TABLE: AUDIOLOGY** 

MONTH	2011	2012	2013	2013 TARGET	2014 TARGET
January	132	195	179		
February	151	173	170		
March	176	163	194		
April	127	93	119		
May	188	211	159		
June	134	146	156		
July	126	138	123		
August	136	180	242		
September	167	185	200		
October	86	199	229		
November	136	183	188		
December	117	125	175	_	
Total	1,676	1,991	2,134	2,200	2,400

## SERVICES PROVIDED BY THE SPEECH AND LANGUAGE THERAPY UNIT

Speech and Language therapy cases increased over the last three year period. The unit had an increment of 29.02% in the number of cases seen from 417in 2012 to 538 in 2013 as well as an increment of 7.6 % of the 2013 target of 500 cases - as shown in the Table below.

**TABLE: O.P.D Speech & Language Therapy Cases** 

MONTH	2011	2012	2013	2013 TARGET	2014 TARGET
January	58	60	66		
February	38	41	27		
March	31	30	30		
April	27	32	36		
May	44	17	62		
June	33	48	43		
July	10	25	31		
August	40	39	53		
September	41	31	44		
October	14	19	56		
November	46	54	59		
December	18	21	31		
Total	400	417	538	500	600

## SERVICES PROVIDED AT ENT TREATMENT ROOM

Treatment Room cases increased from 2,610 cases in 2012 to 2,727 (4.48%), and was able to achieve 90% of 2013 target of 3,000 cases- as shown by the Table below.

## **SURGERIES PERFORMED**

The ENT unit was able to perform a total of 564 Surgeries in the year 2013, a reduction of 11.6% of the 2012 figure of 638 cases—Reference table below. The reduction was due to the reduction in theatre session because of the ongoing rehabilitation of the main theatre in the Hospital

# **TABLE: O.P.D TREATMENT ROOM CASES**

MONTH	2011	2012	2013	2013 TARGET	2014 TARGET
January	211	283	265		
February	215	261	222		
March	232	356	257		
April	187	171	124		
May	189	243	244		
June	209	231	247		
July	172	160	250		
August	227	149	220		
September	258	136	224		
October	137	293	242		
November	245	150	232		
December	223	177	200		
Total	2,505	2,610	2,727	3,000	3,000

TABLE: MAJOR AND MINOR SURGERIES PERFORMED

MONTH	TOTAL	MAJOR	MINOR	TOTAL
January	50	58	-	58
February	54	55	1	56
March	51	48	1	49
April	42	23	-	23
May	54	34	-	34
June	67	48	-	48
July	53	50	-	50
August	52	56	-	56
September	41	40	-	40
October	56	57	2	59
November	81	55	5	60
December	37	31	-	31
Total	638	555	9	564 (88.40%)
E.N.TSURGERI 2013	ES 20	)12		
MONTH	TOTAL	minor MAJOR	MINOR	TOTAL
January	50	58	-	58
February	54	55	1	56
March	51	48	1	49
April	42	23	-	23
May	54	34	-	34
June	67	48	-	48
July	53	50	-	50
August	52	56	-	56
September	41	40	-	40
October	56	57	2	59
November	81	55	5	60
December	37	31	-	31
Total	638	555	9	564 (88.40%)
E.N.TSURGERI 2013	ES 20	)12 		
No Prop		minor		

**TABLE: MAJOR AND MINOR SURGERIES PERFORMED** 

TYPE OF OPERATION	2011			2013	
	MAJOR		MINOR	MAJOR	MINOR
ENT		621	17	559	9
EYE		703		2,012	831
DENTAL		136	MINOR	MAJOR	292

**Table: OPD Cases Provided** 

UNITS	2011	2012	2013
ENT	14,699	16,369	14,470
<b>AUDIOLOGY</b>	1,676	1,991	2,134
SPEECH &	400	417	538
LANGUAGE			
THERAPY			
UNIT			
TREATMENT	2,505	2,610	2,727
ROOM			

## **E.N.T TOP TEN CAUSES OF HOSPITAL ATTENDANCE**

The first five conditions continued as dominant causes of ENT Hospital attendance over the three year period. Hearing loss which maintained the second position in 2011 and 2012 overtook impacted wax as the most common cause of attendance in 2013. While Otitis Media maintained the third position over the three year period-Reference table below.

**Table: Top Ten Causes of Hospital Attendance** 

CONDITIONS	2011	CONDITIONS	2012	CONDITIONS	2013
Impacted wax	465	Impacted wax	465	Hearing loss	437
Hearing loss	448	Hearing loss	448	Impacted wax	376
Otitis Media	393	Otitis Media	393	Otitis Media	353
Sinusitis	254	Sinusitis	254	Obstructive Sleep Apnoea	240
Obstructive Sleep Apnoea	236	Obstructive Sleep Apnoea	236	Sinusitis	230
Tonsillitis	210	Tonsillitis	210	Foreign body in the ear	186
Rhinitis	204	Rhinitis	204	Delayed Speech	186
Foreign body in the ear	203	Foreign body in the ear	203	Otis External	177
Otis External	152	Otis External	152	Foreign body in the throat	175
Delayed Speech	149	Delayed Speech	149	Rhinitis	147

## **E.N.T TOP TEN CAUSES OF ADMISSION**

Impacted Foreign Body in the Oesophagus, Obstructive Sleep Apnoea and Laryngeal Tumour continues to occupy the first three positions in 2012 and 2013. However, Oro Nasopharyngeal tumor, nasal polyps, stridor, otitis media, and foreign baby in the nasal cavity which were not part of the 2012 top ten causes of admission had become part of the 2013 top ten causes of admission as showed by table 7 below.

**TABLE: E.N.T TOP TEN CAUSES OF ADMISSION** 

CONDITION	2012		2013
Impacted Foreign Body In The Oesophagus	227	Impacted Foreign Body In The Oesophagus	204
Obstructive Sleep Apnoea	103	Obstructive Sleep Apnoea	92
Laryngeal Tumor	65	Laryngeal Tumor	59
Laryngeal Papillomatosis	46	Oro Nasopharyngeal Tumor	49
Epistaxis	36	Epistaxis	42
Tonsillitis	33	Nasal Polyps	29
Nasal Tumor	30	Stridor	23
Laryngeal Cancer	17	Laryngeal Papillomatosis	21
Nasopharyngeal Tumor	10	Otitis Media	11
Peritonsillar Abscess	10	Foreign Body In The Nasal Cavity	9

## TABLE: ENT. WARD ADMISSION AND DISCHARGES

WARD A AND B	ADM 201 2013	_	l 2012		DISCHA	ARGE 2012	2011 2013	ABSCC	NDEES 2012
NO.	797	860	781	775	831	753	5	5	1

## TABLE: MORTALITY - CAUSES OF DEATH AT THE WARD (A & B)

RAN K	DISEASES/ CONDITIONS 2011	PATIENT ATTEND ANCE	DISEASES/ CONDITIONS 2012	PATIEN T ATTEN DANCE	DISEASES/ CONDITIONS 2013	PATIENT ATTENDAN CE 2013
1	CA Larynx	4	Advanced Nasopharyngeal Cancer	6	Advanced Hypo/ Naso/ Oropharyngeal Tumor	4
2	Nasopharyngeal Cancer	4	Ludwigs Angina	2	Advanced Laryngeal cancer	2
3	Advanced CA Tongue	2	Ethmoidal Sinus Cancer	1	Advanced Ethmoidal Tumour	1
4	Tonsillar Tumor	2	Stridor 2º Para pharyngeal Tumor	1	Ludwigs Angina	1
5	Hypo pharyngeal Carcinoma	1	Bilateral Cervical Lymphadenoma	1	Orbital Complications of Leukaemia	1
6	Stenomastoidn Tumor	1	Advanced Laryngeal Cancer	1	Oesophageal Tumour	ſ
7	Impacted Foreign Body in Oesophagus	1	Ulcerative Tonsil	1	Progressive Dysphagia	1
8	Inhaled Foreign Body	1	Deep Neck Abscess	1	Advanced Sinonasal Tumour	Í
9	Intracranial Abscess	1	Maxillary Antrum Cancer	1	Maxillary Antrum Cancer	1
10	-	-	Sub Masseteric Abscess	1	Maxillary Tonsillar Cancer	Ī
11	-	-	Neurofibromatosis	1	Upper Airway Obstruction 2* Huge Cervical Lymph Node	1
12	-	-	Cervical Fasciitis	1	Cancer of the Hard Palate	1
13	•	-	HaemangiomaPeric ytoma of the Maxilla	1	-	-
		17		19		16

The Sub-BMC experienced 16 deaths. 3 less than that of the 2012 figure with the leading cause of death being Advanced Hypo /Naso / Oropharynangeal Tumor out of 4 cases -reference table 9 above

# EYE CENTRE EYE OPD STATISTICS

The Eye Unit catered for a total number of 31,189 General cases, an increment of 1.88% of the year 2012 cases being an achievement of 93.10% of the 2013 target-reference table 10 below.

TABLE: EYE OPD STATISTICS -OPD CASES

MONTH	2011	2012	2013	2013 TARGET	2014 TARGET
January	2,026	2,445	2,570		
February	2,180	2,572	2,606		
March	2,082	2,528	4,645		
April	2,245	2,610	1,090		
May	2,342	2,674	2,313		
June	2,411	2,756	2,515		
July	2,474	2,822	2,616		
August	2,502	2,883	2,644		
September	2,512	1,904	2,618		
October	924	2,554	2,676		
November	2,582	2,490	2,031		
December	2,575	2,375	2,865		
TOTAL	26,855	30,613	31,189 (93.10%)	33,500	35,000

## **SERVICES PROVIDED -VISUAL FIELD TEST CASES**

With reference to table 11 below, Visual Test cases had a reduction of 21 cases compared to 2012 cases. The Visual Test unit achieved 2,171 (72.36%) of 2013 target of 3,000 cases.

TABLE: EYE OPD STATISTICS -VISUAL FIELD TEST CASES

MONTH	2011	2012	2013	2013 TARGET	2014 TARGET
January	123	92	189		
February	104	91	216		
March	-	166	197		
April	-	272	136		
May	81	137	175		
June	84	166	47		
July	89	308	234		
August	139	187	207		
September	113	134	252		
October	18	198	231		
November	71	274	199		
December	-	167	88		
Total	822	2,192	2,171(72. 36%)	3,000	3,200

## **EYE OPD STATISTICS - REFRACTIONROOMCASES**

The unit experienced a reduction of 344 Refraction cases compared to the 2012 number of cases. However, it was able to achieve 82.27% of the 2013 target of 4,000 cases as shown in the table below.

**TABLE: EYE OPD STATISTICS - REFRACTION CASES - 2013** 



MONTH	2011	2012	2013	2013 TARGE T	2014 TARGET
January	297	367	310		
February	305	304	302		
March	233	166	296		
April	288	305	287		
May	279	376	250		
June	314	356	252		
July	341	306	302		
August	351	331	255		
September	338	343	252		
October	179	326	285		
November	285	298	270		
December	256	157	230		
Total	3,466	3,635	<mark>3,291</mark> (82.27%	4,000	4,300

#### **WARD ACTIVITIES**

The Eye Unit experienced an increment in the number of admissions over the three year period, with a figure of 782 admissions in 2013 -an increment of 35.29% over that of 2012; with a corresponding increment in the number of patients discharged (755) in 2013.

TABLE: EYE -ADMISSION, DISCHARGE, ABSCONDEE AND DEATH

WARD A	ADM	ISSION		DISCHA	RGE	ABSCO	NDEE
AND B	2011	2012	2013	2012		2012	2013
			2013				
NO.	376	578	782	572	755	2	1

## **TOP TEN CAUSES OF EYE O.P.D ATTENDANCE**

Cataract, retina conditions and allergic conjunctivitis continued to maintain the second, third and the forth positions in 2012 and 2013. However, the first and the fifth conditions being Refractive Error and Glaucoma have swap position. Refractive Error, the first condition in 2012 was ranked the fifth condition in 2013 whiles Glaucoma the fifth condition in 2013 was ranked the first condition in 2012.



TABLE: TOP TEN CAUSES OF EYE O.P.D ATTENDANCE

RANKING	DISEASE	NO OF NEW CASES 2012	DISEASE	NO OF NEW CASES 2013
1	Refractive Error	3,628	Glaucoma	4,221
2	Cataract	1,342	Cataract	3,147
3	Retina Conditions	621	Retina Conditions	1,733
4	Allergic Conjunctivitis	502	Allergic Conjunctivitis	872
5	Glaucoma	368	Refractive Error	789
6	Injuries	301	Uveitis	772
7	Uveitis	102	Tumour	616
8	Corneal Ulcers	58	Corneal Ulcers	439
9	Congenital Anomalies	85	Congenital Anomalies	326
10	Tumor	60	Injuries	259

## **SURGERIES PERFORMED**

The Eye Clinic performed a total of 1,513 Surgeries in 2013 being a reduction of 30.15% of the 2012 figure of 2,166Surgeries. The reduction was due to the reduction in theatre session because of the ongoing rehabilitation of the main theatre in the Hospital.

**TABLE: SURGERIES PERFORMED** 

SURGERIES	2012	2013
Major Surgeries	703	682
Minor Surgeries	1,463	831
Total	2,166	1,513

## **DENTAL CLINIC**

During the year under review, the Dental Unit registered a total of 484; Road Traffic Accident cases being a reduction of 72.49% of the 2012 figure of 1,759 cases. The reduction was at variance with the increased commercialization of 'Okada' business in the country –use of motorbikes on a commercial basis. One can therefore infer that the reduction may be due to the awareness created by the National Road Traffic Commission over the period.

## **DISEASED/CONDITION CLASSIFICATION**



TABLE: ROAD TRAFFIC ACCIDENT (RTA) CASES

MONTH	2011	2012	2013	2013 TARGET	2014 TARGET
January	24	166	59		
February	19	140	41		
March	31	170	45		
April	28	140	18		
May	20	130	44		
June	17	145	40		
July	22	170	59		
August	29	190	73		
September	24	129	31		
October	10	200	15		
November	19	105	16		
December	29	74	43		
Total	269	1,759	484 (24.82%)	1,950	500

## **DENTAL INFECTION CASES**

Dental infection cases in the year 2013 were 5,374, being an increment of 78.36% of 2012 cases.

**TABLE: DENTAL INFECTIONS** 

MONTH	2011	2012	2013	2013 TARGET	2014 TARGET
January	539	240	544		
February	437	240	435		
March	422	220	399		
April	428	204	158		
May	482	267	378		
June	421	211	419		
July	399	229	446		
August	427	266	403		
September	400	305	650		
October	417	257	650		
November	611	259	503		
December	511	315	389		
Total	5,494	3,013	5,374 (58.06%)	3,400	5,500

## MAXILLOFACIAL/DENTAL TUMOUR CASES

Tumor cases showed a reduction of 8.51% of the 2012 figure. However the unit achieved 79.60% of the 2013 target of 2,000 cases.

TABLE: MAXILLOFACIAL/DENTAL TUMOUR CASES

MONTH	2011	2012	2013	2013 TARGET	2014 TARGET
January	169	191	130		
February	76	104	98		
March	120	139	162		
April	85	168	35		
May	77	165	124		
June	77	125	143		
July	60	105	172		
August	94	131	150		
September	204	155	190		
October	121	130	190		
November	109	201	101		
December	171	126	97		
Total	1,363	1,740	1,592(79.60% )	2,000	2,000

## **DENTAL WARD ADMISSION**

The Dental unit admitted a total number of 246 cases, an increment of 34.43% as compared to 183 cases in 2012, out of which 207 were discharged.

**TABLE: DENTAL WARD ADMISSION** 

WARD 'A'	ADMISSION			D	ISCHARGE	
AND 'B'	2011	201	2	2011	2012	
	2013			2013		
NO.	212	183	246	177	167	207

## TOP TEN CAUSES OF DENTAL O.P.D ATTENDANCE

Apical periodontitis was the leading cause of Dental OPD attendance in 2013, followed by tumor with the tenth ranked condition being TMJ Ankylosis.



TABLE: TOP 10 CAUSES OF DENTAL O.P.D ATTENDANCE

RANK	DESEASE CONDITIONS	PATIENTS ATTENDANCE -2013
1	Apical Periodontitis	1,071
2	Tumor	907
3	Caries	806
4	Fracture	340
5	Chronic Periodontitis	333
6	Dentoaveolar Abscess	306
7	Ludwig's Angina	101
8	Laceration	85
9	Gingivitis	61
10	TMJ Ankylosis	58
	TOTAL	4,068

## **TOP TEN CAUSES OF DENTAL ADMISSIONS**

Dentoaveolar Abscess experienced a significant reduction in 2013 from the first ranked causes of admission to the 9<sup>th</sup> position whiles Upper face Fractures (Maxilla, Nasal, Zygoma Skull) the third ranked in 2012 was ranked the first in 2013.

**TABLE: TOP 10 CAUSES OF DENTAL ADMISSIONS** 

RANKIN G	DISEASES			NUMBE R OF CASES
1	Dentoaveolar Abscess	35	Upper face Fractures (Maxilla, Nasal, Zygoma, Skull	47
2	Lower face fracture (Mandible)	34	Lower face fracture (Mandible)	36
3	Upper face Fractures (Maxilla, Nasal, Zygoma, Skull	33	Upper face Carcinoma (Palate, Maxilla)	34
4	Odontogenic (Ameloblastoma, Myxoma)	25	Ludwig Angina	25
5	Ludwig Angina	22	Lower face Carcinoma (Buccal Mucosa, Tongue, Mandible	21
6	Upper face Carcinoma (Palate, Maxilla)	22	Odontogenic (Ameloblastoma, Myxoma)	19
7	Cystic Lesions	18	Lacerations	13
8	Lacerations	17	Major Salivery gland tumoures (paritod,submandibular	12
9	Nonodontogenic (Fibro- ossousLesions,Granulomas)	16	Dentoaveolar Abscess	10
10	Lower face Carcinoma (Buccal Mucosa, Tongue, Mandible	11	Cervical Osteomylitis	8

## **SURGERIES PERFORMED -DENTAL**

The Dental unit performed a total of 405 Surgeries being a reduction of 77.11 % of that of the 2012 figure of 1,769 Surgeries. The reduction was partly due to the reduction in the number of theatre sessions because of ongoing renovation of the main surgical theatre.

**TABLE: SURGERIES PERFORMED** 

SURGERIES	2012	2013
Major Surgeries	136	113
Minor Surgeries	1,633	292
Total	1,769	405

## **TABLE: FINANCIAL PERFORMANCE**

ITEM	2012	2013
Total Revenue	1,228,616.29	1,245,915.05
Total Expenditure	144,034.74	292,484.42
Excess	1,084,581.55	953,430.63
ANALYS	IS OF FINANCIAL SUM	MARY
Total Revenue	1,228,616.29	1,245,915.05
Less 40%	491,446.52	498,366.02
Available Income (60%)	737,169.77	747,549.03
Less Expenditure	144,034.74	292,484.42
Excess (not released by administration)	593,135.03	455,064.61

# FUTURE PRIORITIES SERVICE DELIVERY

- To start the operation of the Dental, 'X' Ray equipment supplied under the National Biomedical Equipment Replacement Programme and to make the chairs 80% functional.
- Undertake outreach program by the Eye clinic.
- Acquisition of Hot Air Oven for the ENT clinic.



## **INFRASTRUCTURE**

- Complete rewiring of ward 'A' and 'B'.
- To mount additional water tank for the Dental clinic.
- Solve the flooding of the sitting area at ward 'A' and 'B' and that of Eye, ENT and the Dental clinics.
- Initiate relocation of the sub BMC Administration to the Eye clinic after the relocation of the Eye clinic to the new site.
- Facilitate the relocation of the Eye clinic to the new site.
- Replace the entrance door to Ward 'A' and 'B' with aluminium door.
- Renovate the side ward and the sluice ends to improve service delivery and to generate income.
- Complete the furnishing of Serlomy F. 3 for Doctors on night and weekend duty.

#### **HUMAN RESOURCE**

- To train staff in the Eye sub-specialties to meet the standard of the new Eye clinic.
- Initiate intramural practice at the Dental Clinic in order to increase revenue.
- To collaborate with the HR Directorate to recruit additional consultants for the Dental unit and orderlies, nurses in the Eye clinic.
- Re-establish Outreach Services on care and management of Eye condition.
- Improve on capacity of staff-Workshop, Sponsorship, Seminar etc.



## ACCIDENT AND ORTHOPAEDIC SUB-BMC

## **INTRODUCTION**

The Accident and Orthopaedic Centre receives trauma cases in the metropolis as well as the regions and sometimes from the West African sub-region and works in relation with other departments in the hospital The Sub-BMC aspires to:

- Provide the highest quality care to our clients.
- Enhance full or near recovery using the resources at our disposal.
- Provide excellence in teaching and research opportunities for Medical, Nursing and Allied Health Students and Staff.

## **Table: BED OCCUPANCY AT TRAUMA UNIT**

NO.	WARDS	NUMBER
1	Resuscitation unit	5 beds, 1 cot
2	Intensive unit	4 beds, 1 cot
3	Male recovery ward	17 beds
4	Female recovery ward	8beds, 2 cots = 10
5	Amenity ward	10 beds
TOTAL		44 + 4 COTS = 47
ORTHOPAE	DIC WARDS	•
6	FEMALE	37
7	MALE	57
8	CHILDREN	38
TOTAL		132

## **SURGICAL OPERATIONS**



Major Surgeries	Achievement 2011	Achievement 2012	Target 2013	Achievement 2013		
Accident Centre Theatre	654	747	650	567		
Orthopaedic Theatre	662	708	700	658		
Total	1,316	1,455	1,350	1,225		
Emergency Surgerie (Accident Centre Th		<b>269</b> 200 <b>196</b>				
Minor Surgeries	Achievement 2011	Achievement 2012	Target 2013	Achievement 2013		
Accident Centre Theatre	662	708	650	77		
Orthopaedic theatre	708	738	600	554		
Casualty theatre	1,979	2,578	2,800	2,283		
Total	3,349	4,024 ( 20% increase)	4,050	2,914		

## **TOP TEN CAUSES OF DEATH**

TOP TEN CAUSES OF	2011	2012	2013	
DEATHS	NO ACTUAL	NO ACTUAL	NO ACTUAL	
Head Injuries secondary to Road Traffic Accident	79	61	79	
Polytrauma Secondary to Road Traffic Accident	15	12	3	
Fall from Height / fall	26	18	14	
Assaults	5	8	17	
Burns	10	7	8	
Trauma	6	5	5	
Electric shock	3	3	5	
Stabbed wound	4	3	5	
Gunshot	3	2	1	
Total- All Condition	151	119	137	

## **PATIENTS' STATISTICS**

Patient Category	2011 2012		2013			
	Est. Fig (Target)	Actual	Est. Fig (Target)	Actual	Est. Fig (Target)	Actual
Orthopaedic	5,050	9,512	10,150	14,125	12,000	10,924
OPD & Casualty Reception Unit	10,000	9,685	11,500	10,503	11,000	13,015
Admission	1,200	910	1,200	958	2,000	1,161
Discharges	1,180	910	970	900	1,500	779
Total - All Patients	17,430	21,017	23,820	26,486	26500	25879

#### **ACHIEVEMENT**

## Improvement in Surgical Operations:

- Joint replacement surgeries: Total hip replacement and total knee replacement surgeries conducted
- Sports medicine: ligament repairs in new knee injuries
- Limb lengthening procedure.

## • Improvement in infrastructure:

- The Orthopaedic Ward I has been refurbished by a philanthropist's family.
- The laundry for the Unit is completed and ready to commence work
- The Amenity ward has been renovated by GT Bank who have kept up maintenance of the ward

## Quality improvement;

• Waiting time at the Orthopaedic has fairly improved due to triaging and the appointment system.

## Theatre Equipment

- The unit has purchased seven battery operated hand-held power drills.
- Two (2) power drills were donated by the Dept. of National Lotteries

## Manpower Development

- The Unit has produced three (3) more orthopaedic surgeons
- One (1) nurse has successfully completed Bsc. Emergency Medicine
- The Unit's conference for nurses has been intensified.



## RESEARCH

Postgraduate students carried out the following researches:

- Treatment outcome of open foot injuries at Korle Bu Teaching Hospital.
- Open Tibia shaft fracture epidemiology and treatment outcome at the Korle Bu Teaching Hospital.
- EXISTING KEY EQUIPMENT

KEY EQUIPMENT	2011	2012	2013
Cardiac monitors	8	17	17
Ventilators	Nil	-	-
Defibrillators	Nil	-	-
Blood Gas Machine	Nil	-	-
Image Intensifier	3	Not in use	2
Power drill	3 - not in use	2	4 pneumatic and 7 battery- operated drills
Nebulizer	-	-	2

# EQUIPMENT REQUIREMENT

KEY EQUIPMENT	ADDITIONAL EQUIPMENT REQUIREMENT	JUSTIFICATIONS
Cardiac monitors	8	For Resuscitation Unit, ICU and Amenity Ward for continuous monitoring of the critically-ill patients
Ventilators	2	One (1) at resuscitation unit One (1) at ICU
Defibrillators	2	One (1) at resuscitation unit One (1) at ICU
Blood Gas Machine	1	This is an <b>Emergency Unit</b> and it is needed to help us manage our patients well.
	1	To help give an early diagnosis to some of our clients
Theatre instrument (Basic and specialized sets)	2 basic set 2 large fragment set 2 small fragment set	For the theatres

#### SUPPORT SERVICES

#### **Infrastructure**

Most of the Orthopaedic wards i.e. C, D, H, I & N are among the oldest in the Hospital. They are extensively deteriorated and need urgent refurbishment. The unit is currently tackling this as its major development project. Ward I is almost completed while ward C is next in line. The exterior of the Orthopaedic wards and connecting corridors are very badly deteriorated and dirty. The unit has written to central administration to assist the unit in painting it.

## **Equipment**

In 2013, the Accident Centre sub-BMC in its own initiative procured two image intensifiers and two power drills for the theatres.

Recently, the government re-tooling exercise has added some more equipment including beds and suction machine, cardiac monitors etc.

## **CHALLENGES**

- Congestion at the department due to inadequate outlets. Neurosurgical patients are kept in the unit until they are able to mobilize funds for surgery before being transferred to neurosurgical ward. Non-operatable neurosurgical cases are detained in the unit for a long time creating congestion.
- Large number of visitors/clients' relatives at the entrance of the unit due to lack of waiting areas.
- Non-adherence to the referral and transfer policy.

## WAY FORWARD 2014

- Identify a place for relatives of patients as a sitting area. This will decongest the front of the center.
- To start using the laundry as soon as possible.
- To continue the rehabilitation of ward C and hopefully carry it to other wards, e.g.; D, H.
- Improve revenue collection by increasing the account officers at the theatres and wards.
- Computerization of the stores, clinic and casualty reception to improve records keeping.
- Work with the procurement unit to ensure efficiency in procurement of items.

## CONCLUSION

In spite of the challenges, 2013 was very fruitful. The Sub BMC staff management and the general staff will continue to work very hard to explore all possible resources to put the Department on a sound development trajectory.



#### RECONSTRUCTIVE PLASTIC SURGERY AND BURNS CENTRE

#### **INTRODUCTION**

The Reconstructive Plastic Surgery and Burns Centre (RPSBC) is a 68-bed capacity facility that treats patients with deformities, ulcers, burns, cancers and various degrees of injuries, restoring them to as normal a state as possible.

## PRIORITIES FOR THE YEAR

- 1. Completion of the new building: Procure armoured cable for the supply of electrical power to the new building and install a lift
- 2. Reduce manpower deficit (Plastic surgeons, anaesthetists, specialist nurses, psychologist and support staff).
- 3. Improve our infrastructure, logistic constraints and health care financing issues.

## **PERFORMANCE STATISTICS**

#### **OPD ATTENDANCE**

The Centre recorded an OPD attendance of 8,066, a decrease of 2.4% as compared to the 2012 attendance of 8,262.

## MONTHLY DISTRIBUTION OF OPD ATTENDANCE

The even monthly distribution of the OPD cases (Table 2) depicts the brisk nature of health care delivery activities throughout the year.

Table 3: Monthly OPD Attendance for 2013 - NEW / OLD CASES

MONTH	NEW	OLD	TOTAL
JANUARY	97	607	704
FEBRUARY	120	571	691
MARCH	96	541	637
APRIL	89	573	662
MAY	73	483	556
JUNE	125	571	696
JULY	143	656	799
AUGUST	146	558	704
SEPTEMBER	122	578	700
OCTOBER	102	619	721
NOVEMBER	84	479	563
DECEMBER	95	538	633
TOTAL	1,292	6,774	8,066

The overall total OPD attendance was 8,066 which consists of 1,292 (16%) new cases and 6,774 (84%) old cases.

## ANNUAL DISTRIBUTION OF ADMISSIONS, DISCHARGES AND SURGERIES

The Table below shows the OPD, Admission, Discharges and Deaths, Major and Minor surgeries at the Centre from 1997 to 2013.

Table: Distribution of Admissions, Discharges and Surgeries

YEAR	OPD	ADMISSION	DISCHARGES	MAJOR OPERATIONS	MINOR OPERATONS	DEATH
1997	1,656	-	-	-	-	-
1998	3,660	523	225	270	220	-
1999	3,916	623	320	330	235	-
2000	2,532	346	304	443	318	5
2001	5,945	468	404	629	516	25
2002	5,815	541	429	529	405	24
2003	6,308	499	586	553	423	30
2004	7,130	922	583	554	469	20
2005	7,324	619	593	574	468	33
2006	6,365	631	604	553	648	27
2007	6,403	621	606	683	561	32
2008	7,402	686	675	17	648	38
2009	7,027	694	653	700	646	52
2010	7,473	805	737	666	641	90
2011	7,443	785	676	615	569	81
2012	8,262	842	723	718	604	126
2013	8,066	838	791	698	632	79

The number of deaths reduced from 126 in 2012 to 79 in 2013. The reduction could be attributed to the decrease in both OPD attendance and admissions.

Table 5: Male, Female and Children Distribution of OPD Attendance - 2013

MONTH	MALE			FEMALE		CHILDREN			
	Total	Old	New	Total	Old	New	Total	Old	New
JANUARY	242	207	35	274	231	43	188	169	19
FEBRUARY	255	221	34	261	206	55	175	144	31
MARCH	252	218	34	232	195	37	177	152	25
APRIL	228	204	24	258	227	31	175	141	34
MAY	166	146	20	222	188	34	168	149	19
JUNE	234	190	44	251	208	43	216	178	38
JULY	255	213	42	333	275	58	215	170	45
AUGUST	230	190	40	282	222	60	192	146	46
SEPTEMBER	246	198	48	261	212	49	203	168	35
OCTOBER	261	229	32	237	203	32	223	187	36
NOVEMBER	206	182	24	207	167	40	150	130	20
DECEMBER	231	196	35	234	203	31	168	139	29
TOTAL	2,809	2,394	412	3,052	2,537	515	2,250	1,87 3	377

## Table: MONTHLY OPD MORBIDITY ATTENDANCE - 2013

CASES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ост	NOV	DEC	TOTAL
KELOID	14	16	10	16	10	21	23	37	16	14	12	9	198
SCAR	17	14	10	9	9	17	17	11	13	11	16	9	153
ULCER/WOU ND	14	19	18	10	15	17	19	24	23	16	7	18	200
BURNS	14	7	9		5	7	6	7	8	8	4	3	78
CLEFT LIP /PALATE	3	7	8	12	4	12	12	12	7	7	5	7	96
LACERATION S /AVULSION	1	1	5	5	1	5	5	1	1	5	1	4	35
BURULI ULCER						1		2			-	-	3
GROWTHS	9	3	3	4	5	6	5	4	9	8	9	11	76
DEFORMITIE S	2	6	7	8	5	8	7	11	8	5	3	8	78
CONTRACTU RES	4	3	8	5	1	2	6	4	8	5	4	6	56
HUMAN BITES	1		3	1	1	2	2	1	1	3	2	2	19
LYMPHOEDE MA	3	2	5	2	1	4	7	1	4	3	1	2	35
INJURIES	2	3	1	2	2	2	1	3	9	6	2	5	38
TRIBAL MARKS	1	1	1	1	-	-	-	-	-	1	3	-	8
SYNDACTYLY /POLYDACTY LY	4	3	2	6	3	6	11	4	6	6	10	7	61
LIPOMA	-	1	2	-	1	1	2	1	1	2	-	-	11

HYPOSPADIA S	-	1	1	-	-	1	-	-	-	-	-	-	3
SEBACEOUS CYST	-	2	1	-	1	1	1	1	-	-	-	1	7
MALIGNANT MELONOMA	1	3	2	-	1	-	-	1	-	-	2	-	10
TATOO	-	3	1	1	-	1	1	2	1	1	1	1	12
NEUROFI- BROMATOSO S	-	1	1	2	-	2	4	-	3	2	-	-	15
LESIONS	1	2	5	1	2	7	2	6	-	2	-	-	28
TORN EAR LOBE	1	1	1	-	-	1	1	-	-	2	-	-	7
HAEMAGIOM A	1	1	2	1	2	-	2	1	2	1	2	-	15
ABDOMINO PLASTY	1	6	1	-	1	2	-	1	2	1	1	1	17
OTHERS	2	4	1	4	3	1	4	1	6	2	6	3	37
TOTAL	96	110	108	90	73	127	138	136	128	111	91	95	1296

## **MORBIDITY**

Among the morbid conditions seen at the department's OPD, Wounds/ulcers recorded the highest number of cases with 200 cases; followed by Keloids with 198 cases. Scars came in third with 153 cases followed by Cleft lip/Palate 96, Deformities 78, Burns 78, Growths 76, Syndactyly/Polydactyly 61, Contractures 56, and Injuries 38 in order as evidenced in the chart below. Buruli ulcer and Hypospadias recorded the least number of three (3) cases.

## MORBIDITY OVER THE YEARS—2003-2013

The table below shows that 1,296 different kinds of disease conditions were seen at the centre in 2013. This is 45 (3.4%) less than that of 2012. The highest number of cases, 200, was ulcer wounds and the least, three (3) was Hypospadias and Buruli Ulcer.



# Table: MORBIDITY FROM YEAR 2003 -2013

DISEASE	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
KELOID	69	223	249	228	163	179	144	161	168	203	198
SCAR	155	190	189	119	124	182	118	129	120	163	153
ULCER/WOUND	37	168	226	173	191	225	217	233	209	256	200
BURNS	92	97	54	34	50	68	77	76	70	74	78
CLEFT LIP/PALATE	208	87	77	67	69	68	84	87	72	85	96
LACERATIONS/								27	36	36	35
AVULSION	34	58	32	34	51	47	40				
BURULI ULCER	31	52	52	25	19	9	6	6	7	7	3
GROWTHS	65	46	52	47	49	52	62	59	69	74	76
DEFORMITIES	29	45	37	52	63	76	45	67	70	76	78
CONTRACTURES	11	44	65	55	41	59	51	66	52	78	56
HUMAN BITES	4	44	28	17	23	27	9	10	5	15	19
LYMPHOEDEMA	27	43	33	24	27	21	27	29	32	31	35
INJURIES	35	39	34	48	31	38	32	45	23	34	38
TRIBAL MARKS	15	39	22	19	13	21	12	10	6	7	8
SYNDACTYLY/											
POLYDACTYLY	15	29	51	56	39	53	39	53	53	42	61
LIPOMA	7	20	16	15	19	13	7	9	6	10	11
HYPOSPADIAS	8	17	4	3	4	4	3	3	3	2	3
SEBACEOUS CYST	6	14	13	12	8	6	4	6	3	11	7
MALIGNANT MELANOMA	38	13	6	13	7	7	6	3	12	23	10
TATOO	18	13	18	10	6	13	12	7	4	9	12
NEUROFI-										14	15
BROMATOSIS	15	12	25	19	11	14	12	9	7		
LESIONS	50	12	15	12	30	24	19	11	9	23	28
TORN EAR LOBE	15	11	12	3	11	7	8	7	11	8	7
HAEMANGIOMA	7	8	16	24	12	11	11	19	9	26	15
ABDOMINO PLASTY	7	4	5	3	13	18	9	15	13	8	17
OTHERS	40	1	35	41	37	30	30	3	42	26	37
TOTAL	1042	1329	1359	1152	111	1302	1084	1183	1111	1341	1296

## **BED OCCUPANCY RATE**

- 1. For planning and policy formulation purposes.
- 2. Appraising/evaluating in-patient care and management, including bed utilisation.
- 3. Human and material resource allocation.
- 4. Workload determination.

2013 turnover per bed (Number of patients served by each bed)

<u>Discharges + Death</u>  $\underline{658 + 79} = \underline{737} = 10.8 (11)$ 

patients)

Bed complements 68 68

## **Table: Service Table**

Service/ Clinical Indicators	Achievement 2011	Achievement 2012	Target 2013	Achievement 2013	Target 2014
Major Surgeries	615	718	800	698	800
Minor Surgeries	569	604	700	632	700
OPD Attendance	7,643	8,262	8,500	8,066	8,500
Admission	785	842	900	838	900
Discharges	676	723	800	791	800
Death	81	126		79	
Bed Turnover	11.1	12.5	12	12.8	12
Number of paupers	0	0	0	2	0
Cost of Treatment	0	0	0	10,986.00	0
Number of	1	4	0	1	0
Absconders					0
Cost of Treatment			0	2,760.80	

The above service table clearly shows that attendance to the Centre as depicted by the various indicators is ever increasing. OPD wound dressing as usual is the highest on the list. The number of deaths decreased from 126 to 79 in 2013.

It is hoped that the completion of the new building together with the Intensive Care unit and the provision of requisite resources, the Centre will be in a very good position to render the excellent service it is noted for.



Buruli Ulcer decreased as a result of the number of outreaches and educational campaign embarked upon. Most of the cases were treated in the communities and hence would not come to the Center.

## **Table: BURNS FROM ACCIDENT CENTER**

2	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
4	425	466	485	331	429	430	500	431	640	382	302

## WARD STATE 2013

There were 727 admissions, 658 discharges and 79 deaths. October recorded the highest number of admissions numbering 94 with the least number of 43 occurring in the month of December. The highest number of discharges, 92 was recorded in August with May recording the lowest, 47. March recorded the highest number of deaths, 14 and the lowest, 2 occurred in July

## **Table: Ward State**

MONTH	ADMISSIONS	DISCHARGES	DEATHS
JANUARY	65	71	6
FEBRUARY	70	61	7
MARCH	71	68	14
APRIL	59	62	8
MAY	61	47	5
JUNE	71	55	8
JULY	70	58	2
AUGUST	85	92	3
SEPTEMBER	81	77	8
OCTOBER	94	67	9
NOVEMBER	68	58	4
DECEMBER	43	75	5
TOTAL	727	658	79

## **PHYSIOTHERAPY UNIT**

The Physiotherapy Unit attends to all patients seen from Consultant clinics and receives a few referrals from other departments such as Orthopaedics and General Surgery.

The Unit recorded a significant increase in the number of cases seen below

 2011
 1132

 2012
 1561

 2013
 1350

#### **MEDICAL OUTREACHES**

The Centre engaged in a public awareness programme in Cape Coast under the auspices of Transforming faces worldwide – a Canadian Organization. The various conditions that were treated at the Centre were made known to them and treated some as well.

There was another outreach programme in collaboration with operation smile in Tamale in the Northern Region

## TRAINING AND DEVELOPMENT

Two doctors received further training in India and the United Kingdom respectively. The one in the United Kingdom is ongoing.

#### **ACHIEVEMENTS**

- 1. Maintained uninterrupted services throughout the year in spite of the numerous strike actions.
- 2. An additional water reservoir system has been constructed thus reducing the perennial water problem considerably.
- 3. Two of our Doctors are undergoing training in India and the United Kingdom respectively, to augment the number of consultants we have in the Centre.
- 4. Provided power (armoured cable) to the Centre's new building.
- 5. The Centre has been granted full accreditation for 5 years by the West African College of Surgeons for training.
- 6. The Centre successfully organised and hosted the 5<sup>th</sup> Pan African Burn Society Conference under the theme " Quality Burns Care in Africa Challenges and Prospects"

## **CHALLENGES**

- 1. Shortage of Staff, especially Consultant Surgeons (only 3 at post but 1 is a retired staff on contract) and inadequate anaesthetic cover, specialized Nurses and some categories of supporting staff (Orderlies and Laundry staff)
- 2. An Intensive Care Unit and a High Dependency Unit are urgently needed to make a significant impact on the survival of burns victims and other patients in critical conditions.
- 3. Congestions and long waiting time at the OPD.
- 4. Inadequate and frequent breakdown of surgical equipment.
- 5. Inability of a considerable section of the patients to pay their bills. This resulted in patients occupying the wards after they had been discharged.



- 6. Delayed or non reimbursement of NHIS revenue accrued to the Department. This deprived the Centre of the needed revenue to cover its operational cost.
- 7. Leakage in the theatre ceiling which made work difficult in the theatre.

#### **FUTURE PRIORITIES**

- The completion of the Centre's new building and a state-of-the-art intensive care
  unit is still paramount on its agenda. It is the resolve of Management to
  collaborate with Korle Bu Teaching Hospital and the Ministry of Health to
  complete the new building to execute the ICU and the HDU projects.
- Review of NHIS rates for Plastic Surgery and Burns Services to reflect realistic cost of inputs.
- To liaise with the Social Welfare Unit to facilitate early discharge of patients.
- To continue the training of specialized human resource in the areas of nurse anaesthetists, physician anaesthetists, critical care nurses, tissue viability nurses, a physiotherapist etc.
- It is also necessary to augment the current number of supporting staff in view of the planned expansion of activities.
- To maintain, strengthen and explore new avenues for international and local corporate collaboration for training and support.
- To regularise the appointment of all staff who were working on temporary engagement/appointment basis as a means of motivation.
- To make health care more accessible to as many people as possible the Centre will embark on free surgical outreaches in Efia Nkwanta and in the Upper East in 2014.

Due to the success of the various outreach activities the Centre embarked on and the tremendous impact it had on the society, the Centre will plead with Management of the Hospital and other corporate bodies to sponsor more of such programs.

#### **CONCLUSION**

The increasing patient's attendance as displayed in the performance statistics above is an indication of increasing workload of the Centre. This has motivated Management to put equipment and infrastructural development specialization of human resource training on top of its priorities in 2014.

# CHILD HEALTH SUB-BMC INTRODUCTION

The Department of Child Health, Korle Bu Teaching Hospital is a tertiary referral center for children with medical and surgical problems under age thirteen (13) years. Our patients are from the whole country, but mainly from the southern sector, with some other clients coming from the West African sub-region as well. Children identified to have surgical problems are referred to the appropriate surgical team.

#### **OBJECTIVES**

The following were our goals and objectives for the year.

Improve quality of patient care.



- Modernize rehabilitate and/or replace infrastructure & equipment including: Liaising with Central Administration to create and equip a temporary emergency ward to enable evacuation from the old emergency wards for the major project to commence.
- Improve upon cleanliness to create a safe environment for patients and staff.
- Improve access to investigate services by increasing the scope available on site.
- Motivate Staff to improve attitude and performance.
- Improve governance by regular meetings of Sub-BMC core members, and meeting with members of staff.
- Improve income generation.
- Improve data collection for more accurate service statistics.
- Improve ICT Infrastructure of department in line with E-Health project
- Promote research activities at the Sub-BMC by members of staff as well as permit research by non-staff members who have duly approved proposals by certified bodies.



# **STATISTICAL INFORMATION**

Table 3: Trend 3-year Service Indicators, Child Health: 2011-2013

ACTIVITY	2011	2012	2013
Admission wards & NICU	6,960	6,107	6,457
Emergency Room Detainees	6,156	5,854	5,904
Total Discharges	8,119	7,055	7,042
Absconders	50	45	29
OPD Total Attendance	31,281	28,326	29,348
OPD General Clinic	16,964	17,138	18,572
OPD Sub-specialty total	10,625	11,505	10,776
Sub-Specialty Clinics			
Neuro Developmental	1,143	1,455	1,256
Cardiac	449	563	441
Sickle Cell	1,983	1,882	1,913
Asthma	556	466	463
N.I.C.U	2,111	2,716	2,477
H.I.V	2,013	2,445	2,017
Renal	361	442	375
Diabetes	9	32	58
Haematology	-	10	124
Oncology	-	157*	1,652
Child Abuse Unit	-	-	
DEATHS			
Wards	169	159	165
NICU	484	424	478
<b>Emergency Room</b>	312	328	302
Total deaths dept.	965	911	945
BIDs	128	146	103

# \*Not well documented because it was being done on wards **OPD ATTENDANCE**

Total OPD attendance increased slightly, by 2.5 %, over the previous year's figure. General OPD attendance increased by 8.4% whilst attendance to the sub-Specialty clinics decreased by 6.3% (see table 2).

During the period under review, a total OPD attendance of 10,776 was recorded at the sub-Specialty clinics with NICU clinic recording the highest attendance (23.0%). The least attended clinic was Diabetes clinic constituting 0.5% of the total.

#### **ADMISSIONS TO THE DEPARTMENT**

There were 6,457 admissions to the various wards excluding Emergency Room (ER) but including the Fevers Unit. This indicates a 5.7 % increase over the previous year's total (See Table 3). ER admissions increased marginally by 1 % in the same period. Among the wards, NICU recorded the highest number of admissions whilst P3T recorded the least (Table 4).

**Table 4: Admissions by Ward, Child Health, Jan-Dec 2013** 

WARD	ADMISSIONS	PERCENTAGE (%)
P2T	899	13.9
P2A	903	14.0
P3T	657	10.2
NICU	2,627	40.7
BU	1,364	21.2
TOTAL	6,450*	100.0

Table5: Top 10 Causes of Admission to various Departments excluding ER.

DISEASE	NUMBER OF CASES	% TOTAL CASES
NEONATAL CONDITIONS	3,491	54.1
CANCER	670	10.4
SICKLE CELL DISEASE	422	6.5
PNEUMONIA	316	4.9
MALARIA	187	2.9
UPPER RESPIRATORY TRACT	178	2.8
INFECTION		
GASTROENTERITIS	137	2.1
SEPTICEMIA	67	1.0
TUBERCULOSIS	65	1.0
SEIZURE DISORDER	56	0.9
OTHERS	868	13.4
TOTAL	6,457	100.0

## **Top 10 Causes of Admissions to the Neonatal Intensive Care Unit (NICU)**

NICU is a ward which admits preterms and ill term neonates at least 80% of whom are delivered in Korle Bu Maternity Block. The table below shows the top ten causes of admissions to the NICU in the year 2013. The other causes of admissions to NICU not listed included upper gastrointestinal bleeding, birth injuries, HIV and hepatitis B-exposed newborns.

Table 6: Top Ten Causes of Admissions to NICU, Child Health, 2013

CONDITION	NUMBER OF CASES	% TOTAL CASES
PRETERM BIRTH	838	31.9
BIRTH ASPHYXIA	503	19.1
NEONATAL SEPSIS (suspected & confirmed)	413	15.7
RESP. DISTRESS AT TERM	228	8.7
MECONIUM ASPIRATION SYNDROME	175	6.7
*BIG BABY	143	5.5
CONGENITAL ANOMALIES	131	5.0
NEONATAL JAUNDICE (IN TERM BABIES)	97	3.7
INTRAUTERINE GROWTH RETARDATION	68	2.6
BIRTH INJURIES	18	0.7
OTHERS	14	0.5
TOTAL CASES	2,627	100.0

<sup>\*</sup>usually infants born to diabetic mothers

Total cases admitted to NICU in 2013 increased by 13.2% over the previous year's total. Preterm birth was the leading cause of admissions and accounted for 31.9% of NICU admissions. This is not very different from 31.3% recorded in the same category of cases in 2012 (Not shown in the table).

In principle the Unit should be able to provide intensive care for babies who need it, but in practice this has not been realised due to inability to repair broken down ventilators.

## **COMMON CAUSES OF ADMISSIONS TO THE EMERGENCY ROOM (ER)**

During the year under review, a total of 5,904 cases was seen in the Emergency Room. Like the previous year, neonatal conditions were the leading cause of admissions (see table below).

Table 7: Top 10 Causes of Admissions to ER, Dept. of Child Health, 2013

CONDITION	NUMBER OF CASES	% TOTAL CASES
NEONATA L CONDITIONS	1,530	28.2
SICKLE CELL DISEASE	558	10.3
SURGICAL CONDITIONS	409	7.6
PNEUMONIA	380	7.0
MALARIA	347	6.4
UPPER RESPIRATORY INFECTION	280	5.2
GASTROENTERITIS	229	4.2
CANCER	141	2.6
ACUTE ASTHMATIC ATTACK	109	2.0
MENINGITIS	100	1.8
OTHER	1,333	24.6
TOTAL	5,416	100.0

## **COMMON CAUSES OF MORTALITY IN THE DEPARTMENT**

The top ten causes of mortality based on clinical diagnosis in the Department for the year 2013 are as shown in the Table above. Neonatal conditions accounted for 63.4% of the total deaths. Other causes of death not listed included, meningitis and sickle cell disease.

**Table: Top Ten Causes of Mortality, Child Health, 2013** 

DIAGNOSIS	DEATHS	% TOTAL DEATHS
NEONATAL CONDITIONS	599	63.4
SEPSIS	35	3.7
PNEUMONIA	32	3.4
CANCER	32	3.4
HEART DISEASE WITH FAILURE	31	3.3
ANAEMIA	22	2.3
SEVERE MALNUTRITION/FAILURE TO		
THRIVE	16	1.7
TUBERCULOSIS	16	1.7
SEVERE MALARIA	13	1.4
GASTROENTERITIS	11	1.2
OTHERS	138	14.6
TOTAL DEATHS	945	100.0

## **Common Causes of Mortality at NICU**

In 2013, there were 478 deaths at the NICU (see Table above). These deaths constitute an overall crude mortality rate of 18.2% — which is the same as the previous year's mortality rate of 18.3% (not shown in table). Preterm birth was the leading cause of death at NICU with a case fatality rate of 27.9%. Some of the other diagnoses at the time of death not listed included retro-exposed infants and severe anaemia.

**Table 9: Common Causes of Mortality at NICU, Child Health, 2013** 

DIAGNOSIS	DEATHS	% TOTAL DEATHS
PRETERM	234	49.0
BIRTH ASPHYXIA	113	23.6
NEONATAL SEPSIS (suspected &confirmed) *	61	12.8
CONGENITAL MALFORMATION**	30	6.3
MECONIUM ASPIRATION SYNDROME	20	4.2
CONGENITAL HEART DISEASE	5	1.0
PNEUMONIA	4	0.8
NECROTISING ENTEROCOLITIS	3	0.6
BLEEDING DISORDER	2	0.4
IUGR	2	0.4
OTHERS	4	0.8
TOTAL DEATHS	478	100.0

<sup>\*</sup>Neonatal sepsis may have contributed to some of the other deaths that occurred.

## **Common Causes Of Mortality In The Emergency Room**

The Table above shows the common causes of death in the Emergency Room in the year under review. Neonatal conditions accounted for most of the deaths that occurred. Some of the other causes of death not listed include sickle cell disease and cancer.

<sup>\*\*</sup>Other than congenital heart disease.

Table: Top 10 Causes of Mortality in the ER, Child Health, 2013

DIAGNOSIS	DEATHS	% TOTAL DEATHS
NEONATAL CONDITIONS	104	34.4
PNEUMONIA	27	8.9
SURGICAL CONDITION	25	8.3
HEART DISEASE WITH		
FAILURE	20	6.6
ANEMIA	19	6.3
SEPTICEMIA	19	6.3
MALARIA	13	4.3
DIARRHOEA	11	3.6
MALNUTRITION	7	2.3
CONGENITAL ANOMALIES	5	1.7
OTHERS	52	17.2
TOTAL DEATHS	302	100.0

## **BED STATE**

There were a total of 216 beds on the wards as at 31<sup>st</sup> December, 2013. These are broken down into the various types as follows:

**Table: Bed State, Child health, 2013** 

Bed Type	2011	2012	2013
Incubators	61	24	20
Treasure Cots	49	64	75
Cots	101	52	64
Children's beds	27	45	34
<b>Grand Total</b>	238	185	210

## **BED OCCUPANCY**

Table: Bed Occupancy, Child health, 2013

Indicator	NICU	P2T	P2A	РЗТ	Babies Unit	ER
%bed occupancy	155	74	86	61	77	92
Turnover per bed	5	3	3	3	33	15
Turnover interval	-3	2	2	2	3	1

#### **FINANCE**

The Finance Unit is responsible for all financial transactions in the department. It processes patients' bills, receives and reports on all revenues due the department as part of its core function, it assists the management of the department in the preparation of its annual budget estimate. It also gives reports on monthly, quarterly and annual basis of the departments' financial statement for management decision making.

#### **REVENUE:**

Revenue is derived from the following areas; Fee paying, NHIS, Intramural practice, Donations from corporate institutions and Private individuals. The department estimated to generate total revenue of (GHC 2,652,775.07), two million, six hundred and fifty two thousand, seven hundred and seventy five Ghana cedis, and seven Ghana pesewas in the 2013 fiscal year. However, as at 31<sup>st</sup> December 2013, a total amount of (GHC2, 267,272.00), two million, two hundred and sixty seven thousand, two hundred and seventy two Ghana cedis, was realized as revenue generated by the department.

#### **EXPENDITURE:**

In the 2013 budget estimate, the department proposed to spend a total amount (GH¢ 1,843,656.80), of one million, eight hundred and forty three thousand, six hundred and fifty six Ghana cedis, eighty Ghana pesewas on compensation for employees, Goods and Services and purchase of Fixed Assets.

However, as at the end of the year, i.e.  $31^{\text{st}}$  December 2013 the Department spent a total of (GH¢ 1,418,893.07), one million, four hundred and eighteen thousand, eight hundred and ninety three Ghana cedis, seven Ghana pesewas.

The total expenditure incurred by the Central Administration of the hospital on behalf of the department amounted to (GH¢ 1,078,302.06) one million, seventy eight thousand, three hundred and two Ghana cedis, and six Ghana pesewas.



The total expenditure incurred by the department itself from its share (i.e. 60%) of revenue received amounted to (GH¢ 357,591.51) three hundred and fifty seven thousand, five hundred and ninety one Ghana cedis, and fifty one Ghana pesewas. The summary of our revenue and expenditure for the year 2013 is shown in the Tables below.

## CHILD HEALTH DEPARTMENT 2013 REVENUE AND EXPENDITURE BUDGET RETURNS

REVENUE BY TYPE	BUDGET	T ACTUALS		
	2013	2012	2013	
	GH¢	GH¢	GH¢	PERCENTAGE
FEE PAYING	514,388.31	334,637.78	375,448.73	73%
NHIS	1,653,115.36	1,272,918.35	1,449,037.87	88%
OTHER INCOME	485,271.40	353,311.13	442,785.00	91.2
TOTAL	2,652,775.07	1,993,555.26	2,267,272.00	85%
EXPENDITURE BY				
TYPE				
Compensation of	117,034.00	113,716.87	84,181.00	72%
Employee				
Goods and Services	1,576,572.80	1,204,052.58	1,317,623.07	84%
Fixed Asset	150,050.00	48,134.51	17,089.00	11%
TOTAL	1,843,656.80	1,365,903.96	1,418,893.07	77%

# SUMMARY OF INCOME AND EXPENDITURE FOR THE YEAR ENDED 31<sup>ST</sup> DECEMBER 2013

REVENUE BY TYPE	ACTUALS 2013	
	GH¢	GH¢
FEE PAYING	375,448.73	
NHIS	1,449,037.87	
OTHER INCOME	442,785.00	
TOTAL REVENUE		2,267,272.00
LESS EXPENDITURE BY TYPE		
Compensation of Employee	84,181.00	
Goods and Services	1,317,623.07	
Fixed Asset	17,089.00	
TOTAL EXPENDITURE		1,418,893.07
EXCESS INCOME OVER EXPENDITURE		841,378.93



## 2013 EXPENDITURE BUDGET RETURNS - CHILD HEALTH DEPARTMENT

GFS MAIN CODE	GFS MAIN HEADING	2013 BUDGET2013ACTUALS		VARIANGE
CODE	COMPENSATION OF EMPLOYEE			
2111102	Monthly Paid Labour	38,724.00	-	38,724.00
2111232	Professional Duty Allowance	35,310.00	38,681.00	(3,371.00)
2111244	Out of Station Allowance	1,000.00	-	1,000.00
2111249	Responsibility Allowance	42,000.00	45,500.00	(3,500.00)
	TOTAL	117,034.00	84,181.00	32,853.00
	GOOD AND SERVICES			
2210101	Printed Materials and Stationery	47,325.00		4,413.67
2210102	Office Facilities, Supplies and	1,700.00	1,520.00	180.00
2240402	Accessories	20.000.00	22.450.00	7.044.40
2210103	Refreshment Items	30,000.00		7,841.10
2210104 2210107	Medical Supplies Electrical Accessories	998,021.80 11,680.00		233,547.23 3,183.00
2210107	Construction Materials	22,695.00		3,183.00 11,761.80
2210108	Feeding Cost	216,000.00		(14,630.00)
2210115	UTILITIES	210,000.00	230,030.00	(14,050.00)
2210202	Water	3,000.00	1,368.00	1,632.00
2210203	Telecommunication	9,400.00		8,840.00
2210207	Fire fighting	4,600.00		4,600.00
	3 3 3	,		,
	GENERAL CLEANING			
2210301	Cleaning Materials	16,421.00	90,245.91	(73,824.91)
2210302	Contract cleaning services	10,000.00	-	10,000.00
	TRAVEL - TRANSPORT			(0.000.00)
2210506	Freight and Handling charges	2,000.00	11,679.42	(9,679.42)
2210511	Local Travel Cost	8,000.00	2,174.00	5,826.00
2210514	Foreign Travel port	-		
	REPAIR AND MAINTENANCE			
2210603	Repair of office Building	16,000.00	5,432.00	10,568.00
2210604	Maintenance of furniture and	5,000.00	10,525.19	(5,525.19)
2210005	fixtures	11 000 00	11 (( 70	(((( 20)
2210605	Maintenance of Machinery and Plant	11,000.00	11,665.39	(665.39)
2210606	Maintenance of General Equipment	8,530.00	6,422.00	2,108.00
	TRAINING SEMINARS AND			
2210709	CONFERENCE Seminars/ Conf/W,shops/ Meeting	10,000.00	1,050.00	8,950.00
2210709	Staff Development	25,000.00	5,720.84	19,279.16
2210711	Public Education	23,000.00	3,720.01	15,275.10
2210711	OTHER CHARGES			
224424		4 200 00	766 75	400.05
2211101	BANK CHARGES	1,200.00	766.75	433.25
2721102	REFUND OF MEDICAL EXPENSES	72,000.00	44,785.37	27,241.63
2731102	STAFF WELFARE GENERAL EXPENSES	40,000.00	31,897.00	8,103.00
2821008	AWARDS & REWARDS	5,000.00	_	5,000.00
2021000	TOTAL OF GOODS AND SERVICES	1,579,572.80	1,317,623.07	<b>261,949.73</b>
	FIXED ASSET	2/07 5/07 2:00	1,517,625.67	202/3 1317 3
3112201	Machinery – Equipment Purchase of plant and Equipment	112,350.00	_	112,350.00
3112201	Computers and accessories	20,000.00	11,709.00	8,291.00
3112200	OTHER FIXED ASSETS	20,000.00	11,705.00	0,231.00
3113108	Purchase of furniture and fittings	17,700.00	5,380.00	12,320.00
	TOTAL	150,000.00	17,089.00	132,961.00
	GRAND TOTAL	1,846,606.80	1,418,893.07	427,713.73



#### **ACHIEVEMENT:**

One of the significant achievements in the year is the processing of NHIS claims on time. All backlogs were cleared and presently we present our report on the 15<sup>th</sup> of the preceding month to the NHIS office. We have also reduced the rejection rate from about 3.0% in 2012; to 1.03% in 2013. The poor staffing position in the unit which hampered effective work in 2012 has been resolved.

#### **CHALLENGES**

The strike action by Doctors and Pharmacists in the course of the year affected our revenue position. Also the inconsistency in the internet connectivity in the department is a setback to our work since the online processing and collection of revenue depends on internet connectivity

#### **TRAINING**

In-house

In line with increasing staff competence, various categories of staff participated in continuous professional development activities either in house or outside of the facility. Daily (weekday 8:15am -9am) CPD programmes in the form of seminars, case presentations and journal clubs were organized for doctors and senior nurses. Tutorials, essay writing and bedside teaching were organized for Residents. Nurses also had sessions on emergency care. We also had two (2) perinatal meetings with the Department of Obstetrics. A one-day seminar on stock management was organized by the Department for PNOs to enable them keep accurate records of the use of ward consumables.

## External (in Ghana)

Five nurses participated in the Paediatric Nurse Training Program organized in collaboration with the Sick Kids Hospital, Canada, School of Nursing/ Department of Child Health, University of Ghana as part of the third cohort.

Sixteen members of staff comprising nurses, doctors and pharmacists participated in three workshops on clinical audit organised by the Department in collaboration with the Royal College of Paediatrics and Child Health, UK and undertook clinical audits.

Four members of staff attended audit workshops organized by Project Five's Alive of the National Catholic Secretariat

The FOCUS group organized three (3) workshops on Emergency Triage Assessment and



Treatment (ETAT). The outcome of these workshops was that the system for triaging patients at the OPD was improved upon and arrangements were made for prompt resuscitation of emergency cases.

Six members were sponsored by the Department to pursue the abridged Health Administration and Management course in Korle Bu organized by GIMPA.

Some members of staff also attended Annual Scientific Conferences of their professional bodies.

## **External (international)**

Members of staff also attended various international conferences; six nurses attended the International Society of Paediatric Oncology Conference in Hong Kong,

International Haemophilia Training Centre in India, CWAR Advanced Nutrition Programme in Nigeria.

## **IMPROVEMENT OF QUALITY PATIENT CARE**

## **Measures To Reduce Waiting Time**

A survey was done in March 2012 which showed that waiting time ranged from 1-8 hours with a medium of 6 hours. A two-tier appointment system was put in place with the aim of reducing waiting time by 50%. A repeat survey was undertaken to evaluate the effect in November 2013 Median time from arrival to end of a doctor's consultation reduced by 40%.

# Measures To Reduce Time to 1<sup>st</sup> Administration of Medicine to Emergency Ward Patients

A survey was conducted in July 2013 and factors which cause late administration of medications were identified and corrective measures, such as widening the scope of emergency drug stock, were put in place. A repeat survey in November 2013 showed a reduction of 48% in the median time to first drug administration from 5 to 2.6 hours.

## **Measures To Improve Infection Control**

Availability of items for hand hygiene has been greatly increased. Single use paper and cotton towels and liquid soap are available. We have also solicited and obtained washing machine/ dryers to facilitate washing the single use towels



#### **Staff Motivation**

The quarterly best worker award, which was instituted in 2011 was continued to foster teamwork and stimulate excellence amongst the various categories of professions in the Department.

#### **INFRASTRUCTURE**

A contract was awarded for the construction of the new emergency (ER) and subspecialty unit in October 2012. Construction of a structure to house the ER temporarily was completed and we evacuated from the old site in June 2013 in order to allow demolition of the old site. Pharmacy and Merchant Bank have relocated. Work is yet to commence with these. The newly constructed Cancer Day Care Centre at a cost of  $GH\+ 214,000$  through very generous donations from AFROX, Childcare Cancer and Ghana Parents Association of Childhood Cancer, was handed over and started operation in the  $2^{nd}$  quarter of 2013. This was the result of great advocacy on the part of Dr Lorna Renner, Head of our Paediatric Cancer Unit and her team.

#### **DONATIONS**

In order to augment the income of the Department to help it achieve the set objectives, the Department received both solicited and spontaneous donations from many generous public spirited individuals, Religious Bodies and Corporate Bodies in cash and in kind. These include

- Donation of USD 200,000 worth of equipment from ECOBANK. An
  Echocardiography machine had been received in 2012. In 2013 we received
  a mobile X-ray machine plus accessories, accessories for the wall oxygen
  flow metres, oxygen concentrators and ordered furniture for a room which
  the Sub-BMC was refurbishing for an Echocardiography room
- Cash donations totaling GH¢95,655 including GH¢ 84, 000 for treatment of cancer patients from ICGC, Christ Temple, GH¢5000 from Vihama Energy Co. Ltd. for cancer patients, GH¢8000 from Ghana Reinsurance. This was an increase of 22.6% over that in 2012.
- Refurbishment of 2<sup>nd</sup> floor wards by Women Empowerment Fellowship International and 3<sup>rd</sup> floor by Vodafone Foundation creating a very attractive child-friendly environment

We received many other donations from corporate bodies, Associations and individuals such as Little Angels Trust, Price Waterhouse CooperC, Ghana Doctors and Dentists



Association UK, as well as many others. We are most grateful to all our donors as nothing is too small or too big.

#### **RESEARCH AND TEACHING ACTIVITIES**

#### Research

Senior members of the University of Ghana Medical School were engaged in various research activities such as HIV Care and Surveillance of Vaccine Preventable Childhood Disease. Senior Residents also worked on their research dissertations. Several students pursuing Masters Programmes from various universities undertook research work after going through due processes. Operational surveys and clinical audits were undertaken to help improve upon our services in collaboration with the Public Health Unit, KBTH, Project Five's Alive and the Royal College of Paediatrics and Child Health UK.

## **Teaching**

Teaching of the various categories of health workers took place in the Department with doctors and nurses acting as facilitators and preceptors. With funding from the Millennium Acceleration Framework (MAF) the Department organized a 3-day training workshop on Essential Newborn care for midwives and nurses from district hospitals and private health facilities as well as Korle Bu.

#### **MAIN CHALLENGES**

- Suspension of a project to build new emergency and sub-specialty unit, including paediatric intensive care unit (PICU) due to lack of funds. This has resulted in severe overcrowding of very ill patients putting both patients and staff at risk.
- Very high neonatal morbidity and mortality with grossly inadequate space, staff and equipment to handle the demand for our services. Neonatologists with experience in ventilatory support are needed to provide leadership for neonatal intensive care services.
- NHIS
- Tariffs not realistic, resulting in unduly low reimbursement for services rendered.
- Lack of full cooperation of various categories of staff with respect to documentation resulting in inconvenience to patients and difficulties in processing claims.
- Poor staff patient ratio, especially with respect to nurses. Children are more difficult to handle due to their developmental stage and so need a higher nurse to patient ratio than adult patients to achieve desired outcomes.



 Periodic shortages of emergency and anti-retroviral drugs; lack of antidotes for poisons.

#### **ACHIEVEMENTS**

Despite the many challenges we achieved the following in 2013 through the hard work and commitment of some members of staff.

- Some reduction in patient time spent in OPD due to the creation of an OPD team of doctors and modification of the appointment system.
- More prompt administration of medication on arrival in the emergency ward.
- On-site ancillary services restored or created- radiology, ECG and echocardiography
- Some improvement in environment and services Oncology daycare and ward, more child-friendly appearance.
- Processing of NHIS claims on time. All backlogs were cleared and presently we present our report about the 15<sup>th</sup> of the subsequent month to the NHIS office. We have also reduced the rejection rate from about 3.0% in 2012; to 1.03% in 2013. The poor staffing position in the unit which hampered effective work in 2012 has been resolved.
- Pharmacy has successfully rolled out the NHIS service

#### **FUTURE PRIORITIES**

- NICU to achieve about 50% of CPAP and ventilation services it could offer when refurbished in 2004:
- Neonatologists/paediatricians with a lot of experience in neonatal intensive care to be employed
- Critical care nurses to be posted to NICU and CPAP ward of Babies Unit
- New Emergency/PICU/Sub-Specialty Complex –liaise with Central Administration for funding to be secured for construction to start.
- Address deficiency in number and skill of staff:
- Selected nurses to be trained in critical care and paediatric nursing.
- Prepare towards 2 doctors receiving training in paediatric critical care in 2015.
- Relevant training for non-clinical staff.
- Address staff attitude challenges and acknowledge those who excel.
- Infection prevention and control (IPC) activities to be improved by strengthening the IPC team.
- Improve OPD appointment system— aim at 1-2 hour booking slots to become effective in 2015 and thus further reduce patient OPD waiting time.
- Improve procurement and logistics management.
- Improve quality of data captured by 50%.



- Improve income generation through ECG and ECHO Services, use of amenity wards as well as solicit for financial support.
- Planned Preventive Maintenance and repair works.
- Work closely with GHS, Paediatric Society and other stakeholders to improve capacity of health workers at lower levels so as to reduce the incidence of severe illness in children.

The Management of the Sub-BMC looks forward to improving upon the quality of services offered our patients with the help of all stakeholders in 2014.

## **OBSTETRICS AND GYNAECOLOGY**

#### **INTRODUCTION**

The Department is made up of the Obstetrics Unit, the Gynaecology Unit and Family Planning Unit. Total bed capacity stands at 375 with the Obstetrics Unit having a capacity of 261 beds and the Gynaecology Unit, 114.

The day-to-day management of the Department is done by the Sub BMC Management Team made up of the Head of Department, the DDNS, the Engineer, the Accountant, the Pharmacist and the Administrator. They are supported in this regard by Consultants who are the Heads of Clinical Teams and other Unit Heads.



# **OBSTETRICS UNIT BIOSTATISTICS**OUTPATIENT STATISTICS

MONTH	NEW ANTE- NATAL	OLD ANTE- NATAL	TOTAL ANTE- NATAL	POST- NATAL
Jan	1,361	1,975	3,336	1,584
Feb	1,207	1,674	2,881	1,487
Mar	1,352	1,970	3,322	1,542
Apr	779	1,009	1,788	1,580
May	1,108	1,294	2,402	1,223
Jun	1,272	1,143	2,415	1,378
Jul	1,352	1,597	2,949	1,800
Aug	1,190	1,842	3,032	1,607
Sept	1,065	1,495	2,560	1,555
Oct	1,179	1,554	2,733	1,591
Nov	1,113	1,538	2,651	1,503
Dec	1,162	1,426	2,588	1,238
TOTAL	14,140	18,517	32,657	18,088
2012	13,270	17,368	30,638	16,088
2011	13,155	19,594	32,749	15,795
2010	16,557	19,238	35,795	18,878

## ANTENATAL AND POSTNATAL ATTENDANCE FROM 2004 – 2013 (TEN YEARS)

YEAR	NEW	OLD	TOTAL	POSTNATAL
2004	14,194	19,654	33,848	11,934
2005	14,060	21,630	35,690	11,760
2006	11,409	15,683	27,092	11,477
2007	11,225	17,962	29,187	10,738
2008	13,273	19,117	32,390	15,588
2009	13,413	29,619	43,032	16,943
2010	16,557	19,238	35,795	18,878
2011	13,155	19,594	32,749	15,795
2012	13,270	17,368	30,638	16,088
2013	14,140	18,517	32,657	18,088
TOTAL	134,696	198,382	333,078	147,289

## **INPATIENT STATISTICS**

MONTH	ADMISSION	DISCHARGE
Jan	1,102	1,066
Feb	1,045	1,029
Mar	1,255	1,250
Apr	779	988
May	983	829
Jun	1,197	1,170
Jul	1,218	1,080
Aug	1,122	1,142
Sept	1,002	1,032
Oct	1,083	1,034
Nov	1,008	954
Dec	1,009	1,052
TOTAL	12,803	12,626
2012	11,717	11,729
2011	12,229	12,423
2010	12,462	13,034



## **MODE OF DELIVERY**

INDICATOR	2009	2010	2011	2012	2013
Total Deliveries	10,673	10,882	10,503	10,278	11,186
Vaginal Deliveries	6,750	6,995	6,382	6,153	6,381
Caesarean Sections	3,923	3,887	4,121	4,125	4,805
C/S RATE (%)	36.8	35.7	39.2	40.1	43.0
Daily Average C-Section	11	11	11	11	13

Spontaneous vaginal rate in this report includes all forms of vaginal birth, regardless the mode of presentation. Spontaneous Vaginal Delivery (SVD) recorded in the year under consideration was 57.0%, which is 3.7% rise over 2012 figures. The overall C/S rate has risen steadily from 2011-2013. Daily average C/S stood at 13 per day for epoch under review whilst that of vaginal deliveries documented 18 per day.

## **OPERATIVE PROCEDURES**

INDICATOR	2010	2011	2012	2013
Elective C/S	1,363	1,134	P 1,361	1,448
Emergency C/S	2,524	2,906	2,702	3,353
Hysterectomy	46	64	45	55
Hysterotomy	21	17	17	16
Laparotomy	-	-	-	30
Total	3,954	4,121	4,125	4,902

## **OTHER SURGICAL PROCEDURES**

PROCEDURE	2010	2011	2012	2013
Cervical Cerclage Stitch	67	60	57	56
Evacuation of Uterus	162	200	113	114

## **NORMAL DELIVERIES FROM 2009 - 2013**

DELIVERY TYPE	2009	2010	2011	2012	2013
TERM					
Singleton	5,866	6,056	5,494	5,310	5,333
Twin Spont	117	145	124	135	121
Vacuum Extraction	60	64	85	114	97
Singleton Breech	94	91	96	64	61
Total Term	6,137	6,356	5,799	5,623	5,612
PRETERM					
Singleton	535	543	474	469	670
Twins Spont	42	75	83	48	77
Singleton Breech	36	20	26	13	21
Triplets	0	1	0	0	1
Total Preterm	613	639	583	530	769
Grand Total	6,750	6,995	6,382	6,153	6,381
Preterm Rate	5.7%	5.9%	5.6%	5.2%	6.9%

## **PERINATAL OUTCOMES**

BIRTHS	2010	2011	2012	2013
Live Births	10,693	10,455	10,103	11,132
Early NND	11	13	11	16
Sub Total (Live Births)	10,704	10,468	10,114	11,148
Still Births	523	568	580	499
Total Births	11,227	11,036	10,694	11,647
Still Births Rate	4.6%	5.2%	5.4%	4.3%

## **TYPES OF STILL BIRTHS**

STILL BIRTH	2010	2011	2012	2013
Fresh Still Births (FSB)	252	300	294	257
FSB Admitted With Positive FH	86	65	56	72
Macerated Still Births (MSB)	271	268	286	242

## **CONDITIONS FOUND IN THE NEWBORNS**

No.	ASPHYXIA	FREQUENCY
1	Blue	236
2	White	227
TOTAL		463
NO.	DEFORMITIES	
1	Hydrocephalus	22
2	Extra Digit	9
3	Spinal Bifida	6
4	Anencephaly	4
5	Cleft palate	4
6	Down 's Syndrome	3
7	Exomphalus	3
8	Anchondroplasia	3
9	Omphalocele	3
10	Talipes Rt. Foot	3
TOTAL		60

## **ANALYSIS OF BIRTHS ACCORDING TO WEIGHT**

## **TOTAL BIRTHS 11,647**

UNDER	2.5 KG – 1,926	OVER 2.5 K	G - 9,721
LIVE	STILL	LIVE	STILL
1,693	233	9,444	277



One thousand nine hundred and twenty-six (1,926) representing 16.5% delivered in the review year weighed less than 2.5kg whilst 83.5 percent (9,721) weighed more than 2.5kg.

## **MONTHLY DELIVERY BY AGE-GROUP**

MONTH	10-14	15- 19	20-24	25-29	30-34	35-39	40- 44	≥45	TOTAL
Jan	1	34	149	273	256	164	33	1	911
Feb	3	45	133	274	259	146	33	2	895
Mar	1	53	168	311	304	185	31	2	1,055
Apr	0	35	109	222	228	140	29	0	763
May	1	34	113	255	246	140	35	2	826
Jun	1	48	153	324	316	185	32	2	1,061
Jul	0	51	167	336	313	156	42	0	1,065
Aug	1	41	158	301	298	130	38	1	968
Sept	1	43	151	293	249	130	37	1	905
Oct	0	50	149	342	269	136	40	0	986
Nov	2	45	154	257	254	144	34	0	890
Dec	3	41	154	272	236	128	27	0	861
Total	14	520	1,758	3,460	3,228	1,784	411	11	11,186

#### **SELECTED COMPLICATIONS OF PREGNANCY AND DELIVERY**

COMPLICATION	2010	2011	2012	2013
HYPERTENSIVE DISEASES IN PREGANACY				
Severe Pre-Eclampsia	315	333	433	356
Mild Pre-Eclampsia	181	505	482	172
Eclampsia	119	170	148	151
Gestational /Chronic Hypertension	-	-	-	981
APH	144	144	144	281
Retained Placenta	90	110	114	71
PPH (VAG. DEL.)	108	189	160	379
PPH (C/S - 1L)	80	157	162	134
Cervical Tear	13	22	14	9
Ruptured Uterus	29	38	22	61
TOTAL	1,079	1,668	1,679	2,532

Hypertensive disorders topped the list of complications recorded at the end of the year under review constituting 65.6% of the total complications. Hypertensive disorder consists of all pregnancy related hypertension conditions: severe pre-eclampsia, imminent eclampsia, eclampsia, Mild pre-eclampsia, chronic hypertension and gestational hypertension. The incidence of hypertensive disorder in the registrants was 11.7%.

The postpartum hemorrhage for the year was 4.6%, which is an increase compared to the previous years (2012, 2011 and 2010). The postpartum hemorrhage for vaginal deliveries was 3.3%, which was 2.1% higher than postpartum hemorrhage in C-section deliveries (1.2%).

In 2013 year, Antepartum hemorrhage (APH) occurred in 2.0% of women delivering at the hospital. The previous year, it was 1.4% as highlighted above. Thus, there was an increase in the Antepartum hemorrhage in the year compared to the same period in 2012.



## SCREENING FOR SYPHILIS (VDRL TEST)

STATUS	2012	%	2013	%
Non-Reactive	8,274	80.5	9,265	82.8
Reactive	113	1.1	160	1.4
Not Done	1,891	18.4	1,761	15.8
TOTAL	10,278	100	11,186	100

## CHRONIC DISEASES (PAST MEDICAL HISTORIES) OF MOTHERS DELIVERED

INDICATOR	POSITIVE	NEGATIVE	NOT DONE
Diabetes	104	9,913	1,169
Heart Disease	76	9,862	1,248
Hypertension	385	9,639	1,162
Respiratory Disease (Asthma, TB, etc.)	311	9,764	1,111
Epilepsy	33	9,919	1,234
Jaundice	49	9,885	1,252

## TOP 30 REFERRING FACILITIES TO OBSTETRICS UNIT- KBTH

NO.	REFERRING FACILITY	FREQUENCY
1	Mamprobi Polyclinic	2,769
2	Kaneshie Polyclinic	2,018
3	Ga South Municipal Hospital	1,242
4	Kasoa Polyclinic	1,009
5	James Town Maternity Home	659
6	Ussher Polyclinic	393
7	Lapaz Community Hospital	316
8	Dansoman Polyclinic	260
9	Korle Bu Polyclinic	210
10	Amanfro Health Centre	183
11	Ga West Municipal Hospital	162
12	Achimota Hospital	151
13	Justab Hospital	117
14	Family Maternity Home	101
15	The Rock Hospital	101
16	Holy Trinity Medical Center	89
17	Brazza Maternity Home	88
18	Bortianor Health Centre	83
19	Shukura Community Hospital	71
20	Makola Clinic	66
21	Central Kasoa Clinic	60
22	Nsawam Government Hospital	59
23	St. Gloria's Clinic	57
24	El-Shaddai Clinic	52
25	Mab Medical Centre	52
26	Abodwe Clinic	41
27	Opoku Ware Hospital	40
28	Winneba Government Hospital	39
29	Faith Evangelical Mission Hospital	38
30	Adam Family Maternity Clinic	36
	Total	10,562(74.7%)
	Korle Bu Attendance	1,639(11.6%)
	Others	1,939(13.7%)
	TOTAL	14,140(100.0%)



## **COUNSELLING AND TESTING FOR HIV (PMTCT)**

SERVICE INDICATORS	2010	2011	2012	2013
Clients sensitized	7578	6295	6862	6771
Clients who received pretest counseling	7513	6309	6310	6592
Clients who tested	7043	6192	6730	6592
Clients who tested positive	92(1.3%)	104(1.7%)	73(1.1%)	77
Husbands who tested	209	152	78	-
Husbands who tested positive	5	6	3	-
Positive mothers who tested and delivered in the hospital	203	224	157	165
Mothers who were on HAART	203	209	139	-
Babies who received ART	202	236	270	243

Prevention of Mother-To-Child Transmission (PMTCT) Unit counseling of antenatal attendants patients decline by 1.3% on the preceding year number counseled, from Six Thousand, Eight Hundred and Six-Two (6,862) to Six Thousand, Seven Hundred and Seventy-One (6,771). Out of 6,592 who agreed to be tested after receiving counseling, 1.2% was confirmed to be HIV positive, which shows an increase of 0.1% on 2012 percentage identified as harboring the virus after testing.

## **MATERNAL MORTALITY RATIO**

INDICATOR	2010	2011	2012	2013
Total Maternal Deaths	80	119	85	86
Number of BID	9	8	11	10
Live Births	10,704	10,468	10,114	11,148
Maternal Mortality Ratio/ 100,000 Live Births	747	1137	840	771

## **ANALYSIS OF MONTHLY MATERNAL RATIO FOR 2013**

MONTH	TOTAL BIRTHS	LIVE BIRTHS	STILL BIRTH	TOTAL DEATHS	CUM T.DEATHS	MMR (PER 100,000 LB)	CUM MMR
Jan	939	900	39	7	7	778	778
Feb	933	897	36	3	10	334	556
Mar	1111	1053	58	15	25	1425	877
Apr	797	761	36	3	28	394	775
May	861	827	34	4	32	484	721
Jun	1091	1049	42	13	45	1239	820
Jul	1115	1067	48	7	52	656	793
Aug	1006	952	54	8	60	840	799
Sept	953	917	36	7	67	763	795
Oct	1023	970	53	4	71	412	756
Nov	925	890	35	8	79	899	768
Dec	893	865	28	7	86	809	771
Total	11,647	11,148	499	86	86		771



## PROPORTION OF DEATHS IN TOTAL DELIVERIES FROM 2004-2013 (TEN YRS)

YEAR	TOTAL DELIVERIES	TOTAL DEATHS	% OF DEATHS
2004	11275	83	0.74
2005	11493	103	0.90
2006	6804	56	0.82
2007	7159	75	1.05
2008	9994	77	0.77
2009	10673	86	0.81
2010	10882	80	0.74
2011	10503	119	1.13
2012	10278	85	0.83
2013	11186	86	0.77
Total	10,0247	850	0.85

## **DIRECT CAUSES OF MATERNAL DEATHS**

CAUSES	FREQUENCY	PERCENTAGE (%)
HYPERTENSIVE DISORDERS	24	27.9
ECLAMPSIA - 15		
PIH (SEV. PRE-ECLAM ) - 9		
HAEMORRHAGE	19	22.1
PPH -	17	
APH -	2	
ABORTION (UNSAFE)	11	12.8
SEPTIC -	7	
HAEMORRHAGE - 4		
PUERPERAL SEPSIS	6	7.0
RUPTURED ECTOPIC GESTAT	ION 2	2.3
TOTAL	62	72.1

## **INDIRECT CAUSES OF MATERNAL DEATHS**

CAUSE	FREQUENCY	PERCENTAGE (%)
PULMONARY EMBOLISM	5	5.8
SICKLE CELL DISEASE	4	4.7
HIV/AIDS	4	4.7
CONGESTIVE CARDIAC FAILURE	4	4.7
PURULENT MENINGITIS	2	2.3
SEVERE BROCHOPNEUMONIA	3	3.5
SEVERE ANAEMIA	1	1.1
HEPATIC FAILURE	1	1.1
TOTAL	24	27.9

#### **GYNAECOLOGY UNIT**

Korle Bu Teaching Hospital Gyneacology unit provides comprehensive gynaecological service to the community. The general gynaecology service is supported by subspecialty areas of gynaecological practice: natural fertility services and gynaecological oncology. The service comprises an inpatient ward and general outpatient gynaecology specialty clinics.

#### **OUT PATIENT ATTENDANTS**

FACTOR	2013	2012	2011	2010	2009
New Cases	8,432	8,703	8,748	10,014	10,875
Old Cases	13,983	12,758	15,151	14,393	19,869
Total	22,415	21,461	23,899	24,407	30,744

A total of 8,432 new registrants were recorded for the year under review representing 3.1% decrease as against the previous year value of 8,703. Average daily new cases stood at 32,33,34,38 and 42 in 2013, 2012, 2011, 2010, and 2009 respectively. New registrants had shown a decreasing trend throughout the five year intervals. Old cases recorded an increase of 9.6 percent on the immediate past year figure with daily average of 53, 49, 58, 55 and 76 in 2013, 2012, 2011, 2010, and 2009 respectively.

#### **REFERRALS**

FACTOR	2013	PERCENT (%)	2012	PERCENT (%)
Internal Patients	2,706	32.0	3,051	35.0
Referred	5,726	68.0	5,652	65.0
Total	8432	100	8703	100

In the option of whether patients were referred or not, 5,726 new cases scoring a 68 percent were referred from other hospitals and the rest (2,706) recording 32 percent were internal patients.

Furthermore, out of the 5,726 patients that were referred, 4,329 are from government facilities representing a 75.6 percent and 1,397 were from private facilities also documenting a 24.4 percent.

#### **EMERGENCY REFERRALS**

INDICATOR	2013	PERCENT (%)	2012	PERCENT (%)
Non Emergency	2,678	46.8	835	14.8
Emergency	3,048	53.2	4,817	85.2
Total	5726	100	5652	100

Emergency referral cases on the whole this year recorded 3,048 as against 4,817 in the immediate past year. On the contrary, those that were not emergency attendants documented 2,678 with a percent of 46.8 of the referrals.

#### **NEW REGISTRANTS PREGNANCY STATUS**

STATUS	2013	PERCENT (%)	2012	PERCENT (%)
Non pregnant	4,372	51.9	4,499	51.7
Pregnant	4,060	48.1	4,204	48.3
Total	8,432	100	8,703	100

With the total attendants of 8,432, 51.9 percent were not pregnant, thus, from the table 4,372 attendants. On the other hand, 4,060 (that is 48.7 percent) were pregnant. Out of those that were pregnant, 3,217 were in their  $1^{\text{st}}$  trimester presenting 79.2 percent, followed by those in their  $2^{\text{nd}}$  trimester also presenting 805 (19.9 percent) and the remaining are those in their  $3^{\text{rd}}$  trimester yielded 38 (0.9 percent).

#### **INPATIENT ANALYSIS**

INDICATOR	2013	2012	2011	2010	2009
Admissions	4,039	4,007	3,592	3,829	4,143
Discharges	3,922	3,794	3,442	3,680	3,982
Total	7,961	7,801	7,034	7,509	8,125

Admissions and Discharges of 4,039 and 3,922 respectively, were recorded in the year 2013 which indicates an increase on that of the previous year by 0.8% and 3.3% respectively. The average daily admissions were 11 each in 2013 and 2012. Discharges recorded 11 and 10 patients daily for 2013 and 2012 respectively.

#### **EARLY PREGNANCY COMPLICATIONS**

ABORTION	2013	2012	2011
Incomplete	1,310	1,316	1,116
Ectopic Gestation	490	352	314
Inevitable	13	33	48
Threatened	17	70	43
Missed	38	73	43
Septic	32	33	52
Total	1,899	1,877	1,616

Incomplete Abortion was the commonest early pregnancy complication (69%). The abortion rate was 196 per 1000 females of the reproductive age group seen at the unit.

## **GYNAECOLOGICAL SURGERIES**

SURGERY	FREQUENCY		PERCENTAGE (%)	
	2013	2012	2013	2012
Major	1,224	889	44.0	44.4
Minor	1,558	1,113	56.0	55.6
Total	2,782	2,002	100	100

68.9 percent of all patients admitted had a surgical procedure performed. There was a 37.7% and 40.0% increase respectively in the Major and Minor surgeries done in the review year as compared to the immediate past year.

## AGE DISTRIBUTION OF GYNAECOLOGICAL DEATHS

AGE GROUP	FREQUENCY	PERCENTAGE
Below 15	0	0.0
15-19	0	0.0
20-24	4	4.3
25-29	5	5.4
30-34	6	6.5
35-39	5	5.4
40-44	4	4.3
45-49	9	9.8
≥50	59	64.1
Total	92	100.0

## **CAUSES OF DEATH IN GYNAE UNIT**

CAUSES	FREQUENCY	PERCENTAGE (%)
CANCERS (ADVANCED)	71	77.2
Cervical	28	
Ovarian	19	
Choriocarcinoma	4	
Endometrial	19	
Pelvic Malignancy Unidentified	1	
Anaemia 2° Bleeding Uterine fibroid	7	7.6
Pulmonary Embolism	1	1.1
Sepsis (Excluding Septic Abortion)	1	1.1
Others	12	13.0
Total	92	100



#### REPRODUCTIVE HEALTH CENTRE

The Reproductive Health Unit is one of the units under the Department of Obstetrics and Gyaenecology – Korle Bu Teaching Hospital serving the reproductive health needs of clients.

The activities covered in this document include; attendance where clients who visited the Centre for family planning services are classified into three; New Acceptors (1<sup>st</sup> ever users), Continuing Clients and those who walked in for any of the various methods in the form of treatment known as visitors. It also presents the contraceptive stock for the period under review, Comprehensive Abortion Care (CAC) and Manual Vacuum Aspiration (MVA) cases, Adolescent Contraceptive Use and the reasons for removals (IUD and Implant), etc.

#### **TOTAL ACCEPTANCE BY METHODS**

VISIT	2013	2012	2011	2010
New Acceptance	2,263	2,137	1,870	1,113
Continuous Acceptance	7,902	7,612	2,238	1,428
Follow Up	3,082	2,931	3,379	3,474
Total	13,247	12,680	7,487	6,015

## **SUMMARY OF ACTIVITY**

ACTIVITY	2013	2012	2011	2010
IUD Removal	134	87	89	106
Implant Removal	228	168	114	103
ADHS	573	591	436	402
Comprehensive Abortion Care (CAC)	574	564	527	470
Manual Vacuum Aspiration (MVA)	1,387	1,028	1,325	1,690

## **ABORTION CASES RESULTING IN MVA**

ABORTION	2013	2012	2011
Induced Abortion	336	241	445
Spontaneous Abortion	1,051	787	880
Total	1,387	1,028	1,325

The total abortion cases which resulted in MVA being done decreased by 22.4% from 1,325 in 2011 to 1,028 in 2012. However, the year 2013 recorded 1,387 abortion cases representing an increase of 34.9% on the previous year value.

Spontaneous abortions dominated the Induced abortions constituting 880 (66.4%), 787 (76.6%) and 1,051 (75.8%) in 2011, 2012 and 2013 respectively.



#### **FAMILY PLANNING ACCEPTANCE**

FP	2013	2012
MVA	110	16
CAC	355	342
Total	465	358

The Family Planning acceptance is presented above; 358 (2.8%) of 12,680 accepted family planning in 2012 as against 465 (3.5%) of 13,247 in 2013.

# HUMAN RESOURCE DEVELOPMENT AND PROMOTIONS TRAINING AND EDUCATION

Various categories of nurses/midwives in the Obstetrics Unit had the opportunity of going through some training ranging from one day to weeks.

Almost all nurses in the gynaecology and Reproductive Health Unit also benefitted from

training programmes.

A number of Medical staff attended seminars and workshops also ranging from one day to weeks within the year.

Other supporting staff also benefitted from training programmes.

#### **TRAINING PROGRAMMES**

Some of the training programmes attended are:

- ή Health Administration and Management (HAM) programme
- η Infection Prevention Control
- ή Education and Standard Operating Procedure for HIV care in emergency safety
- η Refresher Course in Basic Nursing practices
- η Patients safety, managing crisis
- ή Evaluation and Surgical management of pelvic organ prolapses
- Resuscitation in a critically ill-patient palliative care, How to break health process
   for cancer patients
- η Management of Eclampsia



- ή Management of hypertension condition in pregnancy
- η Resuscitation of newborn babies
- η Presentation on procurement
- ή Anaesthelogy and Nurses working in the operating room
- η̃ Management of acute malnutrition
- η Respiration therapy and emergency
- η Repair of perinea injuries as well as principle of repair basic surgical handling.

#### **DEPARTMENTAL RENOVATION WORKS**

In the year under review, various renovation works were carried out in the department as indicated below:

- $\mathring{\eta}$  Renovation work on Maternity  $6^{th}$  floor has been completed to an appreciable standard.
- Ř Refurbishment of the blood bank has been completed. This unit is functional thus helping in a way to reduce maternal mortality since haemorrhage is one of the leading causes of mortality.
- ή A new office has been constructed for the National health Insurance staff.
- $\mathring{\eta}$  A new oxygen plant has been constructed for the department.
- $\eta$  However, all renovation work in the department has come to a halt due to lack of finance.

## **ACHIEVEMENTS**

- $\mathring{\eta}$  Water supply to the department has improved greatly and closing of admission because of lack of water was not experienced.
- η Regular workshops were conducted to update staff on current practice.

#### **CHALLENGES**

- Reimbursement for maternal care services remains irregular and therefore creates shortages that affect the quality of maternal and newborn care.
- The required staff strength, especially nursing staff remains a major issue; that is the rate of outflow is much higher than inflows. Additional midwives (30) and Anesthetist (4) nurses are needed.
- Poor communication between referring health facilities and the O & G department of Korle Bu Teaching Hospital affects patient care.
- Level of motivation of staff is not encouraging and this tends to impact



- negatively on the morale of staff.
- Poor quality and inadequate supply of patients' food from the Kitchen as evidenced by patients numerous complaints.
- Uncoordinated inflow of students from various institutions to the department for practical attachment having a negative impact on teaching and supervision due to limited facilities.
- Conditions at Gynae OPD and Chenard remain deplorable despite various assurances to improve upon the current situation.
- Ineffective security system, leading to absconding of patients and petty thefts.

#### **WAY FORWARD**

- Considering the low level of morale amongst staff members, staff motivation programmes should be given priority.
- $\mathring{\eta}$  Motivation of staff through the organization of workshops, seminars and other training opportunities to help achieve MDGs 4 & 5.
- $\mathring{\eta}$  Various units should be involved in plans concerning the Department to encourage staff participation in Departmental activities.
- $\mathring{\eta}$  Research activities on pressing clinical and staff related issues should be intensified.
- ή Ensure quality Obstetrics care through participatory supervision.
- ñ Encourage continuous health education on preventive practices to control Mother To Child Transmission of HIV.

## **CONCLUSION**

It is hoped that with the right staff attitude, the right mix of equipment and consumables, the Department will meet its target for 2014.



## **POLYCLINIC SUB-BMC**

#### INTRODUCTION

Korle Bu Polyclinic is a 42-bed facility that offers primary health care to the Korle Bu community, its environs and the city as a whole. It was established primarily to attend to patients in the catchment area, but has grown over the years into a Sub-BMC under the Korle Bu Teaching Hospital and has been accredited as a training facility for Family Physicians for both West Africa and Ghana Colleges of Physicians since 2003.

The Department offered primary health service by engaging in the following activities;

- $\mathring{\eta}$  Attending to patients at the OPD, admissions to the wards and facilitation of transfer of those who require tertiary service.
- η̈́ Public Health services such as Child Immunization, Welfare Clinics, health education etc.
- η̈́ Ophthalmic Screening Services
- η̈́ Provision of Laboratory Services
- η Provision of Radiological services
- ή Rendering services to Korle Bu Staff (staff clinic)
- $\mathring{\eta}$  Providing 24-hour Pharmacy service to the public
- η Palliative Care Services
- η̈́ Chronic Care & Asthma Clinic
- η Theatre Service Day cases
- η Ultrasound Services
- η̈́ ECG Services

The Department's performance for the year under review was very productive and the numerous patients who accessed care at the facility during the period were attended to. Despite a few challenges which continue to persist in the areas of human resource and finance, the Department carried out its mandate in a congenial environment.

## **MANAGEMENT PLAN**

Activities planned to achieve the objectives of the year were as follows

- η To reduce patients waiting time
- η̃ Strengthen staff/patient communication and feedback (customer care workshop)
- η Patient education (on daily basis @ OPD)
- ή Improvement of patients privacy and confidentiality (screens, gowns, cubicles)
- ή Efficient and effective use of recovery wards facility (high patient turnover)
- η̈́ Provision of additional office space & expand Medical Records Unit
- η̈́ Provision of computers to facilitate work
- η To equip and operationalise the Theatre
- η̃ To acquire Ultrasound Equipment to expand scope of service provision
- $\mathring{\eta}$  To establish a chronic care clinic (to be run on an appointment basis).
- η̃ Strengthen Internal Control Systems (all payments must be receipted)
- η̃ Staff development (provide sponsorship for short courses).



- η Undertake medical screening for staff (as a motivational package).
- ή Provision of safe drinking water for staff.

#### **SERVICES PROVIDED**

## **Out-Patient's Attendance**

During the year under review, the Outpatient's Unit registered a total of 60,720 as against 72,371 in 2012and 54,597 cases in 2011. The attendance decreased over the previous year's attendance by (16.10%). During the year under review, the Sub-BMC attended to an average of 166 Outpatients per day.

Table 2: Monthly OPD Attendance

MONTH	New cases	Old cases	Total	Total	Total
	2013	2013	2013	2012	2011
January	4,257	1,844	6,101	4,162	4,349
February	3,487	1,505	4,992	4,956	5,156
March	3,320	1,923	5,243	6,056	6,005
April	759	501	1,260	5,664	5,262
May	2,664	1,731	4,395	6,199	5,230
June	3,245	2,069	5,314	6,325	5,694
July	3,950	2,331	6,281	7,272	5,314
August	3,756	2,226	5,982	7,180	4,980
September	3,254	1,957	5,212	6,320	4,157
October	3,640	1,933	5,573	6,775	368
November	3,806	1,562	5,368	6,301	4,569
December	3,304	1,696	5,000	5,161	3,513
Total	39,497	21,324	60,720	72,371	54,597

## **Ophthalmic Services**

The total number of eye conditions seen in the year under review was 9,099 (this figure is inclusive of the total OPD cases of the Sub-BMC). This represents a decrease of 5% (423) over the previous year's figure of 9,522. Eye conditions attended to are represented in the table below.

**Table 3: EYE CONDITIONS ATTENDED TO** 

No.	Eye Diseases	2011	2012	2013
1	Conjunctivitis (infective/non-infective)	4,291	4,247	3,838
2	Refractive Errors	2,302	1,652	1,576
3	Blind Cataract	486	229	157
4	Non-Blind Cataract	795	568	376
5	Glaucoma	439	411	446
6	Uveitis	112	82	75
7	Minor Injuries	347	314	179
8	Corneal Ulcer	80	61	52
9	Corneal Opacity	103	54	60
10	Follow ups	1,052	1,089	1,176
11	Others	2,095	775	1,127
12	Normal Eye	30	40	37
	Total	12,132	9,522	9,099

The Eye clinic referred a total number of 890 cases in the year under review as against **1,023** and **1,848** for the years 2012 and 2011 respectively. The table below shows the number of Eye patients attended to and referred in the year 2013.

**Table 4: Monthly Eye Cases Seen & Referred** 

	2011 TOTAL	2011	2012	2012	2013	2013
MONTH	IOIAL	REF.	TOTAL	REF.	TOTAL	REF
JAN	561	168	492	106	558	94
FEB	591	134	541	73	520	90
MAR	610	161	498	57	455	79
APR	526	83	474	74	263	27
MAY	590	139	570	128	435	87
JUN	531	137	548	87	458	71
JUL	424	112	471	69	487	79
AUG	598	477	547	87	505	56
SEP	674	152	480	48	393	64
ОСТ	324	60	556	89	555	99
NOV	539	128	501	104	539	69
DEC	481	97	468	101	453	75
TOTAL	6,449	1,848	6,146	1,023	5,721	890

## **INPATIENTS DATA:**

The Polyclinic operates two main recovery wards namely, Male and Female recovery wards. However, there is space designated for children. Summary of data from these recovery wards are as follows:

A total of 2,576 patients was admitted; out of this total, 1,020 (39.60%) were on the male recovery ward, 1,146 (44.49%) were in the female recovery ward and 410 (15.91%) were at the children's recovery ward. A total of 298 deaths was recorded over a total admission of 2,576 which represent 11.5% as against 7.66% in 2012. A total of 268 patients representing 10.4% of the total admissions were referred and Eight (8) patients representing 0.3% of total admissions absconded.

**Table 5: Summary of Inpatients Data for the year 2013** 

Description	Male Recovery Ward	Female Recovery Ward	Children Recovery Ward	Total 2013	Total 2012	Total 2011
No. detained	1,020	1,146	410	2,576	3,302	4,016
No. discharged	625	795	341	1,758	2,367	2,953
No. referred	132	119	16	268	276	255
No. absconded	4	4	-	8	6	24
No. of deaths	130	166	2	298	253	351

#### **PUBLIC HEALTH UNIT**

The Public Health Unit of the Polyclinic is responsible for health education talks at the OPD, immunization and counseling, HIV screening and counseling, school Health, Home visits, outreach programmes, Child welfare clinics, etc. Output from the unit for the year 2013 is shown below;

# **HIV/AIDS**

The total number of cases that were diagnosed HIV positive in 2013 was 279 as against 249 cases in 2012 and 216 cases in 2011. There was an increase of 30 (12.1%) cases over the previous year's figure of 249 cases. Details are presented in the table below.

Table 6: Monthly HIV-POSITIVE Cases:

MONTH	2011	2012	2013
	CASES	CASES	CASES
January	1	4	24
February	0	22	22
March	2	17	28
April	5	18	8
May	8	23	22
June	12	15	27
July	27	22	34
August	30	42	15
September	42	26	19

October	17	24	28
November	40	14	23
December	32	22	29
Total	216	249	279

The age distribution of the HIV new cases is shown in the table below. The highest number of new cases was recorded among the age group of between 20 and 49 years a total of 215 cases of both male and female respectively. The figure represents 77.06 % of total cases recorded during the year.

**Table 7: HIV POSITIVE CASES WITH AGE DISTRIBUTION** 

AGE	MALE	FEMALE	TOTAL	TOTAL	TOTAL
DISTRIB.	2013	2013	2013	2012	2011
0 – 9	4	1	5	3	3
10 – 19	2	4	6	1	2
20 – 29	13	32	45	43	41
30 – 39	16	60	76	79	76
40 – 49	44	50	94	123	94
50+	20	33	53	-	-
TOTAL	99	180	279	249	216

**Table 8: Top Ten Causes of Admission (Male)** 

No	Diagnosis
1	Hypertension & Complications
	( CVA not inclusive)
2	Diabetes Mellitus
3	Sickle Cell disease
4	Cerebrovascular Accident
5	Respiratory tract infections
6	Malaria
7	Gastroenteritis
8	Anaemia
9	Peptic ulcer/ gastritis
10	Alcoholism

**Table 9: Top Ten Causes of Admission (Female)** 

No.	Diagnosis
1	Hypertension & Complications (CVA not inclusive)
2	Diabetes Mellitus
3	Sickle Cell disease
4	Malaria
5	Cerebrovascular Accident
6	Gastro-enteritis
7	Respiratory tract infections
8	Urinary tract infections
9	Anaemia
10	Peptic ulcer/ gastritis

**Table 10: Top Ten Causes of Admission (Children)** 

No.	Diagnosis	No. of cases	% of total admission- children
1	Malaria	162	39.5
2	Gastro-enteritis	97	24
3	Pneumonia	63	15.4
4	Sickle Cell disease	19	4.6
5	Urinary tract infections	17	4.2
6	Febrile convulsion	15	3.7
7	Septicaemia	9	2.2
8	Asthma	12	2.9
9	Tonsillitis	7	1.7
10	Otitis Media	8	2

# TEN TOP CAUSES OF DEATH BY DISEASE TYPE (males)

- Cerebrovascular Accident
- Chest infections
- Hypertension & Complications
- Meningitis
- Congestive heart failure
- Septicaemia
- Anaemia Related Cases
- Sickle Cell crisis
- Diabetes Mellitus
- Chronic Liver Disease

## TEN TOP CAUSES OF DEATH BY DISEASE TYPE (females)

- Cerebrovascular Accident
- Hypertension & Complications
- Diabetes Mellitus
- Chest infections
- Congestive heart failure
- Anaemia Related Cases
- Chronic Liver Disease
- Septicaemia
- Gastroenteritis
- Sickle cell disease

## **DIAGNOSTIC SERVICES:**

Diagnostic services provided by the Polyclinic Sub-BMC include Radiological and Laboratory investigations. Details of the Laboratory and the Radiology (X-Ray) units are as follows;

## **RADIOLOGY UNIT**

The Radiology Unit recorded a total OPD attendance of 4,017 in the year under review as against 5,125 and 3,484 in the years 2012 and 2011 respectively. There was a decrease in the number of patients attended to in 2013 by 1,108; representing a 21.6 % drop-over the total of (5,125) patients who were attended to in 2012. These are shown in the table below.



**Table 11: OPD Attendance to X-ray** 

MONTH	MALE	FEMALE	TOTAL 2013	TOTAL	TOTAL
MONTH	2013	2013	101AL 2013	2012	2011
January	262	280	542	355	200
February	181	166	347	175	201
March	170	150	320	277	448
April	74	74	148	451	331
May	167	161	328	292	381
June	284	272	556	333	358
July	193	178	371	895	286
August	163	172	335	494	294
September	157	190	347	376	309
October	128	147	275	453	132
November	110	121	231	523	277
December	97	120	217	501	263
TOTAL	1,986	2,031	4,017	5,125	3,484

Table 12: Details of cases performed at X-Ray

	CHEST	GENERAL	TOTAL	TOTAL	TOTAL
MONTH	CASES	CASES	CASES	CASES 2012	CASES 2011
			2013		
JAN	542	335	877	441	230
FEB	202	209	411	238	242
MAR	152	219	371	329	523
APR	80	89	169	548	383
MAY	243	232	475	362	456
JUN	303	401	704	394	421
JUL	227	228	455	1,028	332
AUG	203	184	387	547	349
SEP	223	176	399	463	370
OCT	170	145	315	540	167
NOV	122	136	258	618	360
DEC	126	142	268	603	307
TOTAL	2,593	2,496	5,089	6,111	4,140

# **LABORATORY UNIT:**

The Laboratory unit carried out a total of 12,342 tests comprising a variety of laboratory investigations that were done as against 27,407 and 24,961 cases in 2012 and the year 2011 respectively. This data is displayed on the table below.

**Table 13: Lab Cases Attended to** 

TYPE OF	TOTAL	TOTAL	TOTAL
CASES	2013	2012	2011
FBC	3,436	7,809	4,973
BF	1,805	5,803	4,098
FBS	598	2,020	3,441
WIDAL	357	3,508	3,223
ESR	431	1,253	2,810
SICKLING	1,431	1,355	2,285
URINE	956	2,609	2,055
STOOL	946	820	1,995
BUE CR	866	820	32
LIPIDS	516	702	30
LFTS	341	355	19
HB ELECT.	659	1	-
TOTAL	12, 342	27,407	24,961

#### **PALLIATIVE CARE UNIT**

The Palliative Care Unit was set up during the year purposely to attend to the needs of terminally ill patients through family integration aimed at improving symptoms and achieving comprehensive personal and spiritual care. The unit offers services which include Outpatient clinics, inpatient consults, home visits, family conferences and bereavement care among others.

The total number of cases that were seen at the Unit during the period was **98** out of which **61** were females and **36** males. The youngest patient seen was 10 years old while the oldest was 83 years of age. The statistics for the cancer cases are presented in the table below;

**Table 14: Type of Cancer patients seen at the Palliative Care Unit** 

No.	DIAGNOSIS	<b>TOTAL 2013</b>
1	Breast cancer	19
2	Colorectal	11
3	Liver	8
4	Stomach	7
5	Head & Neck	9
6	Osteosarcoma	6
7	Prostate	8
8	Cervical	6
9	Endometrial	5
10	Uterine	2
11	Ovarian	1
12	Pancreas	3
13	Gall bladder	4
14	Lung	2
15	Other	7
	TOTAL	98

## **CHRONIC CARE CLINIC**

The Chronic Care clinic was set up in the last quarter of the year 2013 after being piloted for about a year. The main idea is to provide frontline management and individualized diabetes self-management education of chronic diseases (cardiovascular) mainly persons who are diabetic and hypertensive. Clients are scheduled for consultation by appointment in an attempt to minimize waiting time. A total of 325 patients was registered during the period under review.

## **ASTHMA CLINIC**

The Asthma clinic commenced at the Polyclinic in August, 2013 with the main aim of providing comprehensive care for asthma patients in order to achieve optimum control of symptoms and improve upon their quality of life. The clinic provides comprehensive management of children and adults who have asthma based on the guidelines of the Global Initiative for Asthma Management. During the period under review, 167 clients visited the clinic, 42 (25%) of whom was children aged 12 years and below whiles the remaining number of 125 (75%) were females.

#### **PHARMACY UNIT**

The Pharmacy Unit operated a 24-hour service to our clients during the year. The total number of prescriptions served to outpatients for the year was **51,598** a decrease from the previous year 2012 figure of 66,430 and 57,696 in the year 2011. The decrease was as a result of the industrial action embarked upon by the pharmacy staff in the month of May during the year. The table below shows the details of the service provided by the Pharmacy unit.

**Table 15: Clients Served By Pharmacy** 

MONTH	CASH &	STAFF	PRIS	NHIS	2013	2012	2011
	CARRY				TOTAL	TOTAL	TOTAL
JAN	2,240	29	10	2,467	4,746	5,958	3,632
FEB	2,796	26	12	3,029	5,863	5,279	3,406
MAR	2,011	20	15	2,306	4,352	5,725	3,919
APR	226	5	2	352	585	4,424	3,228
MAY	0	0	0	0	0	5,893	3,581
JUN	916	6	2	818	1,742	6,499	5,787
JUL	3,042	26	12	3,039	6,120	7,806	6,412
AUG	2,585	25	10	2,687	5,307	6,851	5,611
SEP	2,476	27	4	2,943	5,450	1,800	5,671
OCT	2,763	24	5	3274	6,066	6,151	2,633
NOV	2,563	23	4	3,124	5,714	5,202	4,673
DEC	2,651	22	3	2,977	5,653	4,842	5,224
TOTAL	24,276	233	79	27,016	51,598	66,430	57,696

**Table 16: Earnings from Pharmacy** 

	2013 Sales GH¢	2012	2011 sales
SECTION		GH¢	GH¢
Cash & Carry	403,978.45	305,093.40	308,236.40
(OPD)			
Staff	3,997.49	4,117.06	-
Sickle Cell Clinic (SCC)	656.55	-	3,983.10
Credits (NHIS)	484,769.80	537,843.28	-
Wards	3,160.07	2,888.00	2,793.00
TOTAL	896,562.36	849,941.74	315,012.50

#### **ACHIEVEMENTS**

- Triaging system was introduced
- Improvements in the lines of communication among staff members
- Appointment system was introduced
- Additional car parks were provided
- The palliative care clinic was established in collaboration with other disciplines.
- Steady growth of the Chronic Care Clinic
- Commencement of Asthma Clinic
- Ambience and Privacy in the consulting rooms have markedly improved.
- Installation of equipment in the theatre done and minor surgeries to commence in January 2014
- The palliative care clinic was established in collaboration with other disciplines
- Well-structured Resuscitation facility provided
- Client satisfaction survey at Korle Bu Polyclinic conducted
- Roof leakages; major repair work carried out

## **KEY CHALLENGES**

- Patient waiting time not significantly reduced. Appointment system introduced on a pilot basis. Plans to do evaluation and scale-up
- Provision of cardiac monitors at the theatre and resuscitation bay
- Irregular reimbursement of 60% of revenue generated. Inimical to effective planning
- Human resource challenges; inadequate number of orderlies and trained biostatisticians. Orderlies recruitment done and staff posted to the department



- Security
- Staff motivation
- Difficulty to transfer referred patients to SME, especially cases for the physicians
- Admission of paupers

## **PRIORITIES FOR 2014**

- Scaling up of the appointment system
- Commencement of theatre services (minor surgeries). Provision of central gas delivery services to the theatre and recovery ward
- Capacity building for theatre staff, training in Peri-operative care, training of nurse anesthetists
- ECG services
- Ultrasound services
- Strengthen the internal control systems further
- Staff motivation and training (continuous staff development activities)
- Painting of the Exterior of the entire Polyclinic facility
- Generation and development of relevant research topics and funding

#### **CONCLUSION**

It is the determination of the polyclinic to provide comprehensive, coordinated, continued and cost effective care. The role of management in achieving these objectives cannot be over emphasized. It is therefore our wish that we continue to forge a closer partnership with the management of the Korle Bu Teaching Hospital in our collective strive to achieve our vision.



## **Table: Service Indicators**

Service/Clinical Indicators	2012 Achieved	2013 Achieved	2014 Target
Admissions to unit	9,984	7,687	10,020
Discharges	4,300	2,882	5,010
Transfer to wards	4,260	3,921	4,008
Deaths	1,160	902	982
BID	221	49	30
Absconders	76	27	20
Average length of stay	N/A	2.5 days	2 days
Transfer rate	43%	51%	60%
Mortality rate	11.6%	11.7%	10%

#### **ACHIEVEMENTS:**

- The management of the Department introduced triaging using the Ministry of Health (MOH) triage scale to increase access to emergency care. This was preceded by three (3) months intensive triage training.
- The management of the Department instituted staff durbars and offered training in clinical safety and maintenance topics.
- The management of the Department also organized a month long clinical observation for three (3) doctors and two (2) medical students at New York University
- The management of the Department improved upon documentation by creating a preformatted database with a drop down field to improve accuracy and competency of account records.
- The management of the Department also introduced A&D books on wards to improve record of patient outcomes.
- It also introduced telephone and internet facilities plus motivational packages to its staff.



#### **KEY CHALLENGES:**

The following are the challenges the Department was confronted with:

- Congestion: The Unit was always congested as a result of its frequent use as a lie-in ward due to lack of beds at the outlets.
- Maintenance: There were frequent facility and equipment breakdowns and a considerable amount of time was taken to resolve these issues.
- Waiting area: The entrance of the facility has been converted to a waiting area by relatives and friends of clients. Toilets and bathhouses are jointly used by patients and relatives leaving the place very untidy.
- Infection control: Poor ventilation, lack of isolation, over-crowding, delays in diagnostic services increase infection control risks.

#### **PRIORITIES FOR 2014:**

The following are the priorities set for the New Year:

- To improve upon the environment of care.
- To improve staff morale and support positive attitudes to work.
- To improve and strengthen governance structures and infrastructure.
- To improve upon the quality of care.
- To increase income generation.

#### **CONCLUSION:**

The management of the Sub-BMC looks forward to the construction of the "new temporary ER" in the coming year. It also hopes that Central Management would continue to offer the much needed support to the Sub-BMC as it continues to provide emergency care to those in need of such care.



#### ANAESTHESIA SUB-BMC

## **INTRODUCTION**

The Anaesthesia Sub-BMC was established to provide anaesthesia services in all theatres, recovery wards and intensive care, as well as training and research in the Hospital

The Sub-BMC has a bed capacity of 34 for both the Recovery Wards and the Intensive Care Unit and staff strength of 200.

#### **SERVICES AVAILABLE**

The Anaesthesia Sub-BMC performs the following functions:

- It provides anaesthetic services for all surgical specialties in the Korle Bu Teaching Hospital.
- It provides anaesthetic services for selected patients undergoing CT Scan and other radiological investigation
- It provides pre-anaesthetic clinical services for patients being prepared for surgery and other interventions that require general anaesthesia
- Provides intensive care services for critically-ill patients
- Provides acute and chronic pain management for selected patients
- Provides CPR training for hospital staff and other institutions on request

## **SERVICE PERFORMANCE**

Outpatient Department (OPD)

The Out Patient Department (O.P.D) which holds clinic sessions three times in a week attended to 9,164 patients during the year under review. Out of the 9,164 patients that visited, 5,040 representing 54.99% and 4,124 representing 45% were new and review cases respectively.

Overall, the year under review recorded a marginal increase of 339 (3.6%) over the previous year's O.P.D attendance.



Table: Outpatient Attendance

Months	<b>Review Cases</b>	New Cases	<b>Total Per Month</b>
January	406	482	888
February	322	402	724
March	378	449	827
April	152	175	327
May	350	382	732
June	439	527	966
July	480	551	1,031
August	380	490	870
September	342	360	702
October	393	441	834
November	297	443	740
December	185	338	523
<b>Grand Total</b>	4,124	5,040	9,164

#### **INPATIENT**

The department recorded very low admissions across its recovery wards. Relative to the previous year, the total number of inpatients admitted across the various recovery wards and ICU/HDU increased by just a margin of 981 as compared to the year 2012's significant increase of 6,666. This was due to the renovation of the first floor recovery ward which was closed down for six (6) months.

The Obstetrics Recovery Ward recorded the highest number of admissions of 5,233 (31.3%) out of a total number of 16,674 recorded across all the departments units of operation. This was followed by the  $1^{\rm st}$  Floor Recovery Ward, which admitted 3,805 patients, representing 22.8% of all inpatient admissions.

The least number of inpatient admissions, 540 was recorded at the Surgical Ground Floor ICU/HDU. This represented 3.23% of all inpatient admissions.

**Table: (Summary of Inpatient Admissions)** 

Unit	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	
	Quarter	Quarter	Quarter	Quarter	Total
Surgical Ground Floor ICU/ HDU	135	138	139	128	540
1 <sup>st</sup> Floor Recovery Wd	1,080	793	920	1,012	3,805
Gynae Recovery Wd	545	632	818	754	2,749
Orthopaedic Recovery Wd	353	295	329	318	1,295
Plastic Recovery Wd	349	337	414	342	1,442
Accident Centre Rec. Wd	456	398	420	336	1,610
Obstetric Recovery Wd	1,332	1,217	1,370	1,314	5,233
Grand Total	4,250	3,810	4,410	4,204	16,674



## SURGICAL GROUND FLOOR ICU/HDU

The Surgical Ground Floor ICU/HDU recorded the least number of admissions 540, representing 3.23% of total admissions made. However, this is an increase over year 2012's admission of 503.

Four hundred and sixty-three (463), of the 540 admissions made at the Ground Floor ICU/HDU were (Postoperative) Neurosurgical Cases. The least number of admissions recorded at this unit during the year under review were paediatric cases, recording eight (8) admissions. There were, however, 60 deaths recorded, this represented 11.1% of total admissions made at the unit.

**Table: Ground Floor ICU/HDU Data** 

TYPE OF	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC	TOTAL
ADMISSION													
Neuro	37	35	33	47	37	41	45	39	41	45	36	27	463
General	5	5	2	1	-	1	-	2	1	-	4	1	
Surgery													22
Child Health	1	-	=	1	-	2	1	-	1	-	1	1	8
Accident	-	-	-	-	-	-	-	-	-	-	-	-	
Centre													0
Obst &	1	-	5	-	4	-	3	-	-	1	-	2	
Gynae													16
Medical	1	-	1	-	-	3	2	4	-	2	1	4	18
Cardio	-	-	-	-	-	-	-	-	-	-	0	-	
SME	-	-	-	-	-	-	-	-	-	-	0	-	
Plastic	4	5	-	-	-	1	-	-	-	2	1	-	13
Transplant	-	-	-	-	-	-	-	-	-	-	-	-	0
Others	-	-	-	-	-	-	-	-	-	-	-	-	0
Total	49	45	41	49	41	48	51	45	43	50	43	35	540
Death	5	6	11	4	4	6	2	6	5	2	5	4	60
Total Alive	44	39	30	45	37	42	49	39	38	48	38	31	480

# FIRST FLOOR SURGICAL RECOVERY WARD



The first floor surgical recovery ward during the year under review recorded a total of 3,805 admissions. These admissions were cases performed by different specialties, as shown in the Table below.

The highest numbers of admissions, 1,979, representing 52% of total admissions were from General Surgery. This was followed by the Department of Child Health, recording 725, representing 19% of total admissions by the unit.

The least numbers of admissions were from Neurosurgery and a transfer from outside the hospital, recording one (1) each.

Forty-three (43), representing 1.13% of admissions were recorded mortalities (brought in dead) leaving a total of 3,762 out of the 3,805 patients being admitted alive.

**Table: 1st Floor Recovery Ward Data** 

TYPE OF ADMISSION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	ОСТ	NOV	DEC	TOTAL
Neuro	-	-	-	-	-	-	-	-	-	-	1	-	1
General	191	169	196	91	130	172	161	131	141	172	264	161	1,979
Surgery													
Child Health	67	63	57	5	87	80	78	78	68	24	64	54	725
ENT	57	54	46	22	37	38	41	40	39	51	57	26	508
Genito-	20	16	26	25	20	21	33	17	26	16	23	21	264
Urinary													
Eye	19	26	19	1	13	24	13	10	12	3	25	8	173
Maxillofacial	17	10	16	3	6	11	11	-	9	18	7	6	114
Obst &	1	3	2	1	3	2	-	1	1	10	-	1	25
Gynae													
Medical	1	1	-	-	-	-	-	3	-	-	-	-	5
Plastics and	-	2	-	-	-	1	2	2	2	-	-	-	9
Burns													
Orthopaedic	1	-	-	-	-	-	-	-	-	-	-	-	1
Transplant	-	-	-	-	-	-	-	-	-	-	-	-	0
Critically-ill	-	-	-	-	-	-	-	-	-	-	-	-	0
Others	-	-	-		-	-	1	-	-	-	-	-	1
Total	374	344	362	148	296	349	340	282	298	294	441	277	3,805
Death	12	4	7	6	4	5	-	-	-	1	2	2	43
<b>Total Alive</b>	362	340	355	142	292	344	340	282	298	293	439	275	3,762



## **OBSTETRICS RECOVERY WARD**

The obstetric recovery ward recorded the highest number of admissions during the year under review. A total admission of 5,233, representing 31.38% of all inpatient admissions was recorded. Out of the 5,233 cases recorded, 5,061 and 172 were major and minor cases respectively. There were 12 deaths recorded during the period of review.

**Table: Obstetrics Recovery Ward Data** 

TYPE OF	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	ОСТ	NOV	DEC.	
ADMISSION													
Major	354	481	450	330	381	472	465	475	391	473	393	396	5,061
Minor	22	4	21	7	11	16	17	11	11	15	15	22	172
Total	376	485	471	337	392	488	482	486	402	488	408	418	5,233
Death	2	1	2	0	0	1	3	0	2	0	0	1	12
Total Alive	374	484	469	337	392	487	479	486	400	488	408	417	5,221

#### **GYNAE RECOVERY WARD**

The Gynaecology Recovery Ward recorded a total of 2,749 cases, representing 16.48% of total admissions to Gynaecology unit. One thousand, two hundred and ten (1,210) and 222 were major and minor cases respectively. Seven hundred and forty-six (746), representing 27.13% and 534, representing 19.42% were done under General Anaesthesia (GA) and Spinal Anaesthesia techniques respectively, while thirty-seven cases representing 1.34% were done under Local Anaesthesia technique.

Seven hundred and twenty-five (725), representing 26.37% of all total admissions were active registered NHIS card holders. Details are as shown in table below.

**Table: Gynae Recovery Ward Data** 

TYPE OF ADMISSI ON	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	ОСТ	NOV	DEC	TOTA L
Major	90	85	93	49	93	118	125	109	121	129	118	80	1,210
Minor	12	15	22	10	21	24	18	22	15	20	18	25	222
Gen Anaesthes ia	9	55	61	38	55	68	73	73	95	82	69	68	746
Spinal	2	45	51	18	50	70	64	53	36	60	54	31	534
Local	1	1	3	3	10	5	5	4	5	0	0	0	37
Total	114	201	230	118	229	285	285	261	272	291	259	204	2,749

NHIS	7	55	59	23	78	72	93	70	60	75	71	62	725
													725

#### **ACCIDENT CENTRE RECOVERY WARD**

During the year under review, the Accident Centre Recovery Ward registered a total of 1,610 cases, this represented 9.65% of the department's total admissions. Five hundred and twenty five (554), 34.40% and 91 forming 5.65% were major and minor cases respectively. Twenty point one-eight percent (20.18%) and 11.24% were done under spinal and local anaesthesia techniques respectively, while 259 cases, representing 16.08% were performed under general anaesthesia technique.

A significant 200 cases were recorded as emergencies and 215 forming 13.35% recorded in the unit had valid NHIS cards to access services. There were zero (0) deaths recorded. Details are shown in the Table below.

**Table: Accident Centre Recovery Ward Data** 

Table: Accident Centre Recovery Ward Data													
TYPE OF	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	TOTAL
ADMISSION													
Major	54	46	46	40	40	50	56	56	44	39	53	30	554
Minor	6	21	6	9	6	3	7	3	10	9	6	5	91
Emergencies	14	21	25	20	16	16	23	19	20	9	10	7	200
General	20	22	20	17	27	31	22	32	11	9	30	18	
Anaesthesia													259
Spinal Anaesthesia	28	28	26	36	17	19	40	29	28	39	25	10	
													325
Local Anaesthesia	13	33	27	14	17	20	3	17	0	9	14	14	181
Total	135	171	150	136	123	139	151	156	113	114	138	84	1,610

NHIS	20	19	13	19	20	20	0	48	18	13	16	9	
													215

## **ORTHOPAEDIC RECOVERY WARD**

The Orthopaedic Recovery Ward recorded one thousand two hundred and ninety-five (1,295) patients during the year under review. This represented 7.76% of total admissions of 16,674 recorded by the department of Anaesthesia.

Five hundred and seventy-nine (579), forming 44.7% and seven hundred and sixteen (716), forming 55.28% of the unit's only admissions made were major and minor anaesthetic technique cases respectively.

There were, however, no deaths recorded. There were no patients with NHIS registration, hence all the patients that were received at the unit were fee paying clients.

## **Table: Orthopaedic Recovery Ward Data)**

TYPE OF ADMISSION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	ОСТ	NOV	DEC	TOTAL
Major	44	43	39	55	46	76	38	24	55	67	56	36	579
Minor	77	70	80	36	52	30	84	87	41	54	62	43	716
Total	121	113	119	91	98	106	122	111	96	121	118	79	1,295

## **PLASTIC RECOVERY WARD**

During the year under review, the Plastic Recovery Ward registered a total of 1,442 cases, 713 forming 49.44% and 729 forming 50.55% were major and minor cases respectively. The Unit recorded no death. Details are as shown in the Table below.

## **Table: Plastic Recovery Ward Data**

TYPES OF ADMISSION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	ОСТ	NOV	DEC	TOTAL
Major	50	64	49	67	37	70	75	70	67	73	64	27	713
Minor	76	53	57	60	47	56	59	73	70	64	61	53	729
Total	126	117	106	127	84	126	134	143	137	137	125	80	1,442

#### **MAJOR CHALLENGES**

The following were some of the major challenges the department encountered in the delivering of services during the course of the year.

- Limited operating space at the Intensive Care Unit & Recovery Wards
- Renovation works at 1<sup>st</sup> Floor Recovery Ward
- Inadequate nursing staff
- Inadequate number of permanent and committed Accounts clerks for patient billing
- Inadequate numbers of Physician Anaesthetists
- Absence of appropriate facility to run out patient services
- Congestion at the Obstetric Recovery ward causing delays in surgeries and therefore resulting in morbidity
- Patient's inability to pay for ICU services
- Fire outbreak in the office of the Head of Department which resulted in the loss of some valuable documents and office equipment

#### **WAY FORWARD**

The Department and Sub-BMC is looking forward to the release of funds from the ICU levy fund to offset accumulated bills of ICU patients who were unable to settle their bills and also to improve stock levels of essential drugs and consumables.

The Department envisions to train and retain 10 more critical care nurses by the end of the year 2015.



## **CONCLUSION**

- Within the next 5years, the Department of Anaesthesia will create a congenial and stimulating atmosphere for service, teaching and collaborative research. This will allow an increase in information gathering, improvement in work standards and publications in peerreviewed journals.
- The Department will promote sub-specialisation in the practice and teaching of Anaesthesia as this will improve teaching, research and provision of anaesthetic services in the hospital.
- Sub-specialisation will allow for the expansion of the staff numbers in the department and the provision of anaesthetic services that are worthy of a "Reputable Tertiary Hospital" like the Korle Bu Teaching Hospital.
- It is also envisioned that the department will improve on provision of pain services including pain clinics and advanced pain management procedures.

## **RADIOTHERAPY & ONCOLOGY DEPARTMENT**

Radiotherapy and Oncology Department, a clinical department of the Korle Bu Teaching Hospital came into existence sixteen years ago and was designated a Centre of Excellence by Ministry of Health because there are two centres only, and the only one at the time of its inception.

The main pre-occupation of the Department is to manage solid tumours and some benign tumours with ionizing radiation and chemotherapy.

## **OLD EQUIPMENT**

- 1. One Cobalt 60 Teletherapy Machine. It is sixteen years old and its radioactive source changed six years ago to be decommissioned soon.
- 2. Two brachytherapy low dose rate Machines for treatment of cancer of cervix. Breakdown very frequent, causing decline in success of curing cervical cancer.
- 3. 3D Planning System with conformal treatment System.
- 4. Planning System for low dose rate Brachytherapy for Prostate Cancer owned by BARD.
- 5. Single Head SPECT gamma camera
- 6. Lamina Flowhood.

## **NEW EQUIPMENT**

This was provided under 6.7 million dollar BADEA loan to upgrade Radiotherapy and Nuclear Medicine Services managed by Capital Investment Management Unit of the Ministry of Health.

- 1. Multisource Brachytherapy Machine (HDR) at site awaiting installation.
- 2. Equinox 100 Cobalt 60 Teletherapy machine which has been installed and in use.
- 3. Acuity Radiotherapy Simulator, installed and in use.

The following equipment is expected;

- 1. Linear Accelerator with IMRT, VMAT
- 2. Planning System with Record and Verification
- 3. CT Scan
- 4. SPECT for Nuclear Medicine Imaging.

## **MANAGEMENT PLAN FOR 2013**

To strengthen capacity in conjunction with the government of Ghana, IAEA, and development partners.

## **INFRASTRUCTURE DEVELOPMENT**

- 1. Complete extension building to ease the problem of administrative accommodation, treatment area, filing and research offices.
- 2. Acquisition of modern equipment Including linear accelerator and CT scan.
- 3. New offices to house virtual cancer university training site for Ghana to improve manpower and reduce brain flight.



#### **HUMAN RESOURCE DEVELOPMENT**

- Encourage and support Staff particularly, Nurses, Doctors, Therapy Radiographers, Oncologists, Biomedical Scientists to participate in IAEA programmes and other International Conferences on Oncology to strengthen academia and provide evidence based management options.
- Collaborative Research works with other institutions and departments.
- Encourage staff to make publications in high profile journals, even though the cost of publication is prohibitive and ethical review has become a limiting step.
- Encourage more nurses to take courses in Oncology in order to improve patient care.
- Expand postgraduate training to other faculties of medicine, therapy radiographers and medical physics.
- Formal training of cancer registry staff would be encouraged.

## **QUALITY**

- Introduction of interdisciplinary management of cancer would continue, notably for breast and head and neck cancer and gastrointestinal tumours.
- Perform survival analysis for Common Cancers.
- Personnel would be given additional training externally and internally on new machines as per IAEA recommendations.

## **ACHIEVEMENTS**

- Regular Quality Assurance checks by Radiation Protection Board showed acceptable levels of radiation quality.
- Some members of Staff participated in scientific fora organised by the IAEA and other multi institutional trials.
- There is significant additional degree of competence in low dose rate interstitial brachytherapy for prostate cancer.
- We were very active in organizing CPD courses for the hospital.
- Iodine treatment for thyrotoxicosis and thyroid cancer and other nuclear medicine procedures by nuclear medicine physician.
- Treatment of refractory bone pain with samarium 153
- Other procedure in Nuclear Medicine started e.g. parathyroid Imaging, Merkels diverticulum diagnosis and GIT bleeding studies.
- Same day reporting of Nuclear medicine Imaging (most of the time)
- Three (3) nurses have completed International Oncology online courses and one currently in South Africa.
- Appointment System with specific date and time instituted leading to remarkable improvement in patients' waiting time.
- Patient numbers increased tremendously. Below is the statistical evidence



			STA	TIST	ICAL 20:		ORT I	OR						
CASES	JA N	FE B	MA R	AP R	MA Y	JU N	JU L	AU G	SEP T	OC T	NO V	DE C	TOT AL	%
BREAST	28	29	15	29	19	22	25	20	21	24	21	27	280	25. 0
CERVIX	16	23	10	11	12	18	20	19	19	12	10	13	183	16. 4
HEAD AND NECK	15	21	9	8	7	7	20	14	16	21	11	9	158	14. 1
PROSTATE	13	11	7	9	7	9	7	14	8	16	7	9	117	10. 5
SARCOMA	2	<u>2</u>	3 2	3 6	5 3	2	1 2	<u>4</u> 2	3	3	6 2	2	34	3.0 2.2
OVARY COLO-RECTAL	8	4	4	4	5	3	2	1	2	7	2	6	25 48	4.3
LUNG	1	0	1	2	2	0	1	3	0	2	3	1	16	1.4
ENDOMETRIUM	2	2	2	1	3	2	3	1	4	2	2	2	26	2.3
WILMS	0	0	0	3	0	0	0	1	1	0	0	0	5	0.4
UTERUS BLADDER	1	3	0	<u>4</u> 2	2 0	4	0	2	<u>2</u> 0	<u>0</u>	3	0	18 16	1.6
PANCREAS	1	2	2	0	0	1	0	1	1	0	0	0	8	1.4 0.7
STOMACH/GAS TRIC	1	3	2	2	5	6	2	5	2	2	1	2	33	3.0
MULTIPLE MYELOMA	3	0	0	1	2	0	2	2	0	0	1	0	11	1.0
OTHERS	15	3	8	11	16	11	17	18	4	7	26	4	140	12. 5
TOTALS	10 9	10 6	65	96	88	87	10 3	109	83	98	96	78	1,11 8	100 .0

	END OF YEAR GENERAL STATISTICS FOR 2013														
	CED TO														
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP T	ост	NOV	DEC	TOT AL		
	57 111		1 17 11 4	74114		5011	501	7.00	-		1101		1,11		
<b>NEW CASES</b>	109	106	65	96	88	87	103	109	83	98	96	78	<sup>′</sup> 8		
OPD													9,16		
ATTENDANCE	906	721	755	787	710	757	660	785	761	736	873	712	3		
SIMULATION	52	32	28	26	27	0	0	0	0	0	0	0	165		
CHEMOTHERAP													2,34		
Y	217	174	178	114	196	227	190	189	216	223	208	213	5		
BRACHY-															
CERVIX	16	12	11	4	12	9	15	10	11	9	12	13	134		
BRACHY-															
PROSTATE	0	0	0	4	0	0	2	0	0	0	0	0	6		
BLOOD	_				_	_		_	_	_					
TRANSFUSION	2	4	1	12	8	5	10	9	2	2	10	13	78		
COBALT	48	55	58	60	54	62	67	61	60	50	53	52	680		
RADIO IODINE	2	0	0	0	0	2	0	0	0	0	2	0	6		
BREAST CLINIC	56	81	62	47	63	60	59	79	70	62	95	50	784		
	1,4	1,1	1,1	1,1	1,1	1,2	1,1	1,2	1,2	1,1	1,3	11	144		
TOTAL	08	85	58	50	58	09	06	42	03	80	49	31	79		



#### **CHALLENGES**

- Constant breakdown of outmoded and aging equipment due to lack of spare parts.
- Inadequate skilled staff levels (Medical and nursing).
- Inadequate space for both clinical and office work.
- A lot of patients continued to report at late stages of disease.
- Accommodation for patients who live outside Accra on treatment.

#### **WORK PLAN FOR 2014**

Work towards completion of the extension building to ease problems of administrative accommodation.

- Human Resource Development would continue.
- Encourage more nurses to take up Oncology Courses.
- Continue multi-disciplinary meeting on breast and head and neck cancer as well as gastrointestinal cancers.
- The Centre will encourage its personnel to make publication in high profile journals.
- Training on the use of new equipment acquired.
- Conduct survival analysis on common cancers.
- Expand Chemotherapy Suite.
- Acquire new equipment:
  - High Dose Rate Brachytherapy Machine
  - Linear Accelerator

In conclusion, the year under review saw the Centre being resourced with new equipment which will tremendously facilitate the treatment of patients thus improving quality of life of our patients.



# CENTRAL LABORATORY INTRODUCTION

The Laboratory Sub-BMC provides diagnostic services for both inpatients and outpatients of the Hospital as well as those referred from other hospitals and clinics. It has an additional function of conducting research, teaching and professional staff development.

The Laboratory Sub-BMC has a four-member Management Committee made up of the head of the Sub-BMC, the Laboratory Manager, the Accountant and the Engineer. The Sub-BMC has co-opted three (3) Heads of Departments and four (4) Technical and Deputy Technical Supervisors as part of the team. The Management Team provides direction through planning (budgeting), organization and supervision. It also functions as a liaison between the Sub-BMC and the Central Management of the Hospital.

## **PRIORITIES FOR 2013**

- Provide satisfactory 24/7 clinic and diagnostic services.
- Improve customer service.
- Obtain 4 − 5 stars towards ISO Accreditation to WHO Standard (ISO 15189).
- Ensure constant and uninterrupted function of equipment.
- Embark on relevant and focused staff development.
- Liaise with clinic/departments to continuously enhance services.
- Expand range of service delivery.

# **ACHIEVEMENTS WITHIN 2013**

- Participated in all SLMTA programmes and have attained four stars in the recent exit assessment.
- Provision of P. A. System to enhance communication.
- Reduction in waiting time.
- Implemented an effective internal quality control and Laboratory Information System.
- Expanded range of test offered to clients during the year.
- Improved our test-count and cash revenues for the Sub-BMC and Hospital.
- The Sub-BMC has started a regular senior/supervisors and general meeting for all staff.
- Significant improvement in the physical infrastructure.
- Phlebotomy and orderlies training by BD Consult.

# **CHALLENGES OF THE PERIOD UNDER REVIEW 2013**

- Irregular supply of Laboratory/Hormones reagents from suppliers
- Lack of regular engineering and maintenance service for equipments, especially



- Chemistry Analyzers.
- Frequent power cuts and unstable current which led to frequent breakdown of equipment and air-conditioners.
- Frequent shortage of water supply
- Non availability of back-up equipment.

## MITIGATING ACTIONS ADOPTED TO MEET THOSE CHALLENGES - 2013

- The collaboration between Laboratory Sub-BMC Management and Hospital Management ensured the regular supplies of all reagents in order to prevent any stock outs.
- Arrangements are underway for total replacement of the Analyzer.
- There has been the provision of standby generator to solve the frequent power outage.
- Arrangements for an extra backup polytank to support the supply of water.
- Sub-BMC Engineer and Biomedical Engineer to install backup for all equipment in the Laboratory.

## PRIORITIES FOR 2014 (WAY FORWARD)

- To participate in all SLMTA programmes and to attain five (5) stars in the final exit assessment.
- To improve upon the turn-around-time of the various tests.
- To maintain and improve on the established standards.
- To improve in the Quality Management Systems to enable the Laboratory Sub BMC to obtain Accreditation.
- Enforcement for total replacement of the Chemistry Analyzers.
- Increase revenue by decreasing expenditure and improving efficiency.
- Liaise with management to enhance constant supply of reagents supplies.

#### **SERVICE DELIVERY**

The Central Laboratory is made up of four (4) Departments offering services related to the under listed specialties and four Units (Satellite Laboratories) as follows:

#### **DEPARTMENTS**

- Microbiology Department
- Chemical Pathology Department
- Haematology Department
- Immunology Department

## **SATELLITE LABORATORIES/ UNITS**

- Child Health Laboratory
- Maternity Laboratory
- Fevers Unit Laboratory



- Chest Clinic Laboratory
- Polyclinic Laboratory

# The indicators for service delivery of the various Departments / Units of the Sub-BMC are as follows:

## MICROBIOLOGY DEPARTMENT

The Department provided diagnostic services in the following areas, Bacteriology, Parasitology and Mycology. The diagnostic techniques used in the processing of the clinical specimen are Routine Examination (R/E) using microscopy; Culture and Sensitivity (C/S); Chemical Reaction and Serology.

SERVICE /	ACHIEVEMENT	ACHIEVEMENT	TARGET	ACHIEVEMENT	TARGET	
CLINICAL INDICATOR	2011	2012	2013	2013	2014	
Urine R/E	22,948	23,436	25,000	26,114	30,000	
Stool R/E	4,596	4,106	4,500	4,192	4,300	
HVS R/E	517	621	650	790	800	
Stool Occult	319	267	270	389	400	
Blood test						
Skin Snip	33	62	65	62	65	
Reducing Substances	60	67	70	106	110	
Trophozoite	80	106	110	69	100	
Count						
Filariasis	19	21	25	30	35	
Urine C/S	13,624	14,523	15,000	14,788	15,000	
Miscellaneous C/S	5,501	6,384	6,500	5,440	6,000	
Blood C/S	6,151	7,404	7,500	3,466	5,000	
Stool C/S	1,220	1,343	1,400	1,037	1,200	
CSF C/S	1,153	961	1,000	1,232	1,500	
TOTAL	56,221	59,301	62,090	58,233	64,510	

# IMMUNOLOGY DEPARTMENT INTODUCTION

The Immunology and Cell Biology Department is one of the four departments in the Central Laboratory of the Korle Bu Teaching Hospital. The department has two main units Serology (Virology) and Cell Biology which also has staff operating the Fevers Unit laboratory. The Department provided laboratory services in the following areas: Serology, Immunodiagnostic, immune monitoring and Paternity testing during the year under review.

SERVICE /	ACHIEVEMENT	ACHIEVEMENT	TARGET	ACHIEVEMENT	TARGET
CLINICAL INDICATOR	2011	2012	2013	2013	2014
HbsAg	1,600	4,025	5,000	5,159	6,000
Rhen. fact	152	390	450	190	250
Seman Anal	242	539	600	537	600
Hep profile titre	-	-	10	2	10
Chlamydia	3	5	10	7	20
VDRL	544	632	1,000	1,475	1,700
Widal	1,198	1,800	1,900	1,570	1,800
UPT/HCG	217	481	500	472	600
ASO	51	104	120	109	150
HCV	681	1,433	1,600	2,219	2,500
H. Pylori	28	67	80	53	100
Hep B profile	146	508	600	592	700
CRP	29	82	100	89	120
Тохо	44	6	20	-	-
ANA	99	40	60	-	-
IM	-	-	-	-	-
TOTAL	5,034	10,112	12,050	12,474	14,550

# CHEMICAL PATHOLOGY DEPARTMENT INTRODUCTION

The Department of Chemical Pathology as an integral part of the Laboratory Sub-BMC is constituted by the following Sub-Units namely the General Chemistry, Manual Bench, Endocrinology, Toxicology which provides services ranging from Fasting Blood glucose, Fasting Blood Lipids, Cerebro-spinal fluid, Oral Glucose Tolerance Test Uric Acid to Liver Function Tests.

SERVICE /	ACHIEVEMENT	ACHIEVEMENT	TARGET	ACHIEVEMENT	TARGET
CLINICAL INDICATOR	2011	2012	2013	2013	2014
JANUARY	797	3,319	4,325	7,272	
FEBRUARY	1,600	2,537	3,306	6,788	
MARCH	3,136	6,918	9,015	7,414	
APRIL	5,152	6,604	8,605	3,923	
MAY	5,560	6,858	8,937	5,264	
JUNE	6,168	6,560	8,549	4,617	
JULY	6,283	7,411	9,658	3,407	
AUGUST	6,953	7,896	10,289	3,858	
SEPTEMBER	7,156	7,257	9,457	5,891	
OCTOBER	4,203	7,889	10,290	6,771	
NOVEMBER	5,789	2,729	3,557	7,058	
DECEMBER	5,730	3,211	4,185	2,810	
TOTAL	58,527	69,189	90,173	65,073	

# **HAEMATOLOGY DEPARTMENT**

The Haematology Department of the Laboratory Sub BMC of Korle-Bu Teaching Hospital is one of the major Departments of the Laboratory in the hospital.



SERVICE /	ACHIEVEMENT	ACHIEVEMENT	TARGET	ACHIEVEMENT	TARGET
CLINICAL INDICATOR	2011	2012	2013	2013	2014
FBC	66,583	70,687	72,807	70,920	78,000
BF (mps)	14,906	14,615	15,053	14,278	15,700
Sickling	10,646	9,512	9,797	8,306	91,600
ESR	10,265	8,623	8,882	8,579	9,437
НВ	3,223	3,098	3,191	1,941	2,135
Film Comment	3,892	4,073	4,195	4,052	4,457
Reticulocyte Count	266	294	303	463	510
Clotting Profile	2,536	3,000	3,090	3,482	3,850
G6PD	3,309	2,033	2094	3034	3330
Hb Electrophoresis	4,181	3,720	3832	3902	4300
BMA (Adult)	720	699	719	585	645
BMA (Pd)	247	359	369	286	315
LE Cells	37	17	17	7	40
Prothombin Time	2,320	2,055	2,116	2,602	2,870
APTT	16	13	14	6	20
Factor VIII	0	1	-	0	20
Bleeding Time	0	1	-	2	20
A2/F	0	1	-	0	20
Sampling	0	120	125	222	250



#### **SUPPORT SERVICES**

# State of Health Infrastructure (Building) Against Hospital Capital Plan:

- Construction of temporary waste site.
- Construction of Aluminium panel and door at reception.
- Construction of Aluminium double hinge door at general chemistry.
- Replacement of faulty water pump.
- Repair works on faulty swing doors upstairs
- Repair works on Aluminium door at result collection point.

# **Equipment Situation:**

---

Equipment situation for the past three (3) years has improved steadily with less maintenance. Existing Equipments are as follows:

	EQUIPMENT	NUMBER / YEAR	NUMBER / YEAR	NUMBER / YEAR	NUMBER / YEAR
		(2010)	(2011)	(2012)	(2013)
	Haematology Analyzer	3	3	7	7
	Chemistry Analyzer	7	8	8	6
	Microscope	6	8	13	18
	Water bath	3	3	5	4
	Autoclave	1	1	1	1
	Incubator	2	2	3	2
	Hot air oven	2	1	1	1
	Dry oven	2	2	2	2
	Centrifuge	4	4	5	8
	Blood culture machine	2	2	2	2
	Electronic balance	1	1	1	2
	Burner	2	2	4	4
	Biosafety cabinet	1	1	1	3
	Coagulation Analyzer	1	1	1	1
	Electrophoresis machine	2	2	2	2
	Rotor/mixer	1	1	1	1
	Vortex mixer	2	2	5	5
HING	A.N.A scanner (Erba Lisa Scan II Wash)	1	1	1	1
-	7.				



A.N.A washer (Erba Lisa Wash)	1	1	1	1
PCR analyzer	1	1	1	1
Cobas Amp Prep	1	1	1	1
Thermo mixer	1	1	1	1
DNA 3130 Genetic Analyzer	1	1	1	1
Gene Amp PCR System	1	1	1	1
Blood Bank Fridge	0	0	2	2
Deep freezer	0	1	2	2
Lab fridge	6	8	8	26
CD4 Count	0	0	0	1
Colorimeter	1	1	1	1
Bactec MGIT	0	0	0	1
GT - Blot 48	0	0	0	1
GTQ - Cycler 986	0	0	0	1
PRC Workstation UV	0	0	0	1
Cycler	0	0	0	1
Auto pipette	10	15	15	6
ISE Analyzer	0	0	0	1
Spectrophotometer			1	1
Immunology Analyzer	5	5	5	6
Water distilling plant	1	1	1	1
Mixer	0	1	2	2



- Almost all the equipments are new and functioning under the current year of review.
- Three (3) of the Haematology Analyzers are donation from Lynch Medical Services and the four (4) are on placement under the Management of Lynch Medical services.
- All six (6) Chemistry Analyzers are refurbished and are on placement under the Management of Johnson & Johnson / Ortho clinical diagnostics.
- Out of the eighteen (18) Microscopes, three (3) of them serve as back up for the existing ones in use. Five (5) old, but functioning and ten (10) new ones.

# **Back - Up Equipments for the Sub BMC are as follows:**

EQUIPMENT	NUMBER REQUIRED	LOCATION	REMARKS
Autoclave	1	Bacteriology Department	To support the existing one which is frequently used
Centrifuge	6	All the Departments and Satellite Labs	To complement the existing ones which are not in good
Microscope	4	Bacteriology, Parasitology, Haematology and the Satellite Laboratories	shape To support the existing Microscopes in use
Digital Thermometers	10	All Departments	Per the ISO for standardization additional Thermometers are required for support
Digital hygrometers	10	All departments	To complement the one in use which are not enough
Biosafety cabinet	1	Bacteriology Department	To support the only one for the Department
Water bath	1	Bacteriology Department	To aid the work at the department
Water distilling plant	1	Sub BMC	To ease the pressure on the old one in use currently
Electronic balance	1	Haematology Department	To aid the preparation of some of the reagent for use



- All newly procured medical Laboratory equipments are fully assessed for the necessary requirement such as calibration and verification certificate to meet the international standards.
- All existing equipments are subjected to the required Planned Preventive Maintenance (PPM) as per the scheduled outline both internally and externally by the qualified professionals in the field of effective management. Thus the maintenance is carried out daily, weekly, and as required.
- All corrective maintenance services are duly carried out as and when there is and breakdown by both in house and external Biomedical Engineers.

#### **RESEARCH**

The Laboratory Sub BMC supervises various research works carried out by students pursuing Diploma, BSc, MSc and MPhil courses.

The Sub-BMC also organises workshops and periodic Continuous Professional Education for staff of the various Department / Unit. Staff of the Client Service Unit recently had training in Phlebotomy course organized in collaboration with BD Consult.

#### **FINANCIAL MANAGEMENT**

Below are the summary of inflows and the expenditures of the Laboratory Sub BMC for the period under review.

#### **REVENUE BY TYPE**

REVENUE					
TYPE	ACTUALS	ACTUALS	BUDGETED	ACTUALS	BUDGETED
	2011	2012	2013	2013	2014
	GН¢	GН¢	GН¢	GH¢	GH¢
FEE PAYING	1,744,354.00	1,872,740.82	3,443,082.00	1,936,146.00	4,643,481.00
NHIS	372,598.77	456,444.81	482,958.00	419,649.78	515,943.00
INTRAMURAL		-		8,325.00	50,000.00
OTHER INCOME		2,000.00			

2,116,952.77 2,331,185.63 3,926,040.00 2,364,120.78 5,209,424.00



TOTAL

## **EXPENDITURE BY TYPE**

EXPENDITUR E TYPE	ACTUALS	ACTUALS	BUDGETED	ACTUALS	BUDGETED
	2011	2012	2013	2013	2014
	GH¢	GH¢	GH¢	GH¢	GH¢
COMPENSATIO N OF EMPLOYEE	59,401.00	70,495.00	70,540.00	66,235.00	96,400.00
GOODS & SERVICES	963,982.05	1,293,998.95	1,558,413.80	1,168,032.42	1,762,270.00

TOTAL 1,095,385.74 1,403,196.09 2,093,585.80 1,288,021.07 2,259,754.30

FIIXED ASSETS 72,002.69 38,702.14 464,632.00 53,753.65 401,084.30

# FINANCIAL SUMMARY (INCOME & EXPENDITURE SUMMARY)

	ACTUALS	ACTUALS	BUDGETED	ACTUALS	BUDGETED
	2011	2012	2013	2013	2014
	GH¢	GH¢	GH¢	GH¢	GH¢
REVENUE TOTAL	2,116,952.77	2,331,185.63	3,926,040.00	2,364,120.78	5,209,424.00
EXPENDITURE TOTAL	1,095,386.04	1,403,196.09	2,093,585.80	265,733.59	2,279,754.46
TOTAL	1,021,566.73	927,989.54	1,832,454.20	2,098,387.19	2,929,669.54



# **EXPENDITURE BY SUB ITEMS**

	ACTUALS	ACTUALS	BUDGETED	ACTUALS	BUDGETED
COMPENSATION OF EMPLOYEES	2011	2012	2013	2013	2014
	GH¢	GH¢	GH¢	GH¢	GH¢
ESTABLISHED POSITION	-	-	-	-	-
NON ESTABLISHED POSITION	-	-	-	-	-
OTHER ALLOWANCES	59,401.00	70,495.00	70,540.00	66,235.00	96,400.00
TOTAL	59,401.00	70,495.00	70,540.00	66,235.00	96,400.00

GOODS & SERVICES	ACTUALS	ACTUALS	BUDGETED	ACTUALS	BUDGETED
SERVICES	ACTUALS	ACTUALS	DODGLILD	ACTUALS	DODGLILD
	2011	2012	2013	2013	2014
	GH¢	GH¢	GH¢	GH¢	GH¢
Material – Office					
Supplies	905,883.52	1,220,809.63	1,386,324.80	1,064,247.89	1,582,952.16
Utilities	6,666.00	2,695.50	-	3,580.00	-
General Cleaning	1,706.00	3,480.05	-	7,544.21	-
Travel & Transport	200.00	1,824.60	75,089.00	4,271.80	102,318.00
Repairs & Maintenance	44,439.54	34,795.23	-	75,625.33	-
Training, Seminars & Conference	4,494.80	29,775.68	97,000.00	12,214.00	97,000.00
Other Charges & Fees	592.19	618.26	-	- 549.19	
TOTAL	963,982.05	1,293,998.95	1,558,413.80	1,168,032.42	1,782,270.16



FIXED ASSET	ACTUALS	ACTUALS	BUDGETED	ACTUALS	BUDGETED	
	2011	2012	2013	2013	2014	
	GH¢	GH¢	-	-	-	
Purchase of Plant &						
Equipment	-	5,680.00	352,832.00	13,500.00	239,484.30	
Other Assets						
(REHAB)	-	-	20,000.00	-	5,000.00	
Purchase of						
Computer Software	-	-	17,000.00	12,586.95	18,000.00	
Computer &						
Accessories	21,368.99	5,349.09	32,800.00	5,936.95	43,600.00	
Purchase of						
Furniture & Fittings	50,633.70	27,673.05	42,000.00	21,729.75	85,000.00	
Other Capital						
Expenditure	-	-	-	-	10,000.00	
SUB-TOTAL	72,002.69	38,702.14	464,632.00	53,753.65	401,084.30	
TOTAL	1,095,385.74	1,403,196.09	2,093,585.80	1,288,021.07	2,279,754.46	

# **CONCLUSION**

Management of the Laboratory Sub-BMC hopes that with the right staff attitude, appropriate equipment, adequate consumables and support from the Management of the Hospital, the Sub-BMC will be able to provide continuous, uninterrupted service to its clients and the various Departments / Units will meet their target of 2014.

#### **RADIOLOGY SUB-BMC**

#### Introduction

The Radiology Sub-BMC comprises of the following units;

- η Polyclinic X-ray,
- η̈́ Accident Centre X-ray
- ή Child Health X-ray/ NICU
- ή Chest Clinic X-Ray
- ή CT Scan/MRI
- ή Main Radiology Block, which contains seven different machine rooms
- η Mammography Room and
- ň An Ultrasound Laboratory.
- ή Mobile/ Portable Services at the wards and Theatre

The Sub-BMC provides radiological services in the hospital for both in and out patients except Ultrasound services which is also provided at the Maternity block by the Department of Obstetrics and Gynaecology.

#### **PRIORITIES FOR 3013**

- 1. Improve staff Management
- 2. Ensure smooth workflow
- 3. Improve Accountability
- 4. Ensure all modalities work satisfactorily and patients get optimal care
- 5. Ensure equipments are maintained regularly
- 6. Ensure effective monitoring of all activities in the Sub-BMC
- 7. Improve infrastructure and develop maintenance culture in the Sub-BMC
- 8. Improve service delivery in the Sub-BMC through the use of ICT
- 9. Ensure continuous staff development and motivation
- 10. Improve revenue by reasonable and ethical means

#### **ACHIEVEMENTS WITHIN 2013**

- 1. Ultrasound Lab completed and in use
- 2. Two Secretaries stationed in the Ultrasound Lab to type reports. This has reduced the waiting time for patients
- 3. Networking of almost the whole Sub-BMC to facilitate work
- 4. 24 hours regular services even on weekends and public holidays
- 5. Establishment of Radiation Allowance
- 6. CT Scan at KAMIC handed over to Sub-BMC
- 7. MRI at KAMIC handed over to Sub-BMC
- 8. On-going establishment of mini PACS System by RAD-AID.

#### **CHALLENGES ECOUNTERED IN 2013**

- ກຸ້ Establishment of Equipment Maintenance Fund
- η Frequent breakdown of Equipments
- $\mathring{\eta}~$  Delayed and inadequate release of funds by the Finance Department to run the Sub-BMC



- η̃ Inadequate Radiographers to man the newly-installed equipments
- η̃ Power fluctuations/outages
- ή Philips Fluoroscopy, CT and MRI are broken down
- η Issues with HFC Bank

#### **ACTIONS ADOPTED TO MEET THE CHALLENGES**

- ή Letters, reminders and follow up to Central Administration on the need to establish a Maintenance Fund
- $\mathring{\eta}$  Frequent maintenance and prompt repairs adopted
- ή Letters, reminders and follow up to the Finance Directorate on prompt release of funds to run the Sub-BMC
- $\mathring{\eta}$  Human Resource notified in writing to provide more Radiographers to man the newly installed equipments
- $\mathring{\eta}$  Purchase of diesel to power the generator during power fluctuations/outages
- $\mathring{\eta}$  Letters written to Central Administration about the need to sign maintenance contract for machines to be repaired.
- $\mathring{\eta}$  Letters written to Central Administration to find an amicable solution to the problem

# **PRIORITIES FOR 2014 (WAY FORWARD)**

- ή Improve quality and availability of radiology services
- ή Improve Technical staff number and expertise
- η Implementation of strict quality assurance policy in the Sub-BMC
- η Increase revenue



SERVICE/INDIC ATOR	PERFORM ANCE ACHIEVED 2011	PERFORM ANCE ACHIEVE D 2012	TARGE T 2013	PERFORM ANCE ACHIEVED 2013	TARG ET 2014	REMARKS
GENERAL CASES	38,902	22,332	41,880	23,595	41,664	One general purpose x-ray machine was working effectively for the most part of the year (first seven months)
GIT/BARIUM STUDIES	218	259	500	232	3,036	The machine was working at half strength from the beginning of the year and broke down in May till the end of the year
SPECIAL INVESTIGATIONS (MYELOGRAM, VENOGRAM	16	13	768	290	480	The machine was working at half strength from the beginning of the year and broke down in May 2013.
RENAL TRACTS/IVU	408	505	500	146	504	Frequent breakdown of the machine and was effectively down for four months
ULTRASOUND SCAN	3,285	4745	2,800	6,921	7,200	No appointments for ward cases and emergencies. All afternoons are dedicated to ward cases and completion of Ultrasound Laboratory
CT SCAN	2,966	5548	7,200	5,921	10,200	Old CT Scan Machine was down for the most part of the year. The new CT Scan started work from November 2013.



MRI	1,430	904	3,200	680	3,520	Breakdown of the old MRI machine until May. Cases are done three times a week because of faulty UPS, which could not be replaced until KBTH signs a maintenance contract. The new MRI started work from November, 2013.
MAMMOGRAM	1,075	838	1,732	533	3,060	Existing machine did not work in the first half of the year because of on-going construction work for installation of new Equipment.
HSG	911	1,104	1,500	1,655	1,500	Frequent breakdown of the machine which was effectively down for four months.

#### **SUPPORT SERVICES**

#### **Health Infrastructure**

- Retooling under the GOG Belstar project is almost completed.
- Most of the Radiological equipments have been installed.
- Rehabilitation works on the Mini Conference room, Radiographers Rest room and Central Reception is currently underway at the Sub-BMC.

#### **Equipment Situation**

- Five General purpose x-ray machines have been installed, four in the main Radiology building and one at Child Health. In addition, there are two existing xray machines in Rooms 7 and 8 of the main Radiology building. Room 7 still not working despite Hospital paying all its debt.
- Management has taken stock of three mobile general purpose x-rays currently being used in main Surgical Theatre, Accident Centre Theatre and main Radiology Department.
- One Digital Mammogram machine has been installed at the main Radiology building
- A new functional Premium CT Scanner and MRI have been installed at KAMIC and currently in use by the Sub-BMC. No remote access repairs though. Encountered a few faults.

The Computer Radiography (C.R) System has almost completely eliminated the conventional wet processing system that was in place. Two already faulty less than 6 months after installation

Attached is the list of equipment and their locations in the Sub-BMC.



<b>Duty Room</b>	Equipment Name	Comments
ROOM 2	Radspeed C	Computer System moved to Child Health
Room 3	Amulet F (Mammo)	Functional
Room 5	Radspeed F + CR	Functional
Room 6	Radspeed F + CR	Functional
Room 7	Radspeed F (No CR)	Functional
Room 8	Duodiagnost (Philips)	Functional
Room 9	OPG	Installation incomplete
Room 10	Radspeed F + CR	( Faulty Computer System) Functional
Old CT	M* 8000 (Philips)	Non Functional
Fluoro 1	Duodiagnost (Philips)	Non Functional
Fluoro 2	Flexavision (Shimadzu)	Major manufacturing defect
New CT	Aquilion 1	Functional

New MRI	Titan Vantage	Functional
Child Health	Radspeed F	Functional
NICU	Siemens	Functional
Polyclinic	Philips	Functional
A/Centre	Siemen	Non Functional
Mobile Equipment	Fuji Go 2 * 3	Functional
Ultrasound Lab	4 Scanners	Functional

# **FINANCIAL MANAGEMENT**

**TABLE: REVENUE** 

**BUDGET RETURNS** 

REVENUE BY	BUDGET		ACTUAL	VARIANCE	%
TYPE	2013	2013	2012		
OUT OF POCKET	2,959,056.00	1,567,659.73	1,397,723.80	1,391,396.27	52.98
NHIS	739,764.00	375,947.00	316,460.00	363,817.00	50.82
CONTRAST MEDIA	1,623,570.00	272,838.00	249,254.00	1,350,732.00	16.80
TOTAL	5,322,390.00	2,216,444.73	1,963,437.80	3,105,945.27	41.6 4

Reasons for Variances:MOST OF THE MACHINSES WERE NOT WORKING.

# TABLE: EXPENDITURE BUDGET RETURNS

<b>EXPENDITURE BY</b>	BUDGET		ACTUAL	VARIANCE	%	
TYPE	2013	2013	2012			
Compensation of Employees	298,800.00	163,739.20	49,750.00	135,060.80	54.80	
				-		
Goods & Services	3,358,943.50	747,123.29	829,439.91	2,611,820.21	22.24	
				-		
Fixed Assets	143,500.00	26,571.82	304,855.42	116,928.18	18.52	
GRAND TOTAL	3,801,243.50	937,434.31	1,184,045.33	2,863,809.19	24.66	
	<del> </del>	T	1			
EXCESS/(DEFICIT)	1,521,146.50	1,279,010.42	779,392.47	242,136.08	16.98	



## **TABLE: EXPENDITURE BY TYPE**

EVDENDITUD	E DV TVDE	BUDGETED	ACT	ΓUAL	VADTANCE
EXPENDITURE BY TYPE		2013	2012	2013	VARIANCE
Compensation of Employees					
Other Allowances					
	Acting Allowance	800.00	-	400.00	400.00
	Professional Allowance	12,000.00	-	6,739.20	5,260.80
	Entertainment Allowance	45,000.00	-	45,000.00	-
	Risk Allowance	96,000.00	-	48,000.00	48,000.00
Allowance					
	Travel Allowance	5,000.00	-	5,100.00	(100.00)
	Out-of-Station Allowance	2,000.00	-	-	2,000.00
	Responsibility Allowance	138,000.00	49,750.00	58,500.00	79,500.00
	SUB TOTAL	298,800.00	49,750.00	163,739.20	135,060.80

GOODS & SERVICES					
Materials					
- Office					
Supplies					
	Printed Material				
	& Stationery	22,793.10	-	39,866.61	(17,073.51)
	Office Facilities,				
	Supplies &				
	Accessories	5,000.00	-	4,202.00	798.00
	Refreshment	40.000.00			
	Items	10,000.00	-	7,275.80	2,724.20
	Medical Supplies	-	-	-	-
	Drugs	1,225,509.60	-	250,189.00	975,320.60
	Electrical				
	Accessories	3,648.00	-	70.00	3,578.00
	Other Office				
	Materials and				
	Consumables	-	604,202.18	-	-
	Chemicals &				
	Consumables	1,048,078.80	-	241,726.33	806,352.47
	Purchase of Petty				
	Tools/Implements	-	-		-

		Г	T		T
Utilities	1				
	Telecommunications	4,000.00	1,855.00	30.00	3,970.00
<b>General Clea</b>	aning				
	Cleaning Materials	2,000.00	1,310.50	3,613.14	(1,613.14)
Travel - Transport					
	Car Rental/Leasing	-	-	1,550.00	(1,550.00)
	Running Cost - Official Vehicles Freight and Handling Charges		-	-	-
			-	2,740.57	7,259.43
	Local travel cost	-	5,070.00		-
Repairs - Ma					
	Repairs of Residential Buildings	_	_	1,323.00	(1,323.00)
	Maintenance of Furniture & Fixtures	4,780.00	_	22,965.08	(18,185.08)
	Maintenance of Machinery & Plant	900,000.00	206,082.90	141,014.70	758,985.30
	Maintenance of General Equipment	16,634.00	-	-	16,634.00

Training -					
Seminars -					
Conferences					
	Seminars/Conferences/Workshop			10,364.5	
	s/Meetings Expenses	2,000.00	-	0	(8,364.50)
					, , ,
	Stoff Davidson	79,000.0	10 000 00	E 112.07	72 007 02
Consulting	Staff Development	0	10,000.00	5,112.97	73,887.03
Services					
	Local Consulting Fees		-		-
Other Charge	es - Fees				
	Bank Charges	1,500.00	919.33	909.61	590.39
Social	Burk Charges	1,500.00	717.55	303.01	330.33
Assistance					
Benefits -					
Cash	Refund for Medical Expenses				
	(Paupers/Disease Category)	1,000.00	-	_	1,000.00
	(* 55,5 55,5 55,5 55,5 55,5 55,5 55,5 55				
	Staff Welfare Expenses	2,000.00	-	760.00	1,240.00
	Refund for Medical Expenses	1 000 00			1 000 00
	(Paupers/Disease Category)	1,000.00	-	-	1,000.00
	Staff Welfare Expenses	2,000.00	-	760.00	1,240.00
		10,000.0		13,409.9	
	Refund of Medical Expenses	0	_	8	(3,409.98)
General Expe					(0) 100100)
	Other Charges (Adverts &				
	Publications)	1,000.00	-	-	1,000.00
	Court Charges				
					-
		-	-	-	
		10 000 0			
	Awards & Rewards	10,000.0	_	_	10,000.00
	SUB TOTAL	3,358,943.50	829,439.91	747,123.29	2,611,820.21
	JOD IVIAL	3/330/373/30	029/739:31	171/123.23	2/011/020:21

Fixed					
Assets					
Machin	ery - equipment				
	Purchase of Plant &				
	Equipment	-	276,757.05	5,880.00	(5,880.00)
	Purchase of Computer				
	Software	5,000.00	-	-	5,000.00
	Installation of Network &				
	ICT Equipment	5,000.00	-	-	5,000.00
	Other Capital				
	Expenditure	-	-	-	-
	Other Assets (REHAB)	64,000.00	24,074.43	1,058.13	62,941.87
	Computers and Accessories	33,000.00	573.94	4,122.00	28,878.00
	Landscapping/Gardening	-	-	-	-
	Purchase of Furniture & Fittings	36,500.00	3,450.00	15,511.69	20,988.31
	SUB TOTAL	143,500.00	304,855.42	26,571.82	116,928.18
	GRAND TOTAL	3,801,243.50	1,184,045.33	937,434.31	2,863,809.19

# REVENUE DETAILS BY REVENUE POINT

REVENUE BY POINTS	BUDGETED	ACTUAL	ACTUAL	VARIANCE	VARIANCE
	2013	2012	2013		70
MRI	1,536,000.00	399,600.00	256,036.00	1,279,964.00	16.669
CT SCAN	1,008,000.00	666,470.00	877,471.00	130,529.00	87.051
	600,474.00	165,373.10	362,000.23	238,473.77	60.286
FILM REPORTING	57,000.00	19,414.00	20,751.00	36,249.00	36.405
ACCIDENT	240,000.00	146,866.70	51,401.50	188,598.50	21.417
DRUG CONTRAST	1,623,570.00	249,254.00	272,838.00	1,350,732.00	16.805
NHIS	257,346.00	316,460.00	375,947.00	(118,601.00)	146.086
TOTAL	5,322,390.00	1,963,437. 80	2,216,444. 73	3,105,945. 27	41.644



#### CONCLUSION

It is hoped that with the right staff attitude, the right mix of equipment and consumables and support from central Administration, the Department will meet its target for 2014.

# PHYSIOTHERAPY DEPARTMENT INTRODUCTION

The Physiotherapy Department is under the Medical Sub-BMC and it provides preventive, curative and rehabilitation services to its clientele on outpatient and inpatient basis.

#### **SERVICE AVAILABLE**

The Department provides In and Outpatient services, teaching introductory physiotherapy to medical students, teaching and supervising students and interns during clinical postings and partnering other departments to carry out research.

#### **ACHIEVEMENTS IN 2013**

- Successful commencement and running of intramural services
- Introduction of NHIS services.
- An appointment system for clients to reduce their waiting time.
- Training of physiotherapists in stroke and Parkinson disease management
- Public education on physiotherapy-related conditions.
- Successful establishment and running of the Appropriate Paper Technology workshop as part of our social responsibility.
- Provision of more sinks for hand washing to prevent cross infections as part of quality assurance program.

#### **SUMMARY OF KEY CHALLENGES**

- Major roof leakage at Physiotherapy II
- Breakdown of equipment
- Delay in the provision of a dug hydrotherapy pool at the Physiotherapy II.

#### ADOPTED MITIGATING ACTIONS

- Issues concerning all challenges highlighted in the previous year were captured in both the 2013 and 2014 Annual Budget and Management was informed about it.
- The leadership and staff members have persistently pursued the estate management for more accommodation slots.



#### **SPECIAL INITIATIVES**

- Implementation of the Intramural Services programme.
- Commencement of physiotherapy involvement in Parkinsons disease, haemophilia and stroke Clinics.
- Establishment of Appropriate paper technology (APT) workshop for CP children.
- Public education on work related musculoskeletal injuries.

#### **PRIORITIES FOR 2014**

- To embark on a community based outreach programs
- To conduct two major departmental research works in collaboration with Allied Health School
- To pursue sponsorships from corporate bodies and partner other international rehabilitation institutions for financial and human development support.

#### **OUTPATIENT CASES**

The department provided physiotherapy services to new outpatients as well as old cases in the four units: Gymnasium, Treatment Room, Paediatrics and Burns/Plastics.

In total 18059cases were seen at the various out-patient departments. Below are the figures from the units over 3 years.



**TABLE: OUTPATIENTS ATTENDANCE 201** 

OUTPATIENT	20	2011		2012		)13
UNITS	NEW CASES	FOLLOW UP	NEW CASES	FOLLOW UP	NEW CASES	FOLLOW UP
GYMNASIUM	478	4,574	437	6,394	578	6,744
TREATMENT ROOM	591	5,184	661	6,323	802	6,315
PAEDIATRICS	252	3,909	268	4,446	299	3,752
BURNS / PLASTICS	98	928	320	1,267	105	1,248
TOTAL	1,419	14,593	1,686	18,330	1,784	18,059

## **INPATIENT CASES**

The department provided inpatient services for newly referred patients on admission and follow ups in the various wards. A total of 7,875 follow up inpatient cases were attended to during the year 2013. Below are figures from the various units over the last three years.

## **PHYSIOTHERAPY INPATIENT ATTENDANCE FOR 2013**

INPATIENT		2011	20	2012		2013	
WARD	NEW CASES	FOLLOW UP	NEW CASES	FOLLOW UP	NEW CASES	FOLLOW UP	
SURGICAL	323	1,935	391	1,836	379	1,752	
ORTHOPAEDICS	393	1,696	411	2,170	455	2,162	
BURNS / PLASTICS	291	1,649	281	1,621	222	1,606	
MEDICAL	314	1,304	450	1,691	425	1,210	
CTU / MATERNITY	ı	-	71	433	187	633	
PAEDIATRICS	68	559	86	554	94	512	
TOTAL	1,389	7,143	1,690	8,305	1,762	7,875	

TABLE 1.3 DISTRIBUTIONS OF TOP 10 CASES AT OUT-PATIENTS FOR 2013

SERVICE INDICATORS	NUMBER OF CASES	PERCENTAGE (%)
BACK PAIN	338	26.83 %
EXTREMITIES JOINT PAIN	326	25.87%
STROKE REHAB.	181	14.37 %
FRACTURE REHAB.	138	11.00 %
NECK PAIN	137	10.87%
FACIAL PALSY REHAB.	62	4.92 %
HEAD AND SPINAL CORD INJURY REHAB.	51	4.05 %
RESPIRATORY REHAB.	16	1.27 %
BURNS	6	0.48 %
AMPUTATION REHAB.	5	0.40 %
TOTAL	1,260	100%

# **TABLE: DISTRIBUTION OF INPATIENT'S TOP 10 CASES FOR 2013**

SERVICE INDICATORS	NUMBER OF CASES	PERCENTAGE(%)
FRACTURE REHAB.	364	20.16 %
STROKE REHAB.	322	17.83 %
BURNS	226	12.51%
HEAD AND SPINAL CORD INJURIES REHAB.	199	11.02 %
POST GENERAL SURGERY REHAB.	196	10.85 %
RESPIRATORY REHAB.	132	7.31 %
OTHERS	98	5.43 %
NON-CVA PARALYSIS	96	5.31 %
AMPUTATION	91	5.04 %
CARDIOVASCULAR REHAB.	82	4.54 %
TOTAL	1,806	100%

# TABLE: DISTRIBUTION OF CASES AT BURNS & PLASTICS UNIT, 2013

SERVICE INDICATORS	NUMBER OF CASES	PERCENTAGE (%)
BURNS	216	54.68 %
CONTRACTURE RELEASES/STIFFNESS	44	11.13 %
FLEXOR AND NERVE INJURY	33	8.35 %
ULCERS	32	8.10 %
FLEXOR AND EXTENSOR INJURY	26	6.58 %
OTHERS	21	5.31 %
RESPIRATORY CV REHAB.	8	2.03 %
PERIPHERAL NERVE INJURY	7	1.77 %
EXTENSOR AND NERVE INJURY	5	1.27 %
NON CVA PARESIS/ PARALYSIS	3	0.76 %
TOTAL	395	100%

# **TABLE: DISTRIBUTIONS OF CASES AT PAEDIATRICS UNIT 2013**

SERVICE INDICATORS	NUMBER OS CASES	PERCENTAGE (%)
CEREBRAL PALSY	127	25.55 %
HEMPILEGIA	115	23.14 %
ORTHOPAEDIC REHAB.	74	14.89 %
	73	14.69 %
GENERAL PARALYSIS	45	9.05 %
RESPIRATORY REHAB	32	6.44 %
STERNOCLEIDOMASTOID TUMOUR	9	1.81 %
MENINGITIS	8	1.61 %
CEREBRAL MALARIA	7	1.41 %
OTHER NERVE INJURIES	7	1.41 %
TOTAL	497	100%

# **Human Resource Development**

- One Senior Physiotherapists is pursuing specialist programmes in Cardiopulmonary.
- A three-day in-service training for Physiotherapists was held at In-Service Education Department Korle Bu.
- One Physiotherapist and One Physiotherapy Assistant were recruited to augment the Staff Strength
- The Physiotherapy Assistant attended a Two-day Proper Body Mechanics held at the In-Service Education Department Korle Bu.
- A Senior Private Secretary of the Department attended a Two-day Proper Body Mechanics at the In-Service Education Department Korle Bu
- Staffs were sponsored to attend a 2-day Scientific Conference organized by the Ghana Physiotherapist Association.
- Staffs were sponsored to attend a four-day workshop organized by the Ghana Physiotherapists Association.

#### **CONCLUSION**

The Department aims at becoming a centre of excellence to continue to serve as a reference point to the nation as well as providing the most efficient form of physiotherapy services to our clients.



#### **DIETHERAPY**

#### **INTRODUCTION**

The Dietherapy Department provides a high quality therapeutic counseling service and clinical standards for optimal nutritional care for patients in the Hospital.

#### **POLICY THRUST FOR 2013**

- To recruit additional three Dieticians.
- Billing of Inpatients for Dietician's review to increase revenue generation.
- To extend dietherapy services to other Departments and units, i.e. Surgical, Obstetrics & Gynaecology, etc.
- To train students offering Mphil in Human Nutrition & Dietetic programme from Kwame Nkrumah University of Science & Technology, Kumasi.
- Staff to attend a short course on HACCP (Hazard Analysis Critical Control Point) and Food Safety & Nutrition
- To participate and involve in research in areas concerning food and nutrition.

#### SERVICES PROVIDED

Table: Outpatients seen in 2013

Service Indicator	2011 Performance Achieved	2012 Performance Achieved	2013 Targets	2013 Achievement	2014 Target
		PATIENT SEE	V		
Diabetes	2,772	3,232	3,532	3,180	3,532
Obesity	1,550	1,635	1,862	1,846	1,862
Hyperlipidemia	1,929	2,056	2,179	2,039	2,179
Hypertension	2,737	3,176	3,576	3,215	3,576
Duodenal ulcer/ gastritis	235	153	256	103	256
Renal Diseases	294	331	551	329	551
PEM/failure to thrive	14	467	900	658	900
Others	892	971	1,200	635	1,200
	10,423	12,021	14,056	12,005	14,056

**Table: inpatients seen in 2013** 

Service Indicator	2011 Performance Achieved	2012 Performance Achieved	2013 Target	2013 Achievement	2014 Target
PATIENTS SEEN					
Diabetes	12,413	11,104	12,872	10,534	12,872
Hypertension	15,617	15,809	15,909	16,444	15,909
Renal Diseases	2,106	3,095	4,000	1,728	4,000
PEM/Failure to Thrive	2,258	1,911	2,500	1,109	2,500
Enteral Feeds	-	984	1,250	1,810	1,250
Parenteral Feeds	-	1	5	0	5
Liver Diseases	107	88	150	58	150
Duodenal ulcer/ gastritis	399	296	423	189	423
Stroke (Dysphagia)	-	1,021	1,500	1,296	1,500
Others	64	20	98	66	98
Total	32,964	34,329	38,707	33,233	38,707

## **ACHIEVEMENTS**

- A dietician was internally posted to the Dep't of Obstetrics & Gynaecology to help manage nutritional cases.
- Installation of internet service to the unit.
- Commencement of clinical training of students offering MPhil in human nutrition & dietetic programme from KNUST, Kumasi
- Five (5) dieticians attended continuous professional development on nutrition care process.

## **CHALLENGES**

- Equipment such as ovens, cookers etc. used in the diet kitchen are obsolete
- Lack of commercial blender in the diet kitchen.



- The department has not been able to expand its services to the other clinical Sub-BMCs (esp. Surgery, Cardio, etc.)
- Due to tiling of the kitchen, more orderlies are needed to clean the kitchen and offices
- The department is losing funds due to difficulty in billing in-patients
- Diet cooks are not up to date for modern standard dietetic practice.

#### **WAY FORWARD**

- Purchase of ovens, cookers for the diet kitchen.
- Purchase of commercial blender
- Recruitment of two (2) more dieticians to attend to patients at Surgical and Cardiothoracic centre.
- Recruitment of two (2) more orderlies to clean the department
- Proposing a flat rate for billing in-patients or placing it on Health Insurance Scheme.
- Training of diet cooks to meet modern dietetic standards.

### **OUTLOOK FOR YEAR 2014**

- Billing of inpatients for dieticians review to increase revenue generation.
- Rectifications of payment of DM Centre into Dietherapy unit's account.
- Look for nutritional support, especially for malnourished children.
- Extension of Dietherapy services to other departments and units i.e. surgical & cardiothoracic centre.
- To collaborate with the catering dep't to train all cooks into diet cooks.
- In-service training of hospital waiters to serve in-patients food.
- Outreach programme on T.V. and radio on healthy lifestyle and obesity.

#### **PSYCHIATRY SUB-BMC**

#### **INTRODUCTION**

### **Mandate of the Unit**

The Psychiatry Sub-BMC was formed in November, 2011 and started operating as a distinct Sub-BMC in the same year. It provides psychiatric care for inpatients and outpatients (Walk-in and referred patients). The Sub-BMC also provides on-site psychological services for the sickle cell clinic, child health oncology unit, and the renal unit of the Hospital.



# **REQUIREMENT FOR KEY EQUIPMENT**

Key equipment	Qty. Demanded	Reason for demand
ECT Machine	1	To enable the clinic carry out effective treatment in severely depressed patients
Anesthetic machine	1	To enable the clinic carry out effective treatment in severely depressed patients

## SERVICE DELIVERY

# **TABLE: Clinical Care- Psychiatry OPD attendance**

Month	New cases	Follow Ups
January	12	81
February	14	116
March	3	94
April	10	96
May	16	99
June	5	89
July	17	90
August	7	96
September	27	97
October	20	80
November	15	90
December	5	88

# **Cases managed by the Department**

# **Some Psychiatric conditions**

- 1. Depression
- 2. Schizophrenia
- 3. Suicide attempts
- 4. Somatic disorder
- 5. Vascular Dementia
- 6. Postpartum psychosis
- 7. Aggression
- 8. Auditory hallucination
- 9. Psychosis
- 10. Narcotic abuse (Cocaine)
- 11. Bipolar disorder
- 12. Dementia
- 13. Panic disorder



# Some cases managed by the clinical psychologists

- 1. Poor academic performance
- 2. Learning difficulties
- 3. Psychological assessment for educational placement
- 4. Renal Failure
- 5. Cellulitis ulcer
- 6. Traumatic event (e.g. rape)
- 7. Drug overdose
- 8. Stress and insomnia
- 9. Reduced libido (resulting from depression)

# **Table: Patient statistics- Reasons for referral (Top 10 Attendance)**

RANK	Reason for	YEAR	Reason for	YEAR	Reason for	YEAR
	referral/diagnoses	(2011)	referral/Diagnoses	(2012)	referral/Diagnosis	(2013)
1.	Depression	16	Depression	26	Depression	60
2.	Anxiety disorder/Panic attack	15	Suicidal attempt	8	Psychosis	44
3.	Suicidal attempt	8	Hallucinations (auditory visual)	8	Suicidal attempt	23
4.	Hallucinations (auditory/ visual)	5	Anxiety disorder/Panic attack	7	Intellectual disability (e.g. ADHD)	15
5.	Acute psychosis	5	Abnormal behavior	5	Anxiety disorder	17
6.	Drug/Substance abuse	4	Psychiatric disorder	5	Conversion disorder	10
7.	Psychiatric disorder	3	Aggression	4	Bipolar disorder	7
8.	Aggression	3	Acute psychosis	4	Dementia 10	8
9.	Schizophrenia	1	Schizophrenia	4	Sexual dysfunction	5
10.	Dementia	1	Drug/Substance abuse	3	Seizure disorder	7

# **Table: Addictive Diseases unit**

NO	ADDICTION	NO. OF CLIENTS
1.	Pethidine	2
2.	Pethidine and Tramadol	1
3.	Alcohol	56
4.	Alcohol and Cannabis	6
5.	Alcohol and Coccaine	1
6.	Alcohol and Nicotine	3
7.	Nicotine	1
8.	Cannabis	9
9.	Cannabis and Nicotine	1
10.	Cannabis and Heroine	2
11.	Cannabis and Cocaine	2
12.	Cocaine	1
13.	Cocaine and Heroine	1
14.	Cocaine, Heroine Cannabis & Alcohol	2
15.	Cocaine, Heroine & Cannabis	
16.	Heroine	

# **Table: Financial management**

REVENUE TYPE	REVENUE POSITION			
	2011 2012		2013	
	(Nov. & Dec)			
Fee Paying	560.00	40,030.00	5,842.00	
NHIS	-	-	-	
Other Income	-	-	-	
TOTAL	560.00	4,030.00	5,842.00	

# **Table: Expenditure by item**

ITEM	ACTUAL		
	2011	2012	2013
Compensation of		-	-
employees			
Goods and Services		9,000.00	261.44
(E.g. folders)			
Fixed Assets			
TOTAL		9,000.00	261.44

#### **Achievements**

- Renovation works on structure to house in-patients was completed
- Research into common mental disorders among patients presenting with general health conditions at KBTH was started
- The Sub BMC started providing on-site Psychology services for the Sickle Cell clinic, Child Oncology Unit and Renal Unit of the hospital
- Waiting time of patients have been reduced due to the improvising of other rooms for consulting.
- Clients are satisfied with service delivery

## **Challenges**

- Inadequate space for running outpatient clinic and providing other services
- Lack of admission facilities to provide inpatient care
- Long waiting periods for patients as a result of lack of consulting rooms
- Rationalization of employment relationship between Psychologists and the Hospital
- Fees paid to Psychiatry Department were deposited in Department of Gynae's accounts, due to unavailability of a billing point.

## **Actions adopted to meet challenges**

- Equipment and supplies were borrowed from other departments e.g..
   BP apparatus, tray, weighing scale, methylated spirit, etc.
- Conference room and research room used as consulting rooms by doctors.
- Equipment and other materials were requested for both these items are yet to be procured by management.
- Deputy Director of Finance was contacted for the creation of a billing point

#### **Support service**

- Renovations for Psychiatry Ward have been completed
- Burglar proof is yet to be done
- Partitioning of ward to provide for side ward services is yet to start
- Medical and non-medical equipment/ materials are yet to be procured



#### **Priorities for 2014**

- Setting up of a ward for patient admissions
- Staffing, for shift running
- Management to procure items needed to manage in-patients in the new ward
- Orientation of new staff to manage psychiatric patients
- Consulting rooms and offices for staff

## Way forward

- The Department requires a complete ward and OPD urgently
- More Clinical psychologists should be employed to function in the mainstream of the Hospital's activities
- We aim to establish parameters that will guarantee quality care and patient satisfaction
- We also intend to collaborate with other departments to carry out more research to enable us attend to the mental health needs of patients in a more proactive way.

# CENTRAL STERILE SUPPLY DEPARTMENT INTRODUCTION

Central Sterile Supply Department (CSSD) as a Unit of Korle Bu Teaching Hospital continues to play an important role in the achievement of the overall objectives of the Hospital through the provision of efficient and effective services. CSSD is responsible for processing and distribution of sterile packs and items for patient diagnosis, treatment and ongoing care.

The role of CSSD in the achievement of quality health care cannot be underrated since the optimal functioning of the Hospital and often lives depend on it. This is because improperly sterilized items are a source of infection risk to patients and staff. As such the activities of CSSD have been instrumental in the prevention and control of nosocomial infections in the Hospital.

The core services of CSSD include provision and supply of sterile laparotomy packs and operation gowns, gauze and cotton wool dressing packs, processing of instruments, sample testing for procurement and training of students and other health professionals to man the Sterilization Units in their respective hospitals and clinics.



#### **SECTIONS IN THE DEPARTMENT:**

The Department is divided into six (6) sections namely; Reception, Dressings, Production and Storage, Set/ Instrument section, Machine section and Packs and Gowns. This has been done to ensure that work is carried out in an efficient and effective manner. Each section has a supervisor who is responsible for daily monitoring of work.

#### **WORKPLAN**

During the year under review the following priority areas were tackled:

**Inadequate Staff Strength**: In line with prior discussions with the Director of Human Resource on the need to increase the number of staff in the Department, two new staff has been added to the current number of 38.

**Malfunctioning Autoclaves**: Although the Department was initially installed with four (4) Autoclaves, they have all broken down and currently only one is partially functional. As a result a decision was taken in 2013 to replace all four Autoclaves. In a feasibility study on the Autoclaves at 37 Military Hospital was carried out with the Director of General Services and the maintenance team to assess their suitability. Also a business plan for the acquisition of the new Autoclaves has been submitted to Management for consideration and approval.

**Management and Monitoring of Consumables/Raw Materials:** To check wastage and improve revenue generation measures were put in place to manage and monitor usage of consumables and raw materials in the Department. Enough raw materials were budgeted for the year based on annual consumption. In addition, strict scrutiny of NHIS claims was done to check illegal and over-subscriptions. Careful scrutiny of monthly cash statements from the bank tellers has been helpful in keeping track of revenue generation in the Department.

**Improved Access to CSSD Products and Services**: To ensure that clients have uninterrupted access to services offered by CSSD, since April, 2013 the Department now runs morning, afternoon and night shift throughout the week. Also, all wards incharges were encouraged to have ward stock for emergencies. Arrangements have also been made with the Director of Pharmacy to stock the 24-hour Pharmacy with CSSD dressing packs.

**Development of a disciplined and motivated workforce:** To improve the quality of work in the Department steps have been taken to improve adherence to protocols. To ensure compliance all Departmental protocols were displayed at vantage points for easy reference. Supervision of work was also reinforced. During the year staffs were given the opportunity to undergo training in infection prevention and control. Staff at Reception/ sale point have also been given additional training in HFC software to facilitate work.

Furthermore, Personal Protective Equipment (PPE) needed for work have been provided for staff. In September 2013, Management approved a motivation package for the staff of CSSD. All these measures have had a positive impact on productivity in



the Department.

**Improvement in Quality of Services and Image of Department:** In line with the Department's aim of providing quality services the reception/ sale point was staffed with disciplined staffs who attends to clients readily thereby reducing the waiting time significantly. Additionally, Nursing Directorate has approved plans to procure raw materials for the preparation of Laparotomy packs and gowns as backup stock for emergencies by first quarter of 2014. This is to ensure that theatre packs and gowns are readily available for use during emergencies.

#### **REVENUE GENERATIONS**

Total revenue generated for the year under review was GHc1, 350,740.15. The breakdown is as follows;

## **Hospital Services:**

This included revenue generated from direct cash (HFC Bank), NHIS and supply to Sub-BMC (Ward requisitions, Sets sections, Machine side, Packs and Gown). The amount realized one million, three hundred and thirty-nine thousand, and five Ghana cedis and fifteen pesewas (1,339,005.15).

#### **Private Services:**

An amount of GH¢ 11,735.00 was generated from private services.

CASH SALES (HFC)	285,293.10	
NHIS	309,388.40	
CREDIT SALES UDS	744,323.65	
PRIVATE SERVICE	11,735.00	
TOTAL SALES		1,350,740.15
EXPENDITURE-:	<u></u>	
RAW MATERIALS	520,863.63	
ALLOWANCE	55,944.00	
ADMINISTRATIVE COST	4,940.96	

**REVENUE AND EXPENDITURE REPORT FOR THE YEAR 2013** 

LESS 597,779.95
SURPLUS 752,960.20

10,031.36

6,000.00



**CLEANING MATERIALS** 

**IMPREST** 

**FIXED ASSET** 

# **RAW MATERIALS CONSUMPTION TREND**

ITEMS	2012	2013
GUAZE ROLL	3,998	5,200
COTTON WOOL ROLL	6,700	6,745
CREPE WRAPPER	40	41
AUTOCLAVE TAPE	970	952

# **TOTAL NUMBER OF ITEMS PROCESSED IN 2013**

# **Dressing Pack Supplied**

MONTH	Ward Dressi	Theatr e	Speci al	Tonsil Swab	C W balls	CW roll	Ortho roll	Emerg.	Dent al	Exam inatio
	ng	Gauze	dressi							n
			ng							Packs
JAN	6,732	6,318	3,432	10,900	5,680	3,058	900	1,564	875	20
FEB	3,366	4,758	2,529	7,716	3,680	2,367	630	1,016	875	1
MAR	4,280	5,220	2,911	8,109	4,281	2,911	617	1,180	947	3
APR	4,356	5,343	1,782	7,150	4,800	1,782	630	1,180	500	8
MAY	4,851	4,719	3,036	7,650	2,400	3,036	405	1,340	750	2
JUN	4,445	5,031	3,300	9,150	4,240	3,300	846	1,332	750	2
JUL	5,544	6,045	3,234	10,300	5,280	3,234	675	1,392	750	3
AUG	3,463	4,914	1,045	6,399	1,610	1,045	517	1,397	585	1
SEPT	3,517	5,025	1,150	5,585	1,584	1,150	357	1,277	765	5
OCT	3,634	6,030	860	9,180	1,680	860	340	1,165	360	4
NOV	4,810	9,517	2,281	5,952	2,244	2,281	818	1,575	643	1
DEC	4,300	5,275	1,365	6,000	1,577	1,365	253	1,412	841	1
TOTAL	50,737	68,394	24,795	86,650	36,486	24,795	36,486	15,252	8,496	51

# **Total Number of Instruments Processed (Wards and other Units)**

MONTH	Dressing set	Cut down set	Delivery Bowls	Gynae set	Minor sets	X Ray packs
JANUARY	1,122	101	170	195	50	16
FEBRUARY	1,120	103	149	68	75	18
MARCH	1,158	73	174	62	172	14
APRIL	1,475	64	195	19	118	17
MAY	1,256	39	199	47	174	2
JUNE	1,554	60	245	85	150	12
JULY	1,784	48	306	77	106	19
AUGUST	1,438	130	248	75	269	22
SEPTEMBER	1,412	250	248	90	386	19
OCTOBER	1,389	77	222	93	536	22
NOVEMBER	3,340	40	350	110	51	118
DECEMBER	1,642	42	27	2	72	16
TOTAL	18,690	1,027	2,533	923	2,159	295

# **Total Number of Instruments Processed (Theatres)**

MONTH	General set	Trays	Scissors dish	Other items	E.O.U. Set
JANUARY	2,278	15	221	640	51
FEBRUARY	931	46	216	1,138	85
MARCH	999	56	252	1,735	84
APRIL	940	54	158	922	71
MAY	925	59	196	764	73
JUNE	1,168	58	344	1,035	87
JULY	1,189	127	437	234	264
AUGUST	1,142	59	518	491	65
SEPTEMBER	1,086	53	159	105	51
OCTOBER	1,316	61	1,363	175	81
NOVEMBER	520	20	353	650	61
DECEMBER	440	15	292	602	57
TOTAL	12,934	623	4,509	8,491	1,030

# **Total Number of Processed Packs and Gowns (Theatres)**

MONTH	Lap packs	Gowns	Sheets	Towels
JANUARY	728	914	88	231
FEBRUARY	746	861	124	159
MARCH	827	996	115	223
APRIL	714	773	111	130
MAY	683	876	88	201
JUNE	804	1,066	146	309
JULY	778	812	168	179
AUGUST	662	775	67	273
SEPTEMBER	824	855	110	224
OCTOBER	702	667	88	360
NOVEMBER	584	708	117	195
DECEMBER	556	630	125	173
TOTAL	8,608	9,933	1,347	2,657

# **Total Number of Processed Packs (Private Services)**

ITEMS	NO. OF PACKS
Small pack	31
Medium pack	20
Large pack	29
Extra-large pack	26
TOTAL	106

#### **CHALLENGES**

The smooth operation of the Department was hampered by the following challenges in 2013.

**Inadequate human resource**: This continues to be a problem as the Department must rely on long term measures for staffing from the Human Resource Directorate even though a large number retired in 2013. At the moment the Department has only one Orderly who is overburdened with responsibilities.

**Frequent breakdown of Autoclaves:** This was a great source of worry as the Department grappled continually with malfunctioning Autoclaves. This often led to delays in the processing of items for procedures and surgeries.

**Increased NHIS subscription:** More clients are enrolling onto the scheme and this has put enormous pressure on production due to increased demand for CSSD products and services. Also the Department is still unable to fully recoup NHIS debts since clients are not directly billed for the cost.

**Absence of Low Temperature Sterilizer for rubber and glass goods:** The Department is still unable to sterilize rubber and glass good as it has no low Temperature Sterilizer.

**Sporadic Power fluctuation and water shortage:** Disruptions in electricity and water supply affected the functioning of the Autoclaves and work in the Department.

**Uncompleted Waiting Area and Renovation Works:** The construction of a waiting area for clients and renovation works which were started in 2012 to give the Department a facelift have stalled after block works and are yet to be completed.

#### **ACHIEVEMENT**

In spite of the enumerated challenges proactive measures were put in place to ensure that the sterile needs of clients and the Hospital were adequately met. Some of the Department's achievements in 2013 are as follows:

To begin with, the Department was given to employees by management to boost the human resource of the Department.

In April, the Department successfully implemented 24-hour service. This has been helpful in ensuring that clients have ready access to CSSD services at all times during the week.

An in-house training of selected theatre nurses in the operations and management of autoclaves at the various Departments was undertaken in November to facilitate proper supervision and management of the sterilization process in the Hospital.

Additionally, periodic visits were instituted to the theatres to assess their sterile needs and challenges in order to adequately address them.

Another significant achievement was the approval of a motivation package for Staff in September, 2013. This has helped to improve the morale of staff in the Department.

A four-week training programme in sterilisation process and CSSD management was



organized for a clinical staff from the Tamale Teaching Hospital in March, 2013.

#### **WAY FORWARD**

In 2014, the Department is poised to resolve the enumerated issues below:

- ñ The Department will follow through with the roadmap for staffing of the Department to build its human resource base.
- η̃ Modalities for replacement of current autoclaves will be explored to find a permanent solution to the frequent episodes of breakdowns.
- $\mathring{\eta}$  Ensure that maintenance schedules for autoclaves and other equipment are strictly adhered to.
- γ
   Acquire a low temperature autoclave to facilitate sterilization of rubber goods,
   i.e. diathermy cables, glassware and endoscopes.
- ň Liaise with management to discuss clear modalities for retrieving NHIS debts.
- $\mathring{\eta}$  In the coming year, CSSD will continue to monitor and advise on the sterilization process in the UDS and also buy into Managements' plan to solve the perennial water shortage in the Hospital so as to ensure continuous water supply to the Department.
- $\mathring{\eta}$  The department will continue to lobby for one (1) more Orderly to facilitate cleanliness of the Department as well as lobby for a Departmental Account to promote some level of autonomy.
- $\mathring{\eta}$  Finally, plans are in place to complete the construction of the waiting area and renovation works which were started in 2012 and also prepare a backup stock of laparotomy packs and gowns for emergencies to complement the available UDS stock.

# NURSING DIRECTORATE INTRODUCTION

This report reviews activities carried out during the year 2013. The report in addition discusses statistical analysis of the following; Nursing Manpower or Numerical Strength, Assumption, Attrition Rate, Post Basic Training, Achievements, Challenges and the way forward.

# **BACKGROUND**

The Nursing Directorate has the mandate to oversee all areas of clinical practice regarding management of patient information and the dynamics of patient care. It also ensures staff training and education by linking nursing education with practice and to identify and conduct research into phenomena of interest. In addition, it manages the administrative and managerial needs of the profession to ensure professionalism in practice.

The Directorate is equipped to achieve these under the leadership of a Director, who is



assisted by a Deputy Director. The Directorate is also represented by Deputy Directors at the various departments in the hospital and they deal directly with issues and services relating to nursing at the Departmental ward levels and refer complex issues to the Directorate.

Apart from the DNS' office, the Directorate has three major offices, namely the DNS' secretariat, DDNS' office and the Registry.

#### FUNCTIONAL AREAS OF THE NURSING DIRECTORATE

The Directorate carries out its activities under four thematic areas namely:

- η Service delivery/Clinical Practice
- ή Staff training /Education
- ή Administration
- η Research

#### **PRIORITY AREAS OF ACTIVITIES**

- ή Upholding professional standards and the code of ethics in nursing
- $\mathring{\eta}$  Promoting higher education in nursing with special emphasis on clinical sub specialization.
- η Ensuring evidence based practice.
- $\mathring{\eta}$  Improve relations with the general public and immediate community in order to enhance the public image of nursing and that of the hospital as a whole.
- $\mathring{\eta}$  Development of strategic plans for their various clinical/sub clinical areas to guide their practice.
- $\mathring{\eta}$  Review the membership of the monitoring team for the maintenance of nursing standards.
- $\mathring{\eta}$  Review the job descriptions of DDNS' to reflect the UDS specific duties.
- η̃ Carry out the tenets of the restructuring exercise that is relevant to the Directorate.
- η̃ Improve staff motivation, morale, commitment and satisfaction by identifying staff in high risk areas for motivation.
- $\mathring{\eta}$  Reduce waiting time at all the entry points in the hospital in collaboration with HOD's.



## **ANALYSIS AND DISCUSSIONS**

Analysis and discussions have been made on the topics enumerated below;

- η Nursing and midwifery Manpower
- η Assumptions (No. of staff that assumed duty)
- η Attrition (Staff that separated from the service)
- η Post basic training for Nurses and midwives.

These topics have been analyzed because over the years, it has shown that if issues related to these areas are addressed, it will enable the Directorate achieve its set goals.

# **NURSING MANPOWER**

**Table: Nursing Manpower/Numerical Strength** 

INDICATOR	2011	2012	2013
Professional	1,313	1,336	1,324
Auxiliary	197	523	488
Total	1,510	1,889	1,812
% Target Achieved	166 (5.8%)	379 (20%)	77 (2.1%)

The total number of nurses and midwives including auxiliary staff for the year 2013 amounted to 1,812 which recorded a reduction by 77 representing a 2.1% drop compared to the previous year which recorded a 20% (379) increase. This was as a result of managements hold on recruitment because of the Ministry of Health's directive, which informed institutions recruiting staff to pay such staff from their internally generated funds.

Table I indicates that the figure for auxiliary nurses dropped by 35 representing (3.5%) of the total recruitment. That for professional nurses also fell by a margin of 12 (0.1%). This presupposes that more stringent measures should be adopted to retain professional nurses.

## **ASSUMPTION**

Active recruitment strategies were adopted this year for the recruitment of nurses to improve upon the nursing manpower in order to meet the set targets which invariably will improve the nurse to patient ratio.



**TABLE: ASSUMPTION OF NURSES** 

INDICATOR	Recruitment	Recruitment	Recruitment
	2011	2012	2013
Nursing Officer	15	50	11
Staff Nurses	161	110	42
Midwives	51	18	11
Health Assist. Clinical	35	246	14
Total	262	517	81
	(10.5%)	(38%)	(72.1%)
*Grand Total of Assumption	301	549	115

\*\* Grand assumption includes all nurses and midwives who have resumed duty from study leave with pay, leave without pay or re-engaged in the service.

A casual glance at the figures for staff who assumed duty in the year 2013 shows a significant drop in all the parameters as compared to the previous year 2012. The total figure for new appointees for 2012 was 517, representing a (38%) increase over the previous years of 262 while that of 2013 fell by 72.1% (436).

The Table depicts actual recruitment for the various categories of staff. The figure for Degree nurses was 11 which was a drop from 39. That for Staff Nurses (42) recorded a shortfall by (44.7%) and the actual recruitment figure for midwives (11), reduced by (24.1%). This is with reference to the various ceilings allocated for the different categories of staff. On the whole, the figure for the Health Assistant Clinical, an auxiliary grade decreased astronomically by 89.2% (232) which was a significant improvement over the previous year.

The Hospital being a tertiary health care delivery institution requires certain caliber of professionals in order to provide the specialised care required. It is therefore necessary to take the steps to attract and also retain professionals through lobbying at the training school level and also to revert to the system where nurses that pass out after



qualification are made to serve for a period in the region of their training. This move, however, would be only applicable in the state owned training institutions; in that, many newly qualified nurses and midwives now shy away from working in the Teaching Hospitals because the workload in such hospitals is heavier than the others in the periphery.

# **ATTRITION**

TABLE III - ATTRITION OF NURSES

Attrition	2011	%	2012	%	2013	%
Study Leave with pay	76	49.0	46	34.7	34	27.6
Leave without pay	10	6.5	3	2.3	8	6.5
Vacation of Post	16	10.4	12	6.1	8	6.5
Resignation	15	9.7	11	8.3	18	14.6
Retirement	24	16.0	43	32.1	45	36.6
Transfer Out	10	7.0	14	10.5	6	4.9
Death	1	1.0	4	3.0	4	3.3
End of contract	-		-		-	
Total	141	100	154	100	123	100
	(6.8%)		(4.4%)		(- 11.2%)	

The rate of attrition this year dropped by 31 thus recording a negative percentage from that of 2012 which increased by 4.4%. This year also the phenomenon of interest is the study leave with pay; it decreased from 46 in 2012 to 34 in 2013. This was achieved because stringent measures were put in place to minimize the incidence of unapproved study leave which was a major bottleneck. In relevance to the Human Resource needs of the Hospital, Public Health nursing and Anaesthesia were not given slots for study leave. With regards to the broader picture of Management's plan to build the new Hospital Complex, more nurses are being encouraged to pursue clinical subspecialties in order to meet the overall objective of providing quaternary quality care. It is therefore imperative to improve the nursing manpower so as to ameliorate the seemingly negative effect the nurses on study leave may have on patient care.

Apart from training, the next highest rate was retirement and resignation respectively. In 2012, the absolute figure for retirement was 43 (32.1%). This increased to 45 (36.5%) in 2013, thus significantly affecting the overall attrition rate for the year. Another increase of interest is that for resignations which increased from 11 in 2012 to 18 in 2013. Again, this implies that more proactive ways have to be adopted to motivate and retain the nurses and midwives.

#### **POST BASIC TRAINING FOR NURSES**

**Table: Post Basic Training** 

NO	INDICATOR	2011	2012	2013
1	Public Health School	3	1	-
2	Paediatric Nursing	13	7	9
3	Critical Care	11	15	12
4	Peri-Operative Nursing	9	7	5
5	Anaesthesia	13	9	-
6	First Degree	22	1	2
7		2	1	2
8	E.N.T.	1	2	-
9	Ophthalmic Nursing	2	5	2
10	Oral Health Nursing	-	-	2
TOTAL		76	48	34

As stated earlier, the need for clinical specialties could not be overemphasized considering the ultimate goal of providing quaternary services within and outside Ghana. Table IV, thus emphasized the hospital's human resource needs this year in Critical Care and Peri-operative nursing with a total figure of Twenty-two (22), Ophthalmology is recording five (5) to prepare for the takeover when the new eye hospital in conjunction with the Moorefield's Eye Hospital in the United Kingdom is completed. As already mentioned Public Health nursing and nurse anaesthetist training were not priorities for the Hospital in that sufficient numbers were available in the system. Nobody opted to train in ENT nursing, however, two (2) nurses were granted permission to pursue Oral Health nursing which is a new area in the field of nursing.

A review of the five (5) year Human Resource Development plan was therefore carried out in order to streamline the number of nurses going for post basic training; to meet the Hospitals real needs especially with Emergency Medicine.

#### **ACHIEVEMENTS**

The Directorate under the year in review made significant achievements which include;

- Appointment of Nine (9) new Deputy Directors of Nursing Service. Out of this
  figure seven were newly created positions, namely Renal, Radiotherapy,
  Haematology, Theatres, Neonatal Intensive Care Unit, Psychiatry and
  Paediatric Emergency.
- Development of standards of care (patient centered) to guide nurses in the discharge of their duties.
- A strategic plan to improve on the nursing service as a whole is also in progress.
- Newly designed files for documentation of nursing activities for patients on pilot basis.
- Completed Guidelines for professional code of conduct, rewards and sanctions.
- Successful training of two (2) nurses in the care of patients with breast cancer.
- Development of standard operation procedures (SOP's) for all UDS's.
- Recruitment of 81 new staff was recruited made up of 11 midwives, 53 nurses and 14 Health Assistant Clinical (HAC's).
- Resumption of sixty-five (65) nurses resumed from study leave after pursuing various post basic courses, first and second degree programmes, as follows;



Critical Care (14)

Peri-Operative Nursing (7)

Masters & 1<sup>st</sup> Degree (21)

Paediatric Nursing (5)

Public Health (3)

Ophthalmic Nursing (2)

Ear, Nose and Throat (1)

Anaesthesia (12)

The new knowledge and skills of these cadres of nurses has infused into the service, a new sense of professionalism in the hospital.

- Training of 16 theatre nurses to update their knowledge and skills on the operations and management of autoclaves in their units.
- Update of 18 senior nurses in the policies of the Hospital to sharpen their managerial skills.
- Updates in basic nursing and midwifery skills for 108 nurses and midwives.
- All nurses and midwives who were sponsored to pursue various courses resumed work on completion of their courses.
- Training of six (6) nurses for six months in paediatric cardiology at the Walter Sisulu University in South Africa.
- Trained three (3) nurses in the Oncology through online programmes.
- Approval by the Hon. Minister for nurse and other health institution trainees to pay fees for clinical attachment.

## **CHALLENGES**

- The influx of nurse/midwifery trainees in the hospital with its resultant congestion and strain on consumables.
- Inadequate provision for the welfare of nurses in most of the UDS's.
- Lack of cooperation from some health team members.
- Disregard and poor recognition of nurses' contribution towards service delivery generally.
- Inadequate medical care for nursing staff
- Non-payment of the salaries of some newly recruited nurses since 2011 resulted in some agitation by the affected nurses.



## **WAY FORWARD**

- Emphasize on patient centered rather than task oriented care as a policy for all UDS's.
- Conduct effective nursing audits.
- Institute strategies for effective succession planning.
- Advocate for establishment of a mutual Health Scheme for nurses and midwives.
- Link up with the College of nurses and midwives to run fellowship programs for nurses and midwives.
- Link up with stakeholders to review the professional grading structure of nurses and midwives to reflect their relevant competencies.
- Rationalize existing nursing workforce for optimum outcomes.
- Update knowledge, skills and attitudes of nurses for innovative leadership.
- Ensure that professional and auxiliary nurses and midwives have valid PIN's/AIN's.
- Collaborate with the relevant units to ensure environmental cleanliness of the wards and its environs.
- Enforce sanctions and disciplinary measures to ensure desired behavioral change.
- Institute a unit for effective monitoring and evaluation.
- Institute another unit for nursing research.

# **Pharmacy Department**

#### Introduction

The Pharmacy Department has the mission to ensure safe and cost-effective medication use and to work synergistically with health care colleagues to promote optimal drug therapeutic outcomes through the development of integrated, quality programmes in patient care, research and education.

In pursuance of this mission the department provides clinical pharmacy services and general hospital pharmacy services to patients. These services were rendered through the 18 units of the department with a high caliber of Pharmacists trained in special areas of hospital practice, namely; clinical pharmacy, manufacturing, pediatrics, obstetrics and gynecology, among others.

# **Priority Areas for 2013**

- Carry out activities to improve on the quality of patient care
- Ensure the availability of appropriate, cost-effective, quality pharmaceuticals
- Recruit more pharmacists and pharmacy technicians, develop capacities of staff of the Department and motivate staff.
- Provide teaching, support and training to pharmacy-related and other health institutions
- Enhance the provision of appropriate and accurate information on medicines to health professionals, patients and the general public
- Promote research at the Pharmacy Department in collaboration with the rest of the Hospital
- Rehabilitate/refurbish existing infrastructure
- To improve on our generation of IGF through sound financial and stock management.

# **Activities and Achievements for 2013**

Activities undertaken in the year under review included Inpatient (Ward/Clinical) and Outpatient Pharmaceutical Services, National Health Insurance Service, Adherence Counseling, Operational Research, Health Outreach programmes, Drug Information Services, Small Scale Manufacturing, staff Recruitment, Development and Training.

# **Patient Care Services**

A total of 28,068 inpatient clients (average 2339/month) received in-patient services during which a sizable number of them received medicines on credit basis for payment to be done on discharge.

A total of 331,444 (average 27,620month) out-patients received services from the department in 2013. The pharmacists ensured that the right patient was served, the desired dosage form of the correct drug was given, the prescribed dosage and quantity were given in the right container that maintained the potency of the drug, the container was appropriately labeled, and also clear instructions were delivered verbally to the patient. The above procedure ensured the rational use of medicines.

Clinical pharmacy activities included the continuous collation and interpretation of



patient specific information throughout the patient's admission using sources such as medical notes, laboratory results. The patient's pharmaceutical care issues desired therapeutic outcomes the pharmacist intends to achieve for a patient in relation to their pharmaceutical care issues were duly identified. Other activities included the review of medical therapy, formulation and implementation of a monitoring strategy to measure progress towards the desired outcomes. Review of outcomes and the modification of the patient's management were also undertaken when required.

National Health Insurance Scheme activities included service to both Inpatients and Outpatients. In providing the NHIS service to clients, the following documents were checked for:

- Validity of the NHIS card
- Photocopy of the card
- Photocopy of the Referral letter
- Form J
- Claim form or Form A (original for out-patients & photocopy for in-patients) with the appropriate diagnosis, doctor's name and department. The medication prescribed must match the diagnosis.

**Table 1: Total Number of Patients Served** 

	Pharmacy Unit	No. of	Inpatients No. of Outpatients S		Served		
		Served					
		2011	2012	2013	2011	2012	2013
1	Main Pharmacy	5,765	1,359	223	23,561	29,820	21,704
2	Korle-Bu 24 -Hour Pharmacy	0	0	0	272,403	249,648	177,192
3	Surgical Pharmacy	4,242	2,808	689	23,062	20,322	14,933
4	Obstetrics & Gynae. Pharmacy	11,437	13126	12,552	33,471	28,733	14,823
5	Child Health Pharmacy	15,110	17189	8,029	27,631	27,092	17,154
5	Plastics (RPSB) Pharmacy	3,057	1,282	1,108	21,919	26,132	13,661
6	Chest Clinic Pharmacy	450	636	340	2,581	3,441	4,957
7	SME/Accident Centre Pharm.	10,910	10,545	4,962	9,994	13,893	14,732
9	Polyclinic Pharmacy	0	16,144	165	47,975	49,238	51,433
10	Manufacturing Unit	0	0	0	759	645	855
11	Adherence Counseling/Fevers	845	978	xxxx	14,400	23,074	xxxx
	Total	51,816	64,067	28,068	477,756	472,128	331,444

**Table 2: NHIS Services – 2013 Performance for Pharmacy Department** 

CLAIM MONTH		NO. OF PATIENTS SERVED		F DRUGS D GH¢
	2012	2013	2012	2013
JANUARY	3,035	3,067	70,002.53	51,684.21
FEBRUARY	2,725	2,536	52,644.26	45,821.27
MARCH	3,002	2,374	51,249.83	47,009.98
APRIL	<mark>2,299</mark>	<mark>352</mark>	<mark>37,387.97</mark>	<mark>6,926.37</mark>
MAY	<mark>3,129</mark>	0	<mark>47,674.47</mark>	0
JUNE	<mark>3,254</mark>	<mark>824</mark>	<mark>52,908.16</mark>	<mark>14,688.03</mark>
JULY	3,814	3,240	73,183.50	54,622.53
AUGUST	3,438	2,746	46,377.47	52,180.45
SEPTEMBER	862	3,143	37,326.78	65,960.18
OCTOBER	2,944	3,364	53,736.29	71,734.81
NOVEMBER	2,661	3,220	47,980.21	65,177.05
DECEMBER	2,526	3,087	41,828.56	61,531.72
GRAND				
TOTAL	33,689	27,953	612,300.03	537,336.60

 Table 3: Top Ten Pharmaceuticals Dispensed by Pharmacy Unit in 2013

Positi on	Korle- Bu 24 Hour Pharma cy	Main	Surgery	Plastic s and Burns	Obst. & Gynae	Child Health	Emergen cy	Polyclini c
1	Paraceta mol Tab. 500mg	Flucloxaci Ilin Cap. 250mg	Pethidine Inj.100m g	IV Normal Saline 500ml	Inj Hydrallazi ne 20mg	Supp P'mol 125mg	IV Normal Saline 500ml	Paracetam ol Tab. 500mg
2	Tab Metformi n 500mg	Tab Vitafol	IV Normal Saline	IV Ringers Lactate	Inj Vitamin K 1mg	Inj Flucloxaci Ilin 500mg	Inj Metronida zole 500mg	Tab (Arthemet er /Lumefant rin

3	Aspirin Tab. 75mg	Paraceta mol Tab. 500mg	IV Ringers Lactate 500ml	Pethidin e Inj.100 mg	Inj Oxytocin 10 IU	1/5th Saline in 10% Dextro 250ml	Inj Frusemide 20mg	Inj. Artemethe r 80mg
4	Frusemid e Tab. 40mg	Cap Eleron	Paraceta mol Tab. 500mg	Tab Paracet amol	Inj. Amoksikl av 1.2g	Ceftriaxo ne Inj. 1g	Tab Diclofenac 50mg	Tab. Amlodipin e 10mg
5	Prednisol one Tab. 5mg	Tab Metformi n 500mg	IV Dextrose 5% 500ml	Inj. Zinacef 750mg	Tab. Misoprost ol 200mcg	X'pen Imu	Tab Nifedipine 20mg	Bendroflu amethiazi de 2.5mg Tab.
6	Flucloxaci Ilin Cap. 250mg	Cap Tramadol 50mg	IV Metronid azole 500mg	Cap Naklofe n Duo 75mg	Diclofena c 100mg Suppo	Iv Ampicillin 500mg	IV Ringers Lactate	Tab Co- Amoksicla v
7	Amlodipin e Tab.	Tab Amlodipin e 10mg	Tab (Artheme ter /Lumefan trin)	Cap Tramad ol 50mg	IV Normal Saline 500ml	Inj. Gentamy cin 80mg	IV Dextrose Saline 500ml	IV Normal Saline 500ml
8	Ferrous Sulphate Tab.	Tab Amlodipin e 5mg	Cap Naklofen Duo (Diclo)	Tab, Vitamin C 500mg	IV. Ringers Lactate 500mg	Zincovit Syr	Supp. Paracetam ol 1g	Inf. Dextrose Saline
9	Metronid azole Tab. 200mg	Cap Naklofen 75mg	Cap Tramadol 50mg	Povidon e Iodine Solution	Inj. Magnesiu m Sulphate 50%	10% Dex 250ml	Supp. Diclofenac 100mg	Diclofenac 75mg Inj.
10	Bendroflu amethiazi de 2.5mg Tab.	IV Normal Saline 500ml	IV Ciproflox acin	Tab. Cefurox ine 250mg	Inj Metronid azole 500mg	Claforan Inj. 1.0g	Tab Co- Amoksicla v	Tab. Metformin 500mg

# **Table: Distribution of Pharmacists on the Wards for Ward/Clinical Pharmacy Activities**

No.	Unit	No. of Pharmacists			
		2011	2012	2013	
1.	Child Health	5	4	6	
2.	Obstetrics & Gynecology	4	2	3	
3.	Surgical	4	4	4	
4.	S ME	4	3	4	
5.	Medical	5	4	5	
6.	СТИ	3	2	2	
7.	Plastic/Burns	3	1	2	
8.	Polyclinic	2	2	2	
9.	Chest Clinic	2	1	2	
10.	Allied Surgery	0	0	1	



# Procurement and Stock Distribution

The Department was only able to achieve about fifty percent (50%) of its procurement needs. We procured mainly through the National Competitive Bidding (NCT). We also had approval from the Public Procurement Authority to procure most of our branded products through sole sourcing and restrictive tendering.

Medicines and other commodities were distributed to all units within the Pharmacy Department except the National Cardiothoracic Centre Pharmacy. Stocks were also supplied to the Renal Dialysis Unit, University of Ghana Medical School Clinic and other hospitals such as Ridge Hospital, Achimota Hospital, Regional Medical Stores, Accra, Tamale Teaching Hospital and Komfo Anokye Teaching Hospital.

# Operational Research

To enhance the clinical services of the SME Unit, data were collected daily on the availability of drugs to be administered to inpatients as per the patients' charts.

Topic: Missed doses at SME Unit and their contributing factors Introduction

The availability of medicines is very vital to ensuring the safety of patients in hospitals. Medication errors occur sometimes, mainly because of the unavailability of medicines. The proposed reasons contributing to the challenge are varied and it will be important to know the possible factors to inform future strategies. The main objective of this study was therefore to identify missed doses and explore the possible contributory factors that caused them.

# Method

Missed doses were retrieved from patients' charts during the normal visits of clinical pharmacist to the wards of SME unit and contributory reasons were taken from nurses responsible for those particular patients. The study period was between 20<sup>th</sup> August – 20<sup>th</sup> December 2013. Missed dose was defined as dose which was due for more than 6hours and has not been administered. Data was then analyzed.

#### Results

Of the 380 missed doses identified in 134 patients, 73.7% (280) were because the drug was not available. Further on, 86% (241) of the unavailable drugs were not stocked at the SME pharmacy at the time of the study. Unavailable drugs not stocked at SME Pharmacy and the number of times requested is presented in the Table below.

Non-availability of Emergency Drugs at SME Pharmacy and the number of times requested



Item	Number of times requested
Inj Labetalol	34
Supp paracetamol	32
Iv ranitidine	28
Iv Nexium	27
Inj clexane	26
Tab omeprazole	24
Tab ranitidine	20
Inj Tranexamic	14
acid	
Oral thiamine	9
Nimodipine	7
Inj vitamin k	7
Sc erythropoietin	5
Others	10

# Conclusion

Stock-outs of emergency medicines are frequent at the SME Pharmacy and this impairs the ability to provide continuous unfettered services to patients. This has implications for the safety of patients and the trust they behold on the Department of Pharmacy as a whole. Studies of this nature should be undertaken in other areas of service provision to inform practice.

# Adherence Counselling Unit

The year 2013 marked ten years of antiretroviral therapy service provision on a full public scale in Korle Bu Teaching Hospital. The service was started in December 2003. Hitherto, in the late 1990's, a few people who could afford financially, obtained their Antiretrovirals from private companies. They were, however, monitored clinically by service providers in Korle Bu Teaching Hospital.

By the close of the year 2013, almost twenty thousand (20,000) adult persons living with HIV had registered in Korle Bu Teaching Hospital. Majorities are on antiretroviral therapy; some are waiting to start, others are lost to follow up and a few have passed away. (See attached figures and tables).

Clinics are now held four times a week—Mondays, Wednesdays and Fridays for adults and Thursdays for adolescents (aged 13 to 21years). Paediatric antiretroviral clinics are held Wednesdays at the Department of Child Health. Babies born to mothers infected with HIV are given antiretroviral for prophylaxis at the pharmacy outlet at the Department of Obstetrics and Gynaecology. Patients with HIV/TB co-infection now receive treatment at the Department of Chest Diseases till they are cured of TB when they then continue treatment at the Fevers Unit.

On the average, 200 adult patients are seen on clinic days. On Thursdays, about 20 adolescents are seen when schools are in session and higher numbers during the vacations.

The Adherence Counseling Unit dispenses therapeutic foods provided by the Nutrition Division of the Ministry of Health to clients who are severely immuno-compromised and underweight. Patients at the department of paediatrics, chest clinic, and the adult clinic have benefitted so far. This service was extended to a few patients at the Plastics and Reconstructive Surgery Department with extensive and very severe burns.

Highly Active Antiretroviral Therapy (HAART) -Trend Analysis 2013

	Ad	ults	Paedi	atrics
	Male	Female	Male	Female
Under Clinical	364	690	104	117
Care				
On ART	249	449	27	30
Deaths	38	26	3	2
Lost to follow	225	345	45	46
up				
On second line			2	2
New clients on	288	508	104	114
co-trimoxazole				

#### **Deaths Jan-Dec 2013**

Total admissions	526
Total Deaths	258
Gross Mortality	49.05%
HAART deaths	59
Percentage of HAART deaths	22.87
Non HAART deaths	199
Percentage of non HAART deaths	77.13%

# **Nutrition Assessment Counselling and Support (NACS) 2013**

ſ	Number of PLHAS provided with therapeutic	732
	foods	
ſ	Number of outlets of therapeutic foods	4

# Post Exposure Prophylaxis (PEP)

January – December 2013					
Total number of Risk Level Outcomes					
episodes	Very Low	Low	High	Rape	of Care.
reported	-			-	
37	8	9	16	4	

# Benefits of antiretroviral therapy and achievements of the program:

From the figures above, antiretroviral therapy works. Infected clients are better off on treatment. They live longer, healthier, productive lives. Adolescents are healthy and doing well in school.

Families and businesses are intact compared to times when there were no antiretrovirals.

Particularly rewarding and successful was the prevention of mother to child transmission (PMTCT) program in which babies born to HIV positive mothers turned out HIV negative.

Post exposure prophylaxis, available to staff who got exposed to HIV on the job, worked. No staff, exposed to HIV sero-converted even when the source of exposure was HIV positive and was not on antiretroviral therapy

There was increasingly better collaboration between the different units- HIV testing and counseling (HTC), Prevention of Mother-to-child-transmission (PMTCT), antiretroviral therapy (ART), laboratory services, paediatrics, chest diseases department.

Every patient/client was attended to despite the long working hours.

## The Drugs and Therapeutic Committee

The DTC of the Korle Bu Teaching Hospital has the mandate to ensure that the Hospital meets all statutory requirements; develop and promote strategies that will improve services and care of patients in the area of medicines use by practitioners as well as its



management and administration.

The Committee held two (2) meetings in the year.

## **Activities**

# **Training**

As part of its educational programme on the new prescription pads, the DTC took the opportunity to sensitize the departments which had not had their turn on the sensitisation programme on the responsibilities of the DTC in the hospital; namely the Department of Obstetrics and Gynaecology, Anaesthesia and Child Health. The sensitisation was, however organized successfully at the other departments.

Development and Introduction of New Prescription Format

Korle Bu Management congratulated the DTC for the newly designed prescription forms for out - patients and inpatients use in the Hospital. The forms were successfully used in the departments. An intensive education on the new forms was done by the DTC to the House Committee first and then at the departments. All recommendations were considered and instead of the forms being printed in triplicates it was reduced to duplicate. DTC did recommend to Management that in future the prescription forms should be serialised, unique numbers for prescribers should be generated, appropriate forms should be designed for the prescription of non-drug consumables among others. The inpatient prescription forms are however yet to be printed.

Distribution of Standard Treatment Guidelines and British National Formulary The DTC in its quest to provide current editions of the National Standard Treatment Guidelines (STGs) and the British National Formulary (BNFs) contacted the GNDP and the Pharmaceutical Society of Ghana for the copies. The DTC recommended the acquisition of only fifty (50) pieces of the BNF and the Sub-BMCs should acquire more for their departmental use. There was a set back because the new edition of the STGs was yet to be published.

# **Hospital Formulary**

The Hospital formulary for the year 2013 was successfully compiled and the DTC planned to also embark on an orientation programme for the departments on the importance of the formulary. The Pharmacy Directorate was to budget for the printing of subsequent formularies. The DTC however, faced the challenge of lack of cooperation from the departments.

# Antibacterial Use

The DTC investigated the appropriate antibiotic selection and use in the hospital and made recommendations to minimise future occurrences.

The DTC reiterated that there was antibiotic abuse in the Korle Bu Teaching Hospital due to lack of strict guidelines amongst prescribers. To ensure best practices in Antibiotic use in KBTH, the following recommendations were made.



# • Development of Guidelines to Promote Appropriate Antibiotic Selection and Use at KBTH

- Update training courses in rational use of medicines (RUM) and rational prescribing must be conducted twice yearly.
- There must be regular and continuous education on antibiotic selection and use in the Hospital
- The laboratories must quarterly update the hospital on the susceptibility patterns of antibiotics in the hospital. It could also develop a software to generate the susceptibility patterns of antibiotic use for regular dissemination to the staff.
- The KBTH laboratories must have MIC testing
- Blood levels of aminoglycoside must be carried out
- E.g in a tertiary hospital, we should have a facility to do regular MIC of Gentamicin/ aminoglycoside blood levels of patients
- The use of powerful antibiotics such as third generation antibiotics and meropenem must be justified and limited.
- Periodic audits on antimicrobial usage in the departments must be conducted
- Yellow card suspected adverse drug reaction forms must be instituted in reporting sub-standard medication to FDA for analysis.

# • Formulary Restrictions and Pre-Authorisation Procedures

- There must be some level of authorisation for different levels of antibiotic use in KBTH. Authorisation for empirical prescribing of third generation antibiotics must be strictly endorsed by either specialists or consultants in the various departments before they will be honoured by pharmacies. All House Officers and Residents will need authorisation from their consultants before prescribing third generation antibiotics
- There should be different categorisation of patients and prescribers.
   The classes of antibiotics from suggested empirical prescriptions by prescribers could be grouped into three such as:
- Class 1-Empirical prescription of antibiotics by prescribers at OPD e.g. Oral antibiotics
- Class 2- Prescriptions of antibiotics by prescribers for Inpatients due to susceptibility patterns
- Class 3-Prescriptions of antibiotics by prescribers due to susceptibility patterns, but strictly authorised by Infectious disease physician or medical microbiologist.
   E.g Imipenem etc.
- The hospital must provide unique stamps for all senior specialists and consultants in the various departments which would indicate their names with unique ID numbers for easy identification in the various pharmacies. Eg. A consultant doctor in O& G could have an ID O&G C 01 whilst a senior specialist in the same unit could have a code O&G S 01 etc.



# See **table** below for more on Education and Training:

	Description	2011	2012	2013
Intern pharmacists	Internship	11	23	32
Third Year Students of the Faculty of	Pharmacy Practice	14	20	14
Pharmacy, Kwame Nkrumah University of	Vacation Training			
Science and Technology (KNUST)	May 29 to June 29,			
	July 02 to August 10.			
Fourth Year Students of the University of	Comprehensive		21	16
Ghana School of Pharmacy (UGSOP)	Pharmaceutical Care			
	Rotation			
	February16 to May 4.			
Second Year Central University College (CUC) Students				
Foreign trained practicing pharmacists	Internship	2		2
Post Graduate Clinical Pharmacy students (RGU)		5	3	

# Recruitment/Staff Development (Continuous Professional Development CPD)

The Department was able to recruit three pharmacists, three technicians and two dispensing assistants to replace staff who had either gone on retirement or vacated their post. A further recruitment of ten pharmacists and five technicians were interviewed for recruitment, but challenges with obtaining financial clearance for them has not been successful as at the time of writing this report.

One Pharmacist gained admission to pursue a one-year Master's programme in clinical pharmacy in the UK on a Commonwealth Scholarship. Three Pharmacy Technicians completed their course in pharmacy and are now doing their internship. The table below shows other training programmes and workshops that staff of the department benefited from.

Month	Training Programme	Participants	Date	Sponsorship
JANUARY	<ul> <li>Disclosure of HIV in Adolescents in Kumasi</li> <li>National HIV/AIDS annual review meeting</li> </ul>	1 Pharmacist 3 Pharmacists	9 <sup>th</sup> -12 <sup>th</sup> 22 <sup>nd</sup> - 26 <sup>th</sup>	NACP NACP
FEBRUARY	<ul><li>Health Admin &amp; Management programme @ GIMPA</li></ul>	1 Pharmacist	4 <sup>th</sup> Feb. to 4 <sup>th</sup> March	Radiotherapy Centre
APRIL	<ul><li>Palliative care training@ Dept. of Medicine</li></ul>	6 Pharmacists	23 <sup>rd</sup> - 26 <sup>th</sup> April	Crossroads Hospice
MAY	<ul> <li>18<sup>th</sup> World International Congress on Disaster &amp; Emergency medicine, Manchester, UK</li> </ul>	1 Pharmacist	28 <sup>th</sup> May to 2nd June	Self-sponsored
	♣ Trainer of trainers & Advanced Palliative care workshop @ O& G conference room	3 Pharmacists	1 <sup>st</sup> -5 <sup>th</sup>	GHS/AFROx/ ASCO
JULY	<ul><li>Programmatic management of Drug resistant TB (PMDT) @ Kumasi</li></ul>	1 Technician	15 <sup>th</sup> - 17 <sup>th</sup>	National TB Control programme
	<ul><li>Oncology Training programme@ Lagos, Nigeria</li></ul>	2 Pharmacists	24 <sup>th</sup> - 28 <sup>th</sup>	ROCHE Pharma
	<ul> <li>Pharmabridge 4wks         hospital attachment         programme in NC         University</li> </ul>	1 Clinical Pharmacist	July 8 <sup>th</sup> –Aug 8th	Pharmabridge/ KBTH/ ROCHE
	♣ 73 <sup>rd</sup> International Congress of FIP @ Dublin, Ireland	2 Pharmacists	31st Aug-6 <sup>th</sup> Sept	КВТН
	♣ Warehouse Dejunking & Reorganization @	1 Pharmacist		USAID/DELIVER PROJECT
AUGUST	Tema  AGM for Pharmacists @  Kumasi	77 Pharmacists	5-9 <sup>th</sup> Aug	Pharmacy Dept
AUGUST	<ul><li>Monitoring/Supervisory visits to ART, HTC&amp; PMTCT sites</li></ul>	3 Pharmacists	4-17 <sup>th</sup>	National AIDS/STI control programme



OCTOBER	♣ Logistic management of Public Health commodities	25 Pharmacists 9 Pharmacy technicians	28 <sup>th</sup> - 29 <sup>th</sup>	FOCUS Region Health Project (FRHP) (USAID)
	<ul><li>Expert training in management of Childhood TB@ Kumasi</li></ul>	2 Stores personnel 1 Clinical pharmacist	7 <sup>th</sup> -8 <sup>th</sup>	National TB Control programme
DECEMBER	Training in Pharmacovigilance	40 Pharmacists	12 <sup>th</sup>	WHO Collaborating with Centre for Advocacy & Training in Pharmacovigilance/SA NDOZ

<sup>\*</sup>AfrOx – Africa Oxford Cancer Foundation, \*ASCO – American Society of Clinical Oncology,

# **Drug Information Services**

Medicines information was given to inpatient clients and this included distribution of Patient Information Leaflets (PIL) and health talks to patients and their caregivers and in some situations relatives. Discharged patients received counseling on their condition and how to use medicines at home and also what to do when they experience side effects of medication.

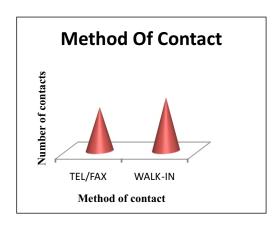
The drug information unit captured service provision in terms of number of queries received, methods of contact, origin of queries and profession of persons accessing their services.

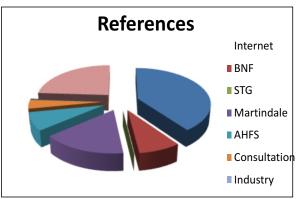
The tables and charts in this section give a good indication of their performance.



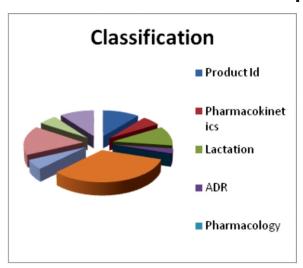
•	es Provided for 20		6040
	2011	2012	2013
Number Of	201	190	78
Queries			
Method of Contact			
Telephone/Fax	111	100	34
Walk-in	90	90	44
Email	0	0	0
Location	0	0	0
Origin of Queries			
Private/Community	29	25	26
Teaching Hospital	172	130	40
Others	0	0	14
Profession of		-	
Requestors			
Doctors	24	15	12
Pharmacists	121	124	44
Nurses	35	15	12
Others	0	0	12
Classification of			
Queries			
Availability/Supply	9	85	8
Product	15	30	16
Identification			
Drug Interactions	32	5	8
Pregnancy &	10	5	8
Lactation			
Therapeutics	95	80	24
Pharmaceutics	0	0	0
Medico-Legal	0	0	0
Poisoning	0	5	0
Pharmacokinetics	17	15	8
ADR	7	5	4
Pharmacology	9	5	0
Others	31	35	15
Response Time			
1-15mins	101	35	40
16-30mins	65	100	16
31-120mins	24	50	16
>120mins	11	5	8

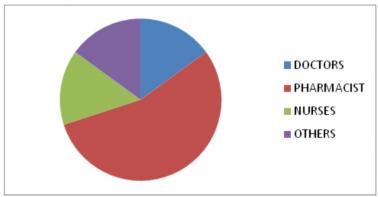




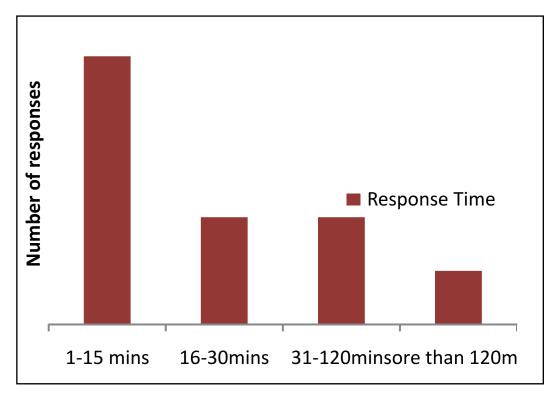


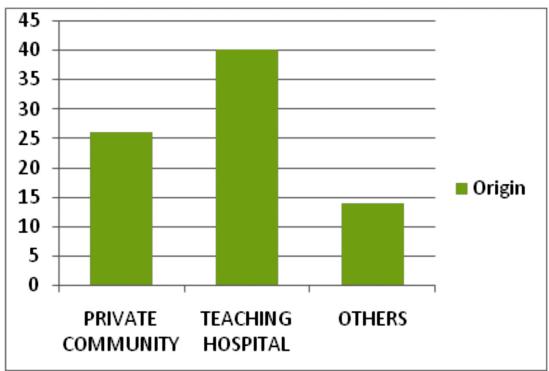
# **Profession**





# Response Time Origin





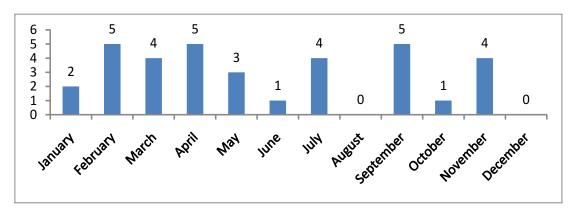


# Trauma and Non-Trauma Pharmacy Services Management of Acute Poisoning

The Unit collected data on 34 cases of acute poisoning. A few of the cases were accidental while a sizable number were as a result of ingestion of herbal preparations and the rest were suicide attempts. Descriptions of cases are represented in Table 1 and Figure 1.

Table: Characteristics of patients seen as cases of acute poisoning (N=34)

Characteristic	Number
Sex	
Male	16
Female	18
Age	
<18	2
18-25	15
26-33	10
>33	76
Substance suspected	
Parazone	9
Rat poison	2
Organophosphate	3
Pesticide	3
Insecticide	4
Unknown	13



# Fig. 1: Number of cases recorded per month

The Unit now has Inj. Acetylcysteine, an antidote for the overdose of Paracetamol and it is our expectation that more antidotes will be procured. Other antidotes for the management of acute poisoning of mostly used chemicals as shown in table 1 are not available. Our best approach over the years has been to provide symptomatic and supportive management for our poison victims.

# **Monitoring Of Anti-Rabies Vaccine Courses**

Eight Hundred and Sixty (860) doses of ANTI-RABIES vaccine were dispensed to patients who came to our facility for post-exposure prophylaxis of suspected or confirmed rabies dog bites. It was difficult to monitor the completion of the full course of therapy from our facility because of the erratic supply of the vaccines. A total number of 176 clients received an average of 3 vaccines at our facility. About 40% of the requests (prescriptions) for vaccines came from outside the hospital mainly from the polyclinics, 37 Military Hospital, Tema Polyclinic and General Hospital and the surrounding regions (Eastern, Volta and Central).

# Anti-Venom Immunoglobulin & Tetanus Immunoglobulin

One Hundred and Twenty (120) doses of anti-venom immunoglobulin were dispensed to about 65 patients, of which approximately 10% were treated at our facility. A total of 230 vials of Tetanus Immunoglobulin was dispensed to 12 patients mainly from the FEVERS UNIT.

#### Radiology

The following were notable activities undertaken by the Pharmacist in 2013.

- Separation of the contrast revolving drug account reporting from the general radiology accounts.
- Full receipt (100%) of contrast media revenues accrued instead of the 60% initially applied.
- Preparation of special alcoholic solutions for cleaning of the new equipment installed.
- Prudent management of contrast stocks leading to over 95% revenue recovery of all supplies made.
- Supervision of the use of ADR forms introduced for Pharmacovigilance at the CT/MRI rooms.
- Monitoring of emergency tray medicines introduced to the CT/MRI room (Most emergency medicines are now available)
- Work- in- progress for acquisition of a semi-automated chemistry analyzer for pre-screening of patients mainly for their kidney function.
- Preparation and transition to use of the new MRI and CT scan equipment.



# **Manufacturing Unit**

The Production (Manufacturing/Compounding) Unit is responsible for local production of pharmaceuticals in the Korle Bu Teaching Hospital. Activities include extemporaneous preparation of internal medicines, preparation of sterile products, bulk production of medicines for topical use (including eye and ear drops) and disinfectants. The unit also provides training for short term visitors, pharmacy interns and National Service persons.

Planned procurement was used for the acquisition of all galenicals. We were unable to obtain most of our needs through the National Competitive Tendering. This was largely because most local suppliers did not have the items we needed and the few who had stocks did not bother to bid for the items offered. This resulted in "unplanned" purchasing throughout the year.

There were a few basic items which were significantly out of stock during most part of the year. The most affected galenicals were absolute alcohol used for the production of retrobulbar injection, glyceryl trinitrate 2% ointment and granulated sugar used for preparing syrup.

It is worth noting that, the Unit started producing Morphine Sulphate Solution 10mg/5ml in 2013 and this has played a major role in pain management.

The total cost of bleach that was served to the Korle Bu Teaching Hospital this year amounted to  $Gh \not\in 169,972.50$  compared to  $Gh \not\in 150,172.75$  in 2012. Unfortunately, the bleach preparation area is still not refurbished irrespective of its importance in infection control. It is hoped that in 2014 the bleach preparation area will be refurbished and adequate working tools provided.

In all, 855 patients were served with various preparations including special personalized products (pediatric extemporaneous) and pre-packed medications. We served wards about 6440 times (repeated service). This is more than the previous year of 6240 wards even though there was a strike for almost three months. The implication is that KBTH is expanding and more wards/theatres/OPDs are being served. The Unit is still the leader in the prevention of nosocomial infections in the Hospital. This is because of continuous supply of disinfectants and preservative (formalin saline) to the various theatres, wards, units, offices, and other areas of the Hospital.

# DRUGS WHOSE PRODUCTION WERE LIMITED DUE TO UNAVAILABILITY OF RAW MATERIALS

DRUG	COMMENT
OINTMENTS	
☐ Aqueous Cream	Lack of Liquid Paraffin, Zinc Oxide (has not been
□ Calamine	produced for about one year.
□ Dithranol	Lack of packaging containers.
☐ GTN Paste	
☐ Metronidazole Paste	
☐ Salicylic Acid (different	
percentages	
☐ Sulphur	
□ Whitfield	
☐ Zinc Oxide	
DRESSINGS	
☐ Hibitane	Lack of plastic bottles and Gentian Violet paint
Savlon	crystals.
□ Eusol	
☐ Gentian Violet	
□ Mercurochrome	
□ Methylated Spirit	
Povidone Iodine Lotion	
EYE DROPS	Dod out on the board on the control of the
□ Amethocaine	Produced as and when droppers are available.
☐ Atropine Sulphate	
Boric Acid (1%, 2%)	
☐ Chloramphenicol	
☐ Cyclopentolate☐ Fluorescaine 2%	
☐ Gentamycin Eye/Ear	
☐ Methylcellulose, 1%	
□ Phenylephrine 5%	
□ Prednisolone (0.1%, 0.5%, 1%)	
☐ Zinc Sulphate (0.25%)	
Calamine Lotion	
□ Formaline Saline	
G. V. Paint	
☐ Savion In Spirit	
☐ Instrument Lotion	
☐ Mercurochrome Paints	
INJECTABLES	
□ Alcohol (70%, 75%)	Lack of Raw Materials and ampoules/Vials
☐ Magnesium Sulphate (20%, 50%)	
☐ Methylene Blue	
□ Potassium Chloride	
☐ Sodium Bicarbonate	

MIXTURES	
Codeine Phosphate Diphenhydramine (Adult, Paediatric) Magnesium Sulphate Mist Expect Sedative Mist Magnesium Trisilicate Potassium Citrate Sodium Citrate	Codeine has not been produced for about two years due to lack of Codeine Phosphate. Potassium Citrate was not produced throughout last year. The rest have not been produced for about 6 months except Diphenhydramine.
EAR/ NASAL DROPS  □ Boric Acid In Spirit Ear Drop  □ Ephedrine Nasal (0.5%, 1%)  □ Spirit Ear Drop (60%)	Produced when there are droppers.
□ Saline Nasal  OTHERS □ Brompton Cocktail □ Magic Solution □ Paediatric Preparations For Individual Specification □ BIPP □ Menthol Crystals	Lack of Iodoform and Liquid Paraffin for the preparation of BIPP for about a year.

# MAIN CHALLENGES OF THE PHARMACY DEPARTMENT Infrastructure and Equipment.

Operation space in some units, including Emergency, Accident Centre, Child Health and Adherence Counseling was very limited. The Manufacturing Unit and Medical Stores Section "C" need to be rehabilitated and provided with metal shelving. Air-conditioners, Computers and Accessories are old and need replacement.

# **Provision of NHIS services**

The inability of patients to benefit from drugs which are covered by the NHIS resulted in poor quality medications on the wards which affected effective monitoring of patients and posed challenges in treatment. NHIS services were limited to the Main and Polyclinic Pharmacies. This was mainly due to our inability to deploy our NHIS-compliant Point of Sale software in all the satellite pharmacies.

# **Procurement of Medicines**

Delays in administrative and other procurement procedures led to stock outs which highly affected the clinical and financial performance of the department. During the latter part of the year, suppliers who won bids were unable to supply because of foreign exchange fluctuation and other factors.

#### **Adherence Counseling Unit**

A major challenge of the unit is storage space, work space and waiting space for clients. The inadequate storage space makes it difficult to take physical inventory and check expiry dates as cartons are packed too closely. Again, due to lack of floor space, cartons are stacked up higher than permitted posing a danger to staff in the store. Significant quantities of antiretrovirals at a time were kept in the stores of the expanded program



on immunization due to lack of space at the pharmacy department stores. The national AIDS control program stores currently still hold some stocks of antiretrovirals belonging to the Korle Bu teaching hospital.

The counselling and dispensing area is so small and crowded, it can lead to the spread of respiratory tract infections like tuberculosis, pneumonias etc. among staff and patients/clients.

The waiting area is also small for the increasing number of patients and clients and can also lead to the spread of respiratory tract infections as above among both staff and patients/ clients.

In the past year, there was a shortage of some antiretrovirals leading to a rationing of both first and second line regimen drugs. Eventually, some clients on second line drugs were given drug holidays.

The number of staff providing service keeps dwindling.

Some staff report very late at the adherence counseling unit because they are required by their unit heads to carry out some assignments before reporting for duty at the counseling unit. This added to the already long waiting time of clients and extends the working hours of staff who report early.

As reported every year, burn out of service providers is real. There is no program in place to address this. Staffs have to battle this out all by themselves, even if unprofessionally and inappropriately.

# **Staff Strength**

The staff strength of the department is still inadequate due to increased workload. NHIS service delivery, Adherence counseling, Ward/Clinical work are duties that require more staff and more time with the patients to ensure quality outcomes. This made effective clinical pharmacy and ward activities irregular in some units since the other clinical/ward pharmacists assigned to the wards have responsibilities at the dispensaries as well.

Also the increasing numbers of students visiting the department for various attachment programmes are beginning to put a strain on the limited clinical pharmacists in the execution of their duties as there is divided attention on the roles and lack of time to concentrate on core duty.

## **Delay in reimbursement of funds**

The delay by Hospital Management in reimbursing the drug account for NHIS service provision is worrying. Disinfectants supplied to departments of the hospital have not been paid for the past couple of years. This exerted a huge strain on the drug account.

#### **Industrial action**

Labor unrest over the past couple of years and the 3-month long strike in 2013 adversely affected pharmaceutical service delivery. Apathy and lack of commitment caused a lot of worry and stress to staff when their salaries were highly reduced. This resulted in strike actions that decreased work output. It is hoped that all issues with the salaries of pharmacy staff will be resolved in order for the Department to continue making strides in helping the hospital attain its set targets.



# The Way Forward for 2014

- The procurement system should be strengthened with trained pharmacy staff
  to assist in speeding up the required procurement processes in order to make
  medicines available on time and in the right quantities. This would help
  minimize the frequency of stock outs.
- Extend coverage of NHIS services to all units in the coming year to enable NHIS patients receive optimum pharmaceutical care.
- Rehabilitate and equip all pharmacy units with the appropriate working tools.
- Re-design, expand and equip the small scale manufacturing and quality control units to improve on their service delivery.
- Anaesthesia Pharmacy will be well-established and demarcated so that all Anaesthesia related activities will be captured under the Sub-BMC.
- All Sub-BMCs would now be billed directly for disinfectants, including Bleach, Methylated Spirit, Savlon, Hibitane, Hibiscrub, Formalin and others.
- Start with the construction of an appropriately designed Adherence Counselling Pharmacy Unit at the Fever's Unit to take care of our increasing numbers of patients on Anti-Retroviral Therapy.
- Provide funds to repair the roof leakage at the Chest Department Pharmacy.
- Funds would be made available for in-service training programmes for all
  categories of staff. In-service training programmes would be organized for staff
  on a regular basis, to keep them updated on current trends, to improve their
  knowledge and skills and boost their confidence.
- Pharmaceutical care services in the areas of patient counseling, patient adverse drug events monitoring and daily ward pharmacy services would be intensified. Patient monitoring and adverse drug reaction data collection would be enhanced with more pharmacists attached to the wards.
- Adequate support and funding would be provided for operational research on relevant issues to inform decision-making.

#### **CONCLUSION**

The Pharmacy Directorate has great potential in terms of service provision and revenue generation. This great potential will be harnessed in the coming year to achieve better results that will go a long in supporting the Korle Bu Teaching Hospital to achieve its set objectives and targets.



# ENGINEERING UNIT INTRODUCTION

To provide strategic support services to the Hospital by offering technical advice and management of plants and installations, medical equipment, environment of the general infrastructure.

In addition, the Department manages the Hospital's utilities, portable water, Electricity and Medical grade Oxygen.

#### Achievements

In collaboration with Belstar, the following departments; Radiology, Dental, Paediatric were retooled.

90% of medical equipment were put in working order, with 80% of breakdowns resolved within 48hrs.

- Refurbishment of first phase of the Hospital's Main Kitchen and Laundry
- Implementation of Planned, Preventive, Maintenance (PPM) and Corrective Maintenance (CM) have minimized the frequent breakdown of Medical equipment.
- 8 Automated Voltage Regulator was installed to provide stable power for the Hospital.
- Provision of technical advice and supervision of all contractual works lead to better project delivery.
- Drawings for rehabilitation of sewage network were completed.
- The installation of equipment for the Plastic Surgery sterilization unit was also complete.
- Cable from the power house to Sub-station D was successfully replaced.
- Two (2) medical gas with a total capacity of 110m³/h were installed to replace the old ones
- Six (6) oxygen manifolds with medical air and vacuum systems were also installed at Gynae, Child health, Maternity, Medical, Plastics and Surgical.
- In collaboration with AMA Urban Roads, 90% of the Hospital roads were repaired.
- All 1,480 Air conditioners had PMs done on them whilst 54 new ones were installed.
- PPMs for the 14 vertical transports (Lift) were undertaken.
- 90% of the Hospital security lightning were made functional with the changing of old fittings and damaged cables.
- 35 consulting room package and 15 ward package were also distributed.

# **CHALLENGES**

- Inadequate technical training for staff.
- Long delay in getting needed input to execute the work.
- Non-stocking of materials affect prompt response to emergencies.
- Non-availability of drawings of structures, service lines and installation hampering planned maintenance.



- Delay in making payment for the acquisition of spare parts for maintenance.
- Non availability of Departmental transport; hampering transportation of staff and logistics to site.
- Old facilities, i.e. Water/Sewage lines, Power lines and Oxygen lines

## **WAY FORWARD**

- Ensure minimal stocking of inputs to execute work.
- Strict adherence to planning, implementation of CMs and PPM schedules.
- Improve water security through expansion of water reservoir with assistance from Ghana Water Company, and servicing of valves for constant flow of water.
- Provision of protective gear and improve the ambience of the department.
- Strengthen technical capacity through training.
- Expand water storage to ten days with a dedicated line.
- Install a new manifold for accident and emergency medicine.
- Completion and handing over of the following projects: -
  - Surgical 1<sup>st</sup> Floor theatre
  - Medical Block ICU
  - Kitchen Phase 2
  - Laundry Phase 2
  - NICU
  - Baby's Unit
  - New Emergency
  - Reproductive Health Building
  - Court H, SSNIT Flat and Slater 1
- West Africa Eye Centre among others
- Revamp sewage system
- Develop a master plan for the hospital
- Pursue more technical training for staff as well as customer care.
- Complete the installation of two new Medical gas plant with a total capacity of 220m<sup>3</sup>/h.
- Experiment with the use of solar street lighting in areas where cables are damaged.



# **Table: TOTAL CASES HANDLED**

CASES	MALE	FEMALE	TOTAL
CASES BROUGT FORWARD	6	11	17
NEW CASES REFERRED	254	206	460
TOTAL CASES HANDLED	260	217	477
INSTALMENT FACILITIES	202	194	396
PAUPERS	16	21	37
CASES CLOSED	228	223	451
CASES STILL PENDING	15	11	26

# **Table: NEW CASES REFERRED FROM VARIOUS WARDS**

WARD	MALE	FEMALE	TOTAL	%
SURGICAL	102	38	140	30.4%
PLASTICS	22	15	37	8.1%
ALLIED SURGERY	86	28	114	24.8%
CHILD HEALTH	36	22	58	12.6%
OBSTETRICS (MATERNITY)	-	45	45	9.8%
GYNAECOLOGY (CHENARD)	-	54	54	11.7%
POLYCLINIC	8	4	12	2.6%
TOTAL	254	206	460	100 %
TOTAL	55.2 %	44.8 %	100%	

**Table: PAYMENT BY INSTALMENT, 2013** 

DEPARTMENT	TOTAL NO. OF	TOTAL BILL	AMOUNT	BALANCE
	PATIENTS	GH¢	PAID GH¢	GH¢
SURGERY	159	130,158.87	90,296.43	39,862.44
PLASTICS SURGERY	29	42,247.15	27,034.97	15,212.18
ALLIED SURGERY	73	62,388.86	40,814.01	21,574.85
CHILD HEALTH	37	14,667.16	10,498.93	4,168.23
POLYCLINIC	7	1,058.23	829.00	229.23
GYNAECOLOGY	52	28,002.52	20,425.05	7,577.47
OBSTETRICS	39	12,722.72	10,675.12	2,047.60
TOTAL	396	291,245.51	200,573.	90,672.00
		100%	51 69%	31%

# **CHALLENGES**

- Inadequate financial support for efficient and effective operation.
- The high incidence of non-payment of bills leading to high incidence of detention puts heavy burden and responsibility on the staff
- Difficulty in locating family members and getting their support
- Lack of motivation for staff of the Unit.

# SUGGESTIONS/CONCLUSION

- Need to bring the plight of the needy patients to the attention of Ghanaians to enable them donate to support the socio-economic life of patients.
- Need to strengthen the control mechanism in order to minimize the incidence of non-payment of bills and detention.
- Periodic training for all medical social workers to update their knowledge and skills to meet emerging challenges.

It is hoped that the social welfare unit will continue to serve its purpose towards the disadvantaged in the hospital and the society at large.



# SUPPLIES UNIT INTRODUCTION

The Supplies Unit under the Directorate of Finance is responsible for managing all non-drug consumables and other supplies of the hospital. Its role involves the forecasting of material requirement in the hospital, initiating replenishment of materials, receiving and issuing of materials, monitoring and controlling of stock to ensure that UDS within the Hospital received their material requirement at the right time to enable them perform their functions without intermittent breaks in line with the operation.

The Unit has Logistics Section which ensures all material and equipment imported for the hospital are cleared from the port and delivered on time as well as other logistics activities.

There is also a sewing section within the Unit, which undertakes sewing of all linen and clothing items for the Hospital, including curtains, bed sheets and pillow cases, Lab Coats, abdominal sponges, operating towels, operating gowns and indeed all sewing activities in the hospital.

#### **STRUCTURE**

The Supplies Unit plays a middle level management function in the hospital, including initial acquisition arrangements, storage and management of materials as well as the management of information from the user departments. The Unit has a centralised storage structure with Fifteen (15) Satellite Stores at the various Sub BMCs and Departments. It also has a sewing section with all the requisite sewing equipment and personnel. The logistics section is also fully in operation to take care of all logistics needs of the hospital.

The centralised stores include Main Store Section 1, 2, 3, 4 and 5. The others are Engineering Store located at the Engineering Department and Central Receiving Bay providing supporting services of receiving and distribution of materials to all Sectional Stores.

Below is the functional structure of the Unit:



# OVERVIEW OF ACTIVITIES IN 2013 MATERIAL RECEIPTS AND ISSUES

During the period from January – December, 2013, the Supplies Unit handled receipts worth GH¢12,195,376. 50. Out of this value, Renal Dialysis Unit consumables was worth GH¢2,037,765.20 and laboratory consumables also GH¢1,356,669.71.

Total issues made to the various Sub-BMCs within the hospital for January – December 2013, was GH¢8,863,077.58, excluding the consumption's value of the Renal Dialysis Unit.

# OVERVIEW OF TOTAL SUPPLIES RECEIVED IN THE HOSPITAL AS COMPARED TO THE PREVIOUS TWO YEARS

Receipt	2011	2012	2013	%
	-	GH¢	GH¢	Change
Procurement	10,674,819.16	6,947,858.90	12,195,376.50	43.03%
Central Medical Store	25,745.00	122,820.00	46,510.00	-
Donation	9,500.00	43,171.53	129,122.00	64.57%
TOTAL	10,710,064.16	7,113,850.43	12,371,008.50	42.50%



# **MATERIALS & CONSUMABLES DISTRIBUTED TO THE VARIOUS SUB-BMCs**

Description	2011 GH¢	2012 GH¢	2013 GH¢	% Change
Consumable & Sutures	4,881,939.74	6,005,450.21	5,195,418.78	
Lab. Consumables	-	-	805,252.42	
Dressing	465,327.68	541,827.72	832,598.56	
Cleaning & cleansing	59,546.55	64,880.57	75,697.37	
Printing & Stationery	401,679.32	293,543.16	272,882.36	
Linen & Clothing	69,716.62	276,393.05	111,305.67	
Equipment	265,988.80	364,027.10	399,904.00	
Sanitary	74,743.67	105,946.43	557,236.82	
X-ray	366,505.66	233,910.81	202,153.40	
Med. Gases	952,000.00	365,155.88	344,849.40	
Clearing Cost	7,900.49	56,959.77	65,778.80	
TOTAL	7,545,348.53	8,308,094.70	8,863,077.58	6.26%

# **ACHIEVEMENT**

The supplies unit achievement for the year includes:

- Improvement on stock turnover to an appreciable level as a result of an increase in total consumption
- Re-organised activities within the stores to ensure efficiency in materials handling and distribution. This includes Reshuffling of all Stores Staff, Designed Organogram and Job responsibilities for all officers.
- Regular staff meeting was introduced in order to promote effective communication and information flow.
- Reduced rate of obsolescence of materials to almost zero through variety reduction strategy
- Training of Supply Staff in the basic knowledge of computing and inventory management
- Developed stock levels for every stocked items as well as Submitting purchasing request on time for procurement actions.



#### **CONSTRAINTS AND CHALLENGES**

EXPANSION AND UPGRADIND OF STORES FACILITY

For several years now there has never been any upgrading and modernisation of the Storehouse facilities in order to meet the changing trend in storage demands, however the other areas of the Hospital facilities continue to expand and even exceeded the capacity of the Storage facilities.

## LACK OF MOTIVATION TO STORES PERSONNEL

The stores personnel of the Hospital have not been getting necessary supports and commitment from the management due to the misconducts and behaviour of some of the Store officers. We, however, believe that should not affect the entire function of the Stores.

# **INADEQUATE STORAGE FACILITIES**

The Storehouse facilities for holding materials are becoming inadequate due to an increase in clinical and diagnostic units, as well as increase inpatient intake at the various treatment centres within the Hospital. This has compelled us to keep some of the materials on the verandas exposing them to the weather.

#### **CHANGING WOODEN DOORS TO METAL DOORS**

The existing doors for the Stores are not appropriate for effective use of Air conditioners and need to be changed in order to maintain the required temperature for the materials as specified by the manufacturers.

INSTALLATION OF INVENTORY MANAGEMENT SOFTWARE;

The Unit is still engaged in out-dated inventory management system due to delay in the installation of inventory management software and networking the stores activities for easy operation through ICT

#### **DELAY IN ORDER DELIVERY BY SOME SUPPLIERS**

Most of the consumable shortages being experienced in the Hospital recently are as a result of delay by some of the Suppliers after the contracts have been awarded to them.

## INADEQUATE MATERIAL HANDLING EQUIPMENT AND TOOLS

Currently there is no vehicle stationed in the unit to distribute materials to the satellite stores through to the Wards/Theatres on time, as well as Forklift for off-loading and loading goods.

The Unit currently has only Three (3) Orderlies out of which two are above the age of Fifty-Five making off-loading and loading goods difficult.

#### DONATION HANDLING AND DISTRIBUTION

It has been that most donations received in the hospital are received directly by the Sub-BMC without any proper records and documentation, and those that are received in the Main Stores also face challenge of following the proper procedures for distribution.



#### SUGGESTED SOLUTION

It is the expectation of the Unit that Management will endeavour to secure the under mentioned to facilitate the effective operations of the Unit.

- Renovation and upgrading of Storehouse and cold room storage facilities,
- Completion of inventory management software installation for the Unit in particular and the Hospital in general.
- Recruitment of additional qualified personnel (Supply Officers) to enhance performance,
- Information flow between stores and procurement should be strengthened in terms of goods delivery notification and sample presentation to the Stores for effective inspection.
- Periodic (Annual) Training support for Store staff for continuous improvement.
- Acquisition of new forklift for loading and off-loading of goods in the Hospital.
- Provision of a pick-up vehicle to facilitate on time distribution consumables to the user ends.
- Management support for formation of Stock Monitoring team
- Sensitisation of suppliers and other stakeholders on the store systems.
- All donated items must pass through stores for proper recording and documentation.

## **CONCLUSION**

Considering the fact that about 60 percent or more of the Hospital's capital is invested in material stocks, there is the need for collaboration and supports from the management and other stakeholders in order to eliminate shortages, losses and pilfering.

There is also the need to computerise the operations of the Unit to enhance effectiveness, efficiency and speedy monitoring as well as proper evaluation of Stores, Procurement and Suppliers performance. Inventory management software installation needs to be completed on time for productivity increase.

# PUBLIC RELATIONS UNIT INTRODUCTION

In 2013, the Public Relations Unit's focus was on deepening customer relations and information flow among staff of the Hospital.

The year marked 90 years since the Hospital's establishment and the Unit collaborated with the Anniversary Committee to make the celebration memorable one.

# **ACTIVITIES**

## 90<sup>th</sup> Anniversary Celebration

The Unit was part of the main Anniversary Committee and the sub-committees as well. Staff of the Unit liaised with relevant authorities to ensure that the various programmes slated for the celebration were successful.



Various dignitaries, including past hospital staff, chiefs, individuals and groups who had contributed towards Korle Bu's growth were invited to be part of the programme. The President of the Republic, His Excellency John Dramani Mahama launched the Hospital's 90<sup>th</sup> Anniversary celebration in December 2012. The Minister of Health, Honourable Sherry Ayittey and Sheikh Nuhu Sharubutu, the National Chief Imam joined the Hospital to climax the celebration. On October 9, 2013, the Minister of Health, the Board and Management of the Hospital commissioned some departments which had undergone renovation under the National Medical Equipment Replacement Project to mark the 90<sup>th</sup> birthday of the Hospital. An additional MRI/CT Scan centre established under the retooling project was also commissioned and handed over to the Hospital.

Some programmes which were organized for the 90<sup>th</sup> Anniversary celebration were blood donations, medical outreach, public lecture, health walk and durbar.

# **Complaints Centres**

The Unit increased the number of complaint centres within the major clinical departments of the Hospital by liaising with the Child Health Sub-BMC to open a desk at their OPD. The desk, which functioned very well in the year under review, was manned by national service personnel.

# **INTERNAL COMMUNICATION**

- Social Media Platform: In order to increase information flow among staff
  members, the Unit created a whatsapp group to inform staff of the Hospital's
  activities in a timely manner. The group was to also enable staff members give
  feedback and in turn inform the Unit of any occurrence in the Hospital. Within
  the first month of its creation, the platform received positive feedback and
  another group was set up to cater for new entrants. Currently, there are two
  Whatsapp groups for all categories of staff at the Hospital.
- **Staff Information Sheet:** In the year under review, 37 issues were circulated to all clinical, diagnostic and administrative departments in the Hospital.
- Corporate Emails: Corporate emails were activated for staff interested in having and using the Hospital's website address as their email. Currently, 190 staff have had their emails activated for them.
- **Korle Bu Bulletin:** Two editions of the Bulletin were published in the year under review. The Unit could not meet the required four publications for the year due to financial constraints.

# **EXTERNAL COMMUNICATION**

Public Education: The Unit liaised with TV3 Network and GTV to educate
the public on key health topics. Medical personnel from the various of the departments were contacted to speak on various health topics on the health segment of the GTV Breakfast Show, TV3's Day Break Show and Medical



Notes. The programme aired every Tuesday and Thursday respectively. By the close of the year, about 15 medical personnel from the clinical departments appeared on the programmes.

- **Documentary:** A documentary chronicling the Hospital's major achievement since its establishment in 1923 was produced and aired on GTV and TV3 Network. The documentary was aired in the course of the Hospital's 90<sup>th</sup> Anniversary celebration.
- Media Interviews and Facilitation: Throughout the year under review, the head of the Unit granted media interviews to explain Hospital-related issues. The Unit also assisted media personnel with professionals to explain disease conditions and their treatment.

#### **Other Activities**

- **Exhibitions:** Various companies continue to visit the Hospital to exhibit their products to staff. The Unit assists such companies with an appropriate location to ensure that while such companies reach their target audience, clinical activities are not disrupted. About 30 companies visited the Hospital in the course of the year.
- **Education:** The Unit continues to be part of the Hospital team that orients newly-recruited staff. Individuals, groups and schools interested in the history and activities of the Hospital are also given a tour by staff of the Unit.

#### **CHALLENGES**

The manpower for the Unit is inadequate. The Unit needs permanent staff to man the complaints centres. The Unit also needs a video camera for in-house productions and an appropriate computer to host the Hospital's website.

#### **WAY FORWARD**

- The Unit hopes to implement more innovative means to communicate with all categories of stakeholders.
- Training of frontline staff of the Hospital on good customer relations.

Production of videos on some best practices to be aired to patients at the main OPDs



# LAUNDRY UNIT INTRODUCTION

The Laundry Unit is responsible for providing adequate, clean and constant supply of linen to the wards, Outpatient Departments, theatres, laboratories, mortuary and non-clinical areas.

For the year under review, the Unit intended to provide On-Premises laundry (OPL) services to patients and staff and increase our productivity.

#### **STRATEGIES**

Some of the strategies to achieve this objective were;

- To ensure that linen is collected between 4:00am and 10:00am daily.
- Provide clean Hospital linen such as bed sheets, blankets, towels, theatre linen etc. in the clinical areas by 10:00am each day.
- Cleaning of soft furnishes, such as curtains, tablecloths etc. used in the nonclinical areas and return them within 24 hours.

## **AREAS OF ACTIVITY**

In the year under review the Unit successfully undertook some of its planned activities such as;

- Ensuring the prompt collection of clean linen and distribution them to their user areas on time.
- The Unit sorted all linen it received, distributed and processed them on time.
- Monitoring in order to minimise waste, cross infection and loss of linen in the hospital and to ensure quality patient care.
- Kept record of cleaning agents and other materials used.
- Staff at the Unit were appraised and routine ward rounds were also conducted to find out concerns about services.

# **CHALLENGES**

The main challenges faced by the Department in 2013 were;

- Inadequate laundry equipment.
- Frequent breakdown of equipment.
- Lack of flatwork ironer and inadequate tumble dryers for ironing and drying linen
- Inadequate linen circulation. The par-stock of linen is less than 1 (one), as a result, there was always pressure on the laundry staff to finish and provide clean linen to the wards.
- Lack of computer for printing out correspondences, keeping records etc.



# **Table: Available Equipment In 2013**

EQUIPMENT	QUANTITY	CAPACITY	IN USE	OUT OF ORDER	REMARKS
Washing machine	2	57KG CDW	2	-	Breaks down very often.
Washing machine	1	23KG CDW	1	-	Breaks down very often.
Tumble dryer	1	23KG CDW	1	-	Breaks down very often.

# **Table 2: NEW EQUIPMENT**

EQUIPMENT	QUANTITY	CAPACITY	INSTALLED AS AT OCTOBER 2013
Washing machine	10	57KG CDW	2
Flatwork ironer	3	-	1
Utility press	3	-	0
Tumble dryer	3	57kg CDW	1
Steam ironer	3	-	3

#### **OUTLOOK FOR 2014**

APPROVAL OF PROPOSAL: the Unit hopes that Management approves our proposal to generate income in order to ensure prompt repair of our equipment and maintenance of the whole unit and for all Units/Departments to pay for services provided

# SECURITY Introduction

The Unit carried out its mandate of providing security for staff, clients, and visitors and for the hospital property from theft, fire, waste and misuse.

# **Challenges**

- The Unit recorded nineteen (19) theft cases. All but six (6) were stealing of car side mirrors.
- Lack of personnel hindered the Unit's effort to curb down on hawking within the clinical areas.
- Unavailability of a duty vehicle to carry out day and night Patrols.
- Inability of the three-tier system to take off.



#### **Achievements**

- Joint patrols with the Korle Bu Police started in earnest from Wednesday 19<sup>th</sup> February, 2013.
- The Unit made a total of 12 arrests; ten (10) of them were side mirror thieves. The Unit latest arrest involved a storekeeper at the Maternity Stores with quantities of assorted consumables on Tuesday 30<sup>th</sup> July, 2013.
- Prevented fires from occurring on three different occasions.

# **Way Forward**

The way forward included the following:

- Positioning of CCTV Cameras at vantage points to make up for the low security strength.
- Provision of a duty vehicle for day and night patrols.
- Introduction of the three-tier system.
- The activation of the Police Visibility Patrols.

# **FINANCE DIRECTORATE**

# **REVENUE**

The Hospital receives its revenue inflow from three main sources, namely, Government of Ghana (GOG) Subvention, Donor Pooled Fund (DPF) and Internally Generated Fund (IGF).

The total revenue inflow to the Hospital for 2013 was GH¢129,337,327 as compared to GH¢127,774,386 in 2012 as shown in the table below.

GOG subvention for the year 2013 amounted to GH&86,793,662. This represents 67.11% of the total flow of revenue to the Hospital. The figure for 2012 was GH&89,276,694 representing 69.87% of total revenue inflows in 2012.

Donor Pooled Fund (DPF) inflows for the year 2013 amounted to GH¢308,590 representing 0.24% as compared to GH¢177,665 inflows in the year 2012 representing 0.14%.

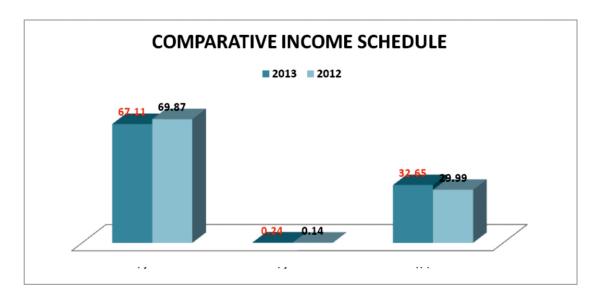


Internally Generated Fund (IGF) inflows in 2013 amounted to GH¢42,235,075 as compared to GH¢38,320,026 generated in 2012. This shows about a 10.23 % increase on the 2012 figures, IGF contribution was 32.65% of revenue generated in 2013.

The table and accompanying bar charts below shows the detail of revenue inflows by source of funding for the year 2013 with comparative figures for 2012.

**Table: Total Revenue Inflow by Source of Funding** 

	2013		2012	
Sources	_ % of Total		Amount GH¢	% of Total
		Income		Income
GOG Subvention	86,793,662	67.11	89,276,694	69.87
Donor Pooled Fund	308,590	0.24	177,665	0.14
IGF	42,235,075	32.65	38,320,026	29.99
GRAND TOTAL	129,337,327	100	127,774,386	100



The table below provides an analysis of the GOG subvention received during the year 2013.

A total of about GH&86,793,662 GOG subvention was released for the payment of personnel emolument, namely GH&86,513,214 for staff salaries, GH&280,447 for consultant top-up.



Table 4: GOG Subventions by item of expenditure

ITEMS	2013		2012	
GOG	<b>AMT IN CEDIS</b>	%	<b>AMT IN CEDIS</b>	%
GOG Salaries	86,513,214	99.68	88,068,328	98.65
Consultants Top-up	280,447	0.32	1,198,971	1.34
Goods & Services			9,395	0.01
Fixed Assets	-	-	-	-
Total GOG Subvention	89,793,662	100	89,276,694	100

# **EXPENDITURE**

The total expenditure incurred by the Hospital in 2013 was GH¢129,718,625 as compared to GH¢123,504,818 in 2012; an increase of 5%.

The table and accompanying bar charts below shows that about 67.15% of the total expenditure incurred in 2013 were funded from the GOG subvention while DPF accounted for about 0.07% and IGF accounted for 32.78% of the total in the year 2013.

Table 5: Expenditure according to source of funding

	201	3	201	2
Sources	Amount GH¢	% of Total Expenditure	Amount GH¢	% of Total Expenditure
GOG	87,109,672	67.15	89,259,649	72.27
Donor Pooled Fund	88,216	0.07	181,778	0.15
IGF	42,520,736	32.78	34,063,390	27.58
GRAND TOTAL	129,718,625	100	123,504,818	100

