**DEPARTMENT OF SURGERY ANNUAL REPORT 2012**

**Contact information**

P. O. Box 19676 KNH, Nairobi - 00202  
KENYA

2nd floor

School of Medicine,

College of Health Sciences, University of Nairobi.  
Kenyatta National Hospital (KNH) Campus - off Ngong Rd

Tel: +254 02 2722890 or +254-0202162064

Email: [dept-surgery@uonbi.ac.ke](mailto:dept-surgery@uonbi.ac.ke)

## VISION

A centre of choice for quality training, innovative research and policy development for the production of world-class surgeons and surgical health care providers.

## MISSION

To train high calibre surgical professionals, carry out creative, innovative and inventive research in current and emerging challenges, set and apply international standards in evidence and science based surgical healthcare provision, and be at the forefront of surgical policy formulation.

## CORE VALUES

* Strive to be a leader in surgical training, surgical research and surgical practice locally, regionally and internationally
* Espouse and impart the virtues of professional ethics and moral standards in training, research and practice
* Promote evidence based health care provision
* Promote research
* Promote teamwork
* Nurture responsible professionalism through a culture of mentorship
* Promote sensitivity and responsiveness to the community and its environmental needs
* Promote gender sensitivity in training, research and practice
* Promote optimum utilization of resources in surgical training, research and practice
* Encourage and champion continuing medical education

## DEPARTMENTAL MANAGEMENT TEAM

Chairman; Prof Stephen W.O. Ogendo

Thematic heads ; Prof. Nimrod J. Mwangombe (neurosurgery)

Dr. J. Githaiga (General surgery)

Dr. Stanley O. Khaninga (Plastic Reconstructive and Aesthetic Surgery)

Dr. Tom M. Omulo (Thoracic and Cardiovascular Surgery)

Dr. Joseph M. Ndungu (Paediatric Surgery)

Dr. Patrick R. Olang (Anaesthesia)

Dr. Peter Ndaguatha (Urology)

Administrative assistant ; Mr, Stephen Mulwa

CONTENTS

[VISION 2](#_Toc352772713)

[MISSION 2](#_Toc352772714)

[CORE VALUES 2](#_Toc352772715)

[DEPARTMENTAL MANAGEMENT TEAM 2](#_Toc352772716)

[MESSAGE FROM THE CHAIRMAN 2](#_Toc352772717)

[INTRODUCTION 2](#_Toc352772718)

[HUMAN RESOURCE 2](#_Toc352772719)

[FUNDING AND FINANCIAL MANAGEMENT 2](#_Toc352772720)

[ACADEMIC PROGRAMMES 2](#_Toc352772721)

[ADMISSIONS 2](#_Toc352772722)

[GRADUATES FOR 2012 2](#_Toc352772723)

[PARTNERSHIPS AND LINKAGES 2](#_Toc352772724)

[EXTERNAL EXAMINERS 2012. 2](#_Toc352772725)

[CONFERENCES ATTENDED BY STAFF MEMBERS 2](#_Toc352772726)

[PAPERS PRESENTED AT CONFERENCES 2](#_Toc352772727)

[FUNDED RESEARCH PROJECTS 2](#_Toc352772728)

[OTHER RESEARCH ACTIVITY 2](#_Toc352772729)

[PUBLICATIONS 2](#_Toc352772730)

[Abstract 2](#_Toc352772731)

[Abstract 2](#_Toc352772732)

[CONSULTANCIES 2](#_Toc352772733)

[FACILITIES AND INFRASTRUCTURE 2](#_Toc352772734)

[COMMUNITY OUTREACH 2](#_Toc352772735)

## MESSAGE FROM THE CHAIRMAN

## INTRODUCTION

The history of the department dates back to the inauguration of the medical school in 1968.

The department has groen significantly since and produced many pioneers for this country. The department has also been associated with many firsts e.g. heart surgery and kidney transplants to mention a few.

The department has graduated more than two hundred graduants. These grandaunts today serve not only in the country but internationally in top government institutions and organisations like the world Health Organisation.

Department of surgery continues to be a leader in academics within the country. In this role it has initiated the development of many new programmes that are anticipated to be operational by 2013. Plans are underway to initiate a master’s programme in Urology.

University expansion continues and it is possible the separation of the department of anaesthesia as a fully-fledged and independent department will be completed before the end of 2013. This separation will provide them with the required autonomy to expand and further broaden their programmes.

Academic staff continue to serve in many of the College activities.

## HUMAN RESOURCE

The department of surgery is the largest department in the university with 55 members of staff consisting of;

|  |  |  |  |
| --- | --- | --- | --- |
| **Academic staff** | **Number** | **Support staff** | **Number** |
| Professor | 5 | Administrative assistant | 1 |
| Ass. Professor | 6 | Secretaries | 2 |
| Senior lecturer | 4 | Support staff | 2 |
| Lecturer | 26 |  |  |
| TF | 13 |  |  |
| **TOTAL** | **54** |  | **5** |

In addition to the academic staff listed above, surgeons from the main Kenyatta national Hospital also participate in teaching activities.

## FUNDING AND FINANCIAL MANAGEMENT

The department met its recurrent expenditure through University capitation.

Funds are allocated into two main votes; teaching and equipment and furniture and office equipment.

The funds were managed as per College/ University financial regulations and other statutory requirements.

|  |  |
| --- | --- |
| Vote | Amount (2011/2012) |
| Teaching and office expenses | 564,400 |
| Traveling and transport expenses | 0 |
| Furniture and office equipment | 155,775.46 |

In addition the department received approximately 800,000 (2012) from the dean’s office for improvements in the departmental. This funding went into the seminar room and purchased and automated LCD system and computers for the departmental computer laboratory.

## ACADEMIC PROGRAMMES

The department of surgery continues to teach undergraduate MBChB and BDS students for the School of Medicine.

Programmes currently offered by the department of surgery are diploma, masters and PhD programmes.

1. Bachelor of Medicine Bachelor of Surgery
2. Bachelor of Dental Science
3. Master of Medicine in General Surgery (3 year programme gradually being phased out)
4. Master of Medicine in General Surgery (New 5 year programme)
5. Master of Medicine in Neurosurgery (6 year programme)
6. Master of Medicine in Anaesthesia (3 year programme)
7. Diploma in Clinical Audiology and Public Health Otology

The department recently completed review of the following programmes and as of the end of December were awaiting Senate approval.

1. Master of Medicine in Paediatric Surgery (5 year programme)
2. Master of Medicine in Thoracic and Cardiovascular Surgery (5 year programme)
3. Master of Medicine in Paediatric Surgery (5 year programme)
4. Master of Medicine in Anaesthesia (4 year programme)
5. Fellowship in Paediatric Anaesthesiology of the University of Nairobi (1 Year fellowship)
6. Diploma

## ADMISSIONS

For the various programmes offered I the department admissions of new candidates for 2012 were;

* MMeD General surgery 9
* MMeD neurosurgery 1
* MMeD ENT 10
* MMeD Anaesthesia 7
* Diploma in Clinical Audiology and Public Health Otology 3

Candidates offered admission in the various programmes but deferred for various reasons were eight (8).

## GRADUATES FOR 2012

From the various programmes on the college the following table shows the number of graduates for 2012.

|  |  |
| --- | --- |
| Programme | Graduates |
| MMed Anaesthesia | 6 |
| MMed General Surgery | 9 |
| MMed Neurosurgery | 0 |
| MMed ENT | 5 |
| Diploma in audiometry | 3 |
| TOTAL | 23 |

## PARTNERSHIPS AND LINKAGES

University of Colorado

University of Cape Town

University of Rwanda

## ACADEMIC STAFF ACTING AS EXTERNAL EXAMINERS 2012.

Prof. Joseph Oliech External Examiner, Aga Khan University, Nairobi

Prof. Z. W.W. Ngumi. External Examiner, National University of Rwanda

Prof. Pankaj Jani. External Examiner, University of Rwanda

Dr. P. Mugwe. External examiner for ENT to Muhimbili

Prof S. Ogendo. External examiner for cardiothoracic surgery to University of Addis Ababa

External examiner to College of Surgeons of South Africa

Prof Pankaj Jani External examiner to College of Surgeons of South Africa

External Examiner, National University of Rwanda

Dr. S. Khainga to Eldoret University as external examiner in general surgery

## CONFERENCES ATTENDED BY STAFF MEMBERS

Staff members attended various academic conferences or workshops during the year. These include national and international conferences.

|  |  |  |  |
| --- | --- | --- | --- |
| **S/NO.** | **NAME** | **DATES ATTENDED** | **CONFERENCES/WORKSHOPS ATTENDED** |
|  | DR. CHRISTOPHER MUSAU | 6th January 2012 | World Federation Of Neurosurgeons (WFNS) course, Serena Hotel, Nairobi |
|  | DR. JULIUS G. KIBOI | 6th January 2012 | World Federation Of Neurosurgeons (WFNS) course, Serena Hotel, Nairobi |
|  | DR. VINCENT D. WEKESA | 6th January 2012 | World Federation Of Neurosurgeons (WFNS) course, Serena Hotel, Nairobi |
|  | DR. CHRISTOPHER MUSAU | 6th January 2012 | World Federation Of Neurosurgeons (WFNS) course, Serena Hotel, Nairobi |
|  | DR. DAVID L. OLUNYA | 6th January 2012 | World Federation Of Neurosurgeons (WFNS) course, Serena Hotel, Nairobi |
|  | PROF. MUNGAI NGUGI | 8- 10TH March, 2012 | Men’s Health Stand-Alone Symposium in Hamburg, Germany. |
|  |  | 20nd – 24th March 2012 | Surgical Society of Kenya Annual Scientific Conference held in Kisumu, Kenya |
|  | PROF. G. MAGOHA | 27th to 2nd March 2012 | Workshop and conference of the Kenya Association of Urological Surgeons |
|  | PROF JOSEPH OLIECH | 27th to 2nd March 2012 | Workshop and conference of the Kenya Association of Urological Surgeons |
|  | DR. PETER NDAGUATHA | 27th to 2nd March 2012 | Workshop and conference of the Kenya Association of Urological Surgeons |
|  | DR. FRANCIS OWILLAH | 27th to 2nd March 2012 | Workshop and conference of the Kenya Association of Urological Surgeons |
|  | PROF PETER MUNGAI | 27th to 2nd March 2012 | Workshop and conference of the Kenya Association of Urological Surgeons |
|  | DR. FRANCIS OWILLAH | 20nd – 24th March 2012 | Surgical Society of Kenya Annual Scientific Conference held in Kisumu, Kenya |
|  | DR. DANIEL K. OJUKA | 20th – 24th March 2012 | Surgical Society of Kenya Annual Scientific Conference held in Kisumu, Kenya |
|  | DR.ELLY OPOT NYAIM | 20th – 24th March 2012 | Surgical Society of Kenya Annual Scientific Conference held in Kisumu, Kenya |
|  | DR. DAN KIPTOON | 20th – 24th March 2012 | Surgical Society of Kenya Annual Scientific Conference held in Kisumu, Kenya |
|  | DR. JOSEPH GITHAIGA | 20th – 24th March 2012 | Surgical Society of Kenya Annual Scientific Conference held in Kisumu, Kenya |
|  | DR. FRANCIS OSAWA | 20th – 24th March 2012 | Surgical Society of Kenya Annual Scientific Conference held in Kisumu, Kenya |
|  | DR. STANLEY KHAINGA | 20th – 24th March 2012 | Surgical Society of Kenya Annual Scientific Conference held in Kisumu, Kenya |
|  | DR. WANJALA NANGOLE | 20th – 24th March 2012 | Surgical Society of Kenya Annual Scientific Conference held in Kisumu, Kenya |
|  | DR. PETER KITUNGUU | 20th – 24th March 2012 | Surgical Society of Kenya Annual Scientific Conference held in Kisumu, Kenya |
|  | DR. DAVID KIHIKO KURIA | 20th – 24th March 2012 | Surgical Society of Kenya Annual Scientific Conference held in Kisumu, Kenya |
|  | DR. WANJALA FERDINAND NANGOLE | 20th – 24th March 2012 | Surgical Society of Kenya Annual Scientific Conference held in Kisumu, Kenya |
|  | DR. JAMES MUTURI NDUNGU | 20th – 24th March 2012 | Surgical Society of Kenya Annual Scientific Conference held in Kisumu, Kenya |
|  | PROF. ZIPPORAH W NGUMI | 20th – 24th March 2012 | Surgical Society of Kenya Annual Scientific Conference held in Kisumu, Kenya |
|  | PROF. JOSEPH OLIECH | 20th – 24th March 2012 | Surgical Society of Kenya Annual Scientific Conference held in Kisumu, Kenya |
|  | DR. MARK AWORI | 23 – 26TH APRIL 2012 | Annual General Meeting of the Kenya Cardiac Society, Travellers Lodge, Mombasa |
|  | PROF. JULIUS KYAMBI | 17-23RD March, 2012 | 9th PAPSA Biennial Conference 2012 in Cape Town, South Africa |
|  | PROF. PANKAJ G. JANI | 11- 13TH February, 2012 | 3rd Sudanese Society of Gastroenterology and 3rd International Digestive Cancer Alliance in Africa and Middle East Conference in Khartoum Sudan |
|  | PROF. ZIPPORAH NGUMI | 25- 30TH March, 2012 | 15th WFSA World Congress of Anaesthesiologists in Buenos Aires, Argentina. |
|  | DR. JOSEPH W. GITHAIGA | 4- 17TH February, 2012 | Observer in pre and post liver transplant management and gastro surgery in New Delhi, India |
|  | DR. PATRICK R. OLANG’ | 25- 30TH March, 2012 | 15th WFSA World Congress of Anaesthesiologists in Buenos Aires, Argentina. |
|  | DR. CAROLINE M. MWANGI | 18- 22ND February, 2012 | South Africa Society of Anaesthesiologists Annual Congress in Cape Town, South Africa |
|  | DR. THOMAS M. CHOKWE | 25- 30TH March, 2012 | 15th WFSA World Congress of Anaesthesiologists in Buenos Aires, Argentina. |
|  | DR. FRANCIS OSAWA | 9-12th May, 2012 | 23RD Annual meeting of the ESPU in Zurich, Switzerland |
|  |  | 18- 21ST March, 2012 | 9TH  Panafrican Paediatric Surgical Association biennial Conference in Cape Town, South Africa |
|  | DR. NDUNG’U MUTURI | 18- 21ST March, 2012 | 9TH  Panafrican Paediatric Surgical Association biennial Conference in Cape Town, South Africa |
|  | DR FRANCIS OWILLAH | 18th -25th May, 2012 | American Urological Association’s 2012 Annual meeting in Atlanta, Georgia, USA |
|  | PROF. MUNGAI NGUGI | 18th -25th May, 2012 | American Urological Association’s 2012 Annual meeting in Atlanta, Georgia, USA |
|  | VERNON M. GACII | 10th- 13th April, 2012 | Echocardiography Training organized by Sun Echo, Cape Town, S. Africa |
|  | PROF. ISAAC M. MACHARIA | 2nd -8th June, 2012 | All Africa ENT and Audiology Conference in Zimbabwe |
|  | PROF. PANKAJ G. JANI | 23rd – 27th April, 2012 | Association of Surgeons of Uganda in conjunction with A.S.E.A &COSECSA Regional meeting in Fort portal, Uganda |
|  |  | 8th-12th May,2012 | Africa Health 2012 Exhibition and conference in Johannesburg, S. Africa |
|  |  | 21st – 25th May, 2012 | 12th Annual Bethune Roundtable on Global Surgery Conference in Toronto, Ontario, Canada |
|  | DR. FRANCIS OWILLAH | 18th -25th May, 2012 | American Urological Association’s 2012 Annual meeting in Atlanta, Georgia, USA |
|  | DR. FRANCIS OSAWA | 8th -13th May, 2012 | European Society for Paediatric Urologist Conference (ESPU) in Zurich, Switzerland |
|  | DR. NDUNG’U MUTURI | 19th – 23rd March, 2012 | PARSA 2012 Congress in South Africa |
|  | DR. DANIEL K. OJUKA | 19th – 25th June, 2012 | The Fellowship at Yonsei University, Seoul, Korea |
|  | DR PETER MUGWE | 16th- 20th June, 2012 | European Academy of Allergy and Clinical Immunology in Geneva, Switzerland |
|  | SERAH N. NDEGWA | 2nd -8th June, 2012 | All Africa ENT and Audiology Conference in Zimbabwe |
|  | JOYCE M. ASWANI | 2nd June- 7th June, 2012 | AAENTA Congress and Exhibition in Victoria Falls, Zimbabwe |
|  | PROF. MUNGAI NGUGI | 30TH SEPTEMBER - 4TH OTOBER, 2012 | 32nd SU Congress, Fukuoka- Japan |
|  | PROF JOSEPH OLIECH | 30TH SEPTEMBER - 4TH OTOBER, 2012 | 32nd SU Congress, Fukuoka- Japan |
|  | PROF. ZIPPORAH NGUMI | 25th – 26th May 2012 | World Christian Doctors Network, Safari Park. |
|  | PROF NIMROD MWANGOMBE | 25th – 27th May 2012 | International Paediatric Neurosurgical Society Conference, Panafric Hotel, Nairobi |
|  | DR. CHRISTOPHER MUSAU | 25th – 27th May 2012 | International paediatric neurosurgical Society Conference, Panafric Hotel, Nairobi |
|  | DR. JULIUS G. KIBOI | 25th – 27th May 2012 | International paediatric neurosurgical Society Conference, Panafric Hotel, Nairobi |
|  | DR. VINCENT D. WEKESA | 25th – 27th May 2012 | International paediatric neurosurgical Society Conference, Panafric Hotel, Nairobi |
|  | PROF GEORGE MAGOHA | 4th July 2012 | Kenya Association of Urologic Surgeons and Urological Society of India on day meeting |
|  | PROF. JOSEPH OLIECH | 4th July 2012 | Kenya Association of Urologic Surgeons and Urological Society of India on day meeting |
|  | DR FRANCIS OWILLAH | 4th July 2012 | Kenya Association of Urologic Surgeons and Urological Society of India on day meeting |
|  | DR PETER NDAGUATHA | 4th July 2012 | Kenya Association of Urologic Surgeons and Urological Society of India on day meeting |
|  | PROF PETER MUNGAI | 4th July 2012 | Kenya Association of Urologic Surgeons and Urological Society of India on day meeting |
|  | PROF. PANKAJ G. JANI | 17TH- 19TH JULY,2012 | Laparoscopic Workshop, Kampala |
|  |  | 20TH-24TH AUGUST, 2012 | COSECSA Regional Meeting |
|  | DR. FRANCIS OSAWA | 9TH – 13TH JULY, 2012 | AMREF outreach to Bwera Hospital, Uganda |
|  | DR. CAROLINE MWANGI | 6TH- 14TH JULY, 2012 | Teach the Teacher Course for Doctors, London |
|  | DR. VINCENT D. WEKESA | 19TH-21 SEPTEMBER, 2012 | Copenhagen Skull Base Course 2012, Denmark |
|  | DR. CAROLINE MWANGI | September 2012 | National Clinical Officer Anaesthetists Conference, Mombasa, Kenya |
|  | PROF. S.W.O OGENDO | 8TH- 12TH OCTOBER, 2012 | Organizational Development Workshop, Dublin, Ireland |
|  |  | 15TH- 17TH OCTOBER, 2012 | College of Surgeons Examinations October 2012, Pretoria, S. Africa |
|  | PROF. Z. W.W. NGUMI | 22ND NOVEMBER- 2ND DECEMBER, 2012 | Operation Smile Mission, Philippines |
|  | DR. JOSEPH GITHAIGA | 10th to 11th October 2012 | mesh hernia surgery workshop at Nairobi Surgical skills Centre |
|  | DR. THOMAS M. CHOKWE | 4TH- 13TH OCTOBER, 2012 | Operation Smile Mission, Kisumu, Kenya |
|  | PROF. PANKAJ G. JANI | 8TH- 12TH OCTOBER, 2012 | Organizational Development Workshop, Dublin, Ireland |
|  |  | 15TH- 17TH OCTOBER, 2012 | College of Surgeons Examinations October 2012, Pretoria, S. Africa |
|  |  | 25TH- 27TH OCTOBER, 201 | Athens Advanced Seminar of IASGO, Athens, Greece |
|  |  | 28TH OCTOBER- 4TH NOVEMBER, 2012 | Medical/ Surgical Camp, Lesotho, S. Africa |
|  |  | 5TH- 7TH DECEMBER, 2012 | 17th Annual General Meeting and Scientific Conference of the SSE and COSECSA’s 13th Annual General Meeting and graduation ceremony, Addis Ababa, Ethiopia |
|  | PROF. PETER ODHIAMBO | 12TH-17TH NOVEMBER, 2012 | 5th Conference of Parties (COP 5) to the WHO Framework Convention On Tobacco Control, Seoul, S. Korea |
|  | DR. CAROLINE MWANGI | 15TH- 25TH NOVEMBER, 2012 | Operation Smile Mission, Lilongwe, Malawi |
|  | DR. VINCENT D. WEKESA | 13TH- 15TH NOVEMBER, 2012 | Advanced Skull Base Microanatomy Course, Florida, US |
|  | PROF. S.W.O OGENDO | 29TH OCTOBER- 2ND NOVEMBER, 2012 | Curriculum and Course design in Medical Education at Maastritcht University, Netherlands |
|  |  | 26th – 30th November 2012 | Trainer, bioethics and research ethics workshop, College of Health Science |
|  |  | 5TH- 7TH DECEMBER, 2012 | 17th Annual General Meeting and Scientific Conference of the SSE and COSECSA’s 13th Annual General Meeting and graduation ceremony, Addis Ababa, Ethiopia |
|  | DR. PATRICK OLANG | 4TH- 13TH OCTOBER, 2012 | Operation Smile Mission, Kisumu, Kenya |
|  | DR. F. NANGOLE WANJALA | 4TH- 13TH OCTOBER, 2012 | Operation Smile Mission, Kisumu, Kenya |
|  | PROF. PETER M. NGUGI | 7TH-12TH DECEMBER, 2012 | Urology CME, Bangkok, Thailand |
|  | PROF NIMROD MWANGOMBE | 2nd – 4th December 2012 | Panafrica Neurological Society. Methodist guest house, Nairobi |
|  | DR. CHRISTOPHER MUSAU | 2nd – 4th December 2012 | Panafrica Neurological Society. Methodist guest house, Nairobi |
|  | DR. JULIUS G. KIBOI | 2nd – 4th December 2012 | Panafrica Neurological Society. Methodist guest house, Nairobi |
|  | DR. VINCENT D. WEKESA | 2nd – 4th December 2012 | Panafrica Neurological Society. Methodist guest house, Nairobi |
|  | DR. DAVID L. OLUNYA | 2nd – 4th December 2012 | Panafrica Neurological Society. Methodist guest house, Nairobi |

## PAPERS PRESENTED AT CONFERENCES/WORKSHOPS

Prof. J. Oliech.

1. Colonic cancer presenting as lower urinary tract obstruction.

Prof S.W.O. Ogendo,

1. “Cardiac surgery in Kenya” at official opening of National Cardiac Centre in Dar es Salaam, Tanzania
2. “Plagiarism” at bioethics and research ethics workshop, College of Health Science

Prof Z. Ngumi.

1. Paediatric fellowship training in Kenya at 15th WFSA World Congress of Anaesthesiologists in Buenos Aires, Argentina.
2. World Christian doctors network. 25th – 26th May 2012 presented two papers; case presentation on faith healing safari park.

Prof P. Mungai

1. Urolithiasis in Kenya. Paper read at Kenya Association of Urologists meeting in Nairobi,
2. Lower urinary tract symptoms.
3. Kenya Association of Urological surgeons meeting, 27th to 2nd March 2012 “Forniers gangrene”
4. Surgical Society of Kenya meeting. “Cancer of prostate” SSK meeting
5. Men’s Health Stand-Alone Symposium in Hamburg, Germany. “Erectile dysfunction in aging man”
6. Oncology conference at Serena hotel. “Prostate cancer”

Dr. Joseph Githaiga

1. Recent advances in breast cancer surgery at the SSK meeting in Kisumu

Dr. Mark Awori

1. Mitral valve repair at Annual General Meeting of the Kenya Cardiac Society, Travellers Lodge, Mombasa

Dr. Caroline Mwangi

1. Airway management in patients undergoing surgery” at the National Clinical Officer Anaesthetists Conference, Mombasa, Kenya

Dr. Julius Kiboi

1. Advances in aneurysm surgery, coils vs clipping. Panafrican Association of Neurological Society (PAANS). Methodist guest house, Nairobi

Dr. Christopher Musau.

1. Pattern of aneurysms in Kenya. Panafrican Association of Neurological Society (PAANS). Methodist guest house, Nairobi

Dr. David Olunya.

Dr. Perter Ndaguatha

1. Ndaguatha PLW, Post urethral stricture repair, Transitional cell carcinoma of the Urethra. Paper read at Kenya Association of Urologists meeting in Nairobi,

Dr. David Kihiko

1. Paediatric urology in Kenya at the SSK meeting in Kisumu

Dr. Francis Osawa

1. Snake bites as seen in Kitui Distric Hospital at the SSK meeting in Kisumu

## FUNDED RESEARCH PROJECTS

The department run two funded research projects last year.

The local principle investigator for the first was Prof. Isaac Macharia in collaboration with University of Colorado, Denver. Study was entitled “Complications of otitis media in school children”. This study was conducted in 9 districts of Nakuru, Nayndarua, Kitu central, Embu east, Strarehe in Nairobi, Nyando, Eldoret east, and Kisii.

Data collection was completes in November

Budget for the study was about 15million Ksh.

The next local principle investigator is Prof Z. Ngumi. The Partnership for Advanced Care and Treatment (PACT-COE.) Project on collaboration with the University of Maryland KNH and Pumwani Maternity Hospital. The project aims to facilitate achievement of a comprehensive HIV prevention, care and treatment program in order to facilitate the Ministries of Medical Services and Public Health and Sanitation control the spread of HIV, and rapidly scale up HIV services within government run health facilities in Nairobi

This is a 5 year project now in and 3rd year. Budget allocation for 2012 was 4.3million.

## OTHER RESEARCH ACTIVITY

Another study underway is the rheumatic heart (REMEDY) Study. This study is a prospective, international (Africa and India), hospital-based registry; follow-up and outcome ascertainment at two-year follow-up. Kenya is one of the African countries participating and the local principle investigator is Prof. S. Ogendo.

The study first phase examines the epidemiological pattern of disease in participating countries. Phase two, due to commence in 2013 will looks into the genetic aspects of susceptibility to rheumatic heart disease following an attack of sore throat.

## PUBLICATIONS

For the year 2012 the following publications were produced by the department.

1. EW Hungu, SWO Ogendo. Thromboembolic and bleeding complications in patients with prosthetic heart valves at the Kenyatta National Hospital.[Annals of African Surgery - Vol 9 (2012)](http://www.ajol.info/index.php/aas/issue/current)

Background: Despite constant monitoring of anticoagulation in prosthetic valve patients, haematologic complications occur. This study documented the occurrence of such complications and associated risk factors at the Kenyatta National Hospital (KNH).  
Study design: Observational study reviewing 142 patients, 39 prospective and 103 retrospective.  
Outcome measures: International Normalised Ratio (INR); presence of signs and symptoms of haematological complications.  
Results: Forty four (31%) patients presented with bleeding tendencies, 28 grade I and 4 grade III. The most common thromboembolic complication was headache in 33 (23.2%) patients. Mean duration of anticoagulation for patients with complications was 82.9 months (± 64), compared to 60.8 months (± 43.8) in those without. Nine patients were non-compliant in taking medications, haematologic complications presenting in 8 of them.  
Conclusion: A positive association was established between hematologic complications and INR levels, duration of anticoagulation therapy, non-compliance in taking of medications, and increased period between clinic visits. Of these only the duration of anticoagulation was an independent predictor for haematological complications.

1. Kiboi JG, **Kitunguu PK**, Musau CK, Mwang’ombe NJ. Clinical experience and outcome of pituitary surgery in Kenyan patients at the Kenyatta National Hospital. African Journal of Neurological Sciences. December 2012

**ABSTRACT**

**Introduction.** Surgical extirpation of pituitary lesions and can be performed by craniotomy or trans-sphenoidal hypophysectomy. This could be for pituitary ablation, excision of pituitary adenomas, craniopharyngiomas, suprasellar meningiomas and other types of tumors of the sellar region. Despite this being a common neurosurgical procedure there is a paucity of data on the local Kenyan experience and outcomes following pituitary surgery.

**Study Design and Site.** A retrospective study at the Kenyatta National Teaching and Referral Hospital. **Objectives.** To evaluate the clinical presentation, management and outcome of patients undergoing surgery for pituitary lesions at the Kenyatta National Hospital. **Patients and Methods.** Following ethical approval, patients’ records were retrieved and assessed for clinical and radiologic features of pituitary lesions, surgical treatment and post operative outcome. All the data was coded and analysed using Statistical Package for Social Sciences (SPSS) version 16.0. **Results.** Sixty five patients, 39 (60%) female and 26 (40%) male patients were included. The mean age was 36.88 years (+ 14.689). The most common presentation were visual disturbances reported by 57 (87.7%) of the patients having reduction in visual acuity, while 37 (56.9%) had bitemporal hemianopia. Sixty two (95.4%) patients were operated during the study period and of these 28 (45.2%) by the transphenoidal approach as opposed to 34 (54.85%) by craniotomy. The pterional trans-sylvian approach was the most prevalent of transcranial hypohysectomies accounting for 17 (50%) patients, while 15 patients (44.1%) were operated by the subfrontal approach and two patients were operated via midline trans-callosal approach. Majority (96.4%) of trans-sphenoidal hypophysectomies were by sub-labial incision. Fifty (76.9%) of the patients had good functional outcome while 11 (16.9%) and 4 (6.2%) suffered moderate and severe disability respectively. Patients’ age (p=0.0029), duration of symptoms prior to surgery (p=0.0018) and surgical management versus conservative (p=0.001) significantly affected patient outcome. There was no statistically significant difference in outcome between patients of different sex (p=0.058) or the type of operation performed (p=0.191). **Conclusion.** Transsphenoidal and trans-cranial approaches are effective and safe treatment strategies for pituitary lesions with low morbidity, mortality and recurrence rates.

1. Mwang'ombe NJ. The role of young neurosurgeons in the development of neurosurgery.

Asian J Neurosurg. 2012 Jan;7(1):1. doi: 10.4103/1793-5482.95686.

The early development of neurosurgery was through the pioneering efforts of a few dedicated young neurosurgeons. In this editorial, I would like to outline the careers of three neurosurgeons, whose achievements during the early years of their careers had a major influence in the development of the speciality of neurosurgery.

Sir Victor Horsley was appointed the first neurosurgeon at the National Hospital for Neurology and Neurosurgery, Queen Square, London, in 1886, at the young age of 29 years. He qualified as a medical doctor at the University College Hospital (UCH), London, in 1881. He was able to establish his mark in the development of neurosurgery, by introducing bone wax and, through a collaboration with Robert Henry Clarke, the stereotactic frame. He was appointed Professor of Surgery at UCH in 1902. He conducted laboratory research and published articles on the thyroid and pituitary glands, and innervations of the larynx. His landmark contribution, at a relatively young age, was that of the stereotactic frame. The National Hospital for Neurology and Neurosurgery, Queen Square, London, has maintained that tradition of clinical work and research in the neurosurgical training of young neurosurgeons that I myself, have benefited from during my period there as a research registrar, during the period 1984 – 1988. Dr. Harvey Cushing made his groundbreaking achievements in neurosurgery, while in his thirties, at the Johns Hopkins as an an ‘associate’ in surgery to Dr. William Halsted. He established the Hunterian Laboratory, where he was able to conduct research on the pituitary gland and publish his first monograph on pituitary diseases in 1912. He established the Society of Clinical Surgery, in 1903, a forum for young surgeons in the world to meet and watch each other operate – a tradition that still remains and is very akin to the World Federation of Neurosurgical Societies′ Young Neurosurgeons Forum. At the time he left Hopkins for Peter Bent Brigham Hospital, Harvard, in 1913, he was already an international neurosurgeon and the acknowledged founder of organized neurosurgery as a specialty. Dr. Walter Dandy, who succeeded Harvey Cushing at Johns Hopkins, was another young achiever. He utilized the Hunterian Laboratory established by Cushing, to conduct experiments on the circulation of cerebrospinal fluid (CSF), and together with Kenneth Blackfurn, a pediatric registrar, contributed to our understanding of the circulation of CSF and hydrocephalus. He later made other significant contributions such as the introduction of encephalography and ventriculography. The young neurosurgeons of today will continue to play a major role in the development of neurosurgery, by building on the foundations laid down by the early pioneers, benefiting from the mentorship and skill-acquisition from the masters, laboratory research, and the translation of research findings into clinical practice. It is in the latter, as shown from the history of the pioneers, where the modern young neurosurgeons are more likely to leave a mark in the development of neurosurgery.

1. Ojuka KD, Nangole F, Ngugi M. Management of anterior abdominal wall defect using a pedicled tensor fascia lata: A case report. Case Rep Med. Volume 2012, doi: 10.1155/2012/487126. Hindawi Publishing Corporation

### Abstract

Degloving injuries to anterior abdominal wall are rare due to the mechanism of injury. Pedicled tensor fascia lata is known to be a versatile flap with ability to reach the lower anterior abdomen. A 34-year-old man who was involved in a road traffic accident presented with degloving injury and defect at the left inguinal region, sigmoid colon injury, and scrotal bruises. At investigation, he was found to have pelvic fracture. The management consisted of colostomy and tensor fascia lata to cover the defect at reversal. Though he developed burst abdomen on fifth postoperative day, the flap healed with no complications.

1. Ombati AN, Ndaguatha PL, Wanjeri JK. Risk factors for kerosene stove explosion burns seen at Kenyatta National Hospital in Kenya. Burns. 2013 May;39(3):501-6. doi: 10.1016/j.burns.2012.07.008. Epub 2012 Sep 19. Abstract. BACKGROUND: The kerosene stove is a common cooking appliance in lower and middle income households in Kenya and if it explodes, life threatening thermal burn injuries may be sustained by those using the appliance. Women tend to be victims more frequently since traditionally they are the ones who are involved in cooking. OBJECTIVES: The aim of this study was to determine risk factors predisposing to kerosene stove explosion burns seen at Kenyatta National Hospital. MATERIALS AND METHODS: The study was a prospective longitudinal descriptive study carried out at the Kenyatta National Hospital. Forty-eight patients who met the inclusion criteria were recruited into the study over a period of 6 months from November 2010 to April 2011 and the data was collected using a structured questionnaire. The analysis, using SPSS version 17.0 was done by associating occurrence of injury to: age, sex, socioeconomic status and level of education of patient. Charts and tables were used to present the results. RESULTS: The mean age of patients who sustained kerosene stove explosion burns was 23.6 years (SD±11.7) with the commonest age group being 20-39 years. More females were affected than males by a ratio of 7:3 and ninety two percent of those who sustained these burns were either from poor or lower middle socio-economic class. Stove explosions occurred mainly during cooking and when kerosene refill was being done. Most of the patients (63%) reported having bought kerosene from fuel vendors and almost all explosions were caused by the wick type of stove (98%). CONCLUSION: Young females from poor socioeconomic background were found to be at a higher risk for kerosene stove explosion burns. The wick stove is a common cause of burns especially when users unwittingly refill it with kerosene when already lit resulting in an explosion. Prevention can be done through evidence based public health education targeting the groups at risk and enactment of relevant laws.
2. Kihiko DK. Degloving Penile trauma in a 12 year old boy: A case report. *Annals of African Surgery* 2012;9:58-60

Abstract

Degloving injury of the penis is rare in children. Management has been controversial and not much literature exists. We present a 12 year old boy who sustained a degloving penile trauma after assault. We managed him by primary suture and local fl aps with good cosmetic and functional results.

1. Jani, P.G; Gill, H. & Kotecha, V. Difficult gallbladder surgery, improving patient outcomes through appropriate surgical decisions. East and Central African Journal of Surgery, Vol. 17, No. 1, 2012, pp. 77-84

**Abstract**  
**Background:** Cholecystectomy is becoming a common operation in Africa. The right upper quadrant is regarded by many as the most difficult area of the abdomen because of the variable anatomy, small sized ducts and the irritant nature of bile. The fact that patients present late also adds to the difficulty with identification of structures in this area. A good working knowledge of the incidence and types of anatomical variations is key to a safe cholecystectomy. About 50% of patients presenting with gallbladder pathology show a significant anatomical variations. This study aimed to improve awareness amongst surgeons, both consultants and those in training to improve patient outcomes with gall bladder pathology.   
**Case presentations:** Four patients who had re-do surgeries at three different private hospitals in Nairobi are presented and discussed. None of the primary surgery in the four cases was done any of the authors. The re-do surgery in the four cases was performed by the principal author. The four patients respectively had a bile duct injury post open cholecystectomy, cholecystostomy done for gall bladder empyema, a stricture from a previous biliary-enteric anastomosis and obstructive jaundice from chronic pancreatitis.   
**Conclusion:** The large number of variations in the anatomic structure of biliary tree imposes an imperative need for surgeons to have an adequate knowledge and understanding of those variations, in order to control the safety of the surgical procedure in this field. A large number of postoperative complications seen in this surgical area result from iatrogenic injuries incurred by a variation of anatomic elements. The role of the medical boards should change to confer consultant status only after a surgeon is capable of independent decision-making and after a reasonable number of cases with recorded good outcomes.

1. Okello G, Ndegwa SN, Halliday KE, Hanson K, Brooker SJ, Jones C. Local perceptions of intermittent screening and treatment for malaria in school children on the south coast of Kenya. Malar J. 2012 Jun 8;11:185. doi: 10.1186/1475-2875-11-185.

Abstract. BACKGROUND*:* The intermittent screening and treatment (IST) of school children for malaria is one possible intervention strategy that could help reduce the burden of malaria among school children. Future implementation of IST will not only depend on its efficacy and cost-effectiveness but also on its acceptability to parents of the children who receive IST, as well as those responsible for its delivery. This study was conducted alongside a cluster-randomized trial to investigate local perceptions of school-based IST among parents and other stakeholders on the Kenyan south coast. METHODS: Six out of the 51 schools receiving the IST intervention were purposively sampled, based on the prevalence of Plasmodium infection, to participate in the qualitative study. Twenty-two focus group discussions and 17 in-depth interviews were conducted with parents and other key stakeholders involved in the implementation of school health programmes in the district. Data analysis was guided by the framework analysis method. RESULTS: High knowledge of the burden of clinical malaria on school children, the perceived benefits of preventing clinical disease through IST and previous positive experiences and interactions with other school health programmes facilitated the acceptability of IST. However, lack of understanding of the consequences of asymptomatic parasitaemia for apparently healthy school children could potentially contribute to non-adherence to treatment, and use of alternative anti-malarial drugs with simpler regimens was generally preferred. The general consensus of stakeholders was that health workers were best placed to undertake the screening and provide treatment, and although teachers' involvement in the programme is critical, most participants were opposed to teachers taking finger-prick blood samples from children. There was also a strong demand for the distribution of mosquito nets to augment IST. CONCLUSION: School-based malaria control through IST was acceptable to most parents and other stakeholders, but careful consideration of the various roles of teachers, community health workers, and health workers, and the use of anti-malarial drugs with simpler regimens are critical to its future implementation.

1. Aswani J. Baidoo K. Otiti J. Establishing a head and neck unit in a developing country. J. Laryngol Otol. 2012 June; 126(6):552-5.

### Abstract

Head and neck cancers pose an especially serious problem in developing countries due to late presentation requiring complex surgical intervention. These countries are faced with many challenges, ranging from insufficient health care staff to problems with peri-operative requirements, diagnostic facilities, chemoradiation services and research funding. These challenges can be addressed through the training of head and neck surgeons and support personnel, the improvement of cancer awareness in local communities, and the establishment of dedicated head and neck institutes which focus on the special needs of head and neck cancer patients. All these changes can best be achieved through collaborative efforts with external partners. The Karl Storz Fellowship in Advanced Head and Neck Cancer, enabling training at the University of Cape Town, South Africa, has served as a springboard towards establishing head and neck services in developing sub-Saharan African countries.

1. Challenges of inappropriate timing of hypospadias repair. Annals of African surgery journal 2012

No abstract

## CONSULTANCIES

Full list of consultancies to follow.

Departmental academic staff continue to offer consultancy services to the KNH.

## FACILITIES AND INFRASTRUCTURE

New facilities acquired in the 2012 year include a new LCD with motorised screen for the departmental board room. These were kindly supplied through funding from the office of the dean.

Work continued on the video link between the main theatre complex and lecture theatre 2. Last phase remains and anticipated to be operational by early 2013.

## COMMUNITY OUTREACH

Staff within the department offer community service through a number of avenues.

Members of academic staff took a prominent part in the annual Surgical Society of Kenya surgical camp. This took place in North Rift region between 27th and 30th September 2012. Dr. Owillah as the chairman of the Society led the surgical teams.

Staff members also play a leading role in professional bodies and these include the following;

* Prof George Magoha Chairman of the Kenya Medical Practitioners and Dentists Board
* Prof. Ziporah Ngumi is a member of the Kenya Medical Practitioners and Dentists Board
* Dr.Elly Opot Nyaim is member of the Kenya Medical Practitioners and Dentists Board
* Prof George Magoha Chairman of the Kenya Association of Urological Surgeons
* Dr.Elly Opot Nyaim a lecturer in the Department of Surgery is the current Chairman of the Kenya Medical Association (KMA).
* Dr.Elly Opot Nyaim and Dr. D. Ojuka re council members of the Surgical Society of Kenya.
* Dr. F. Owilla, chairman of the Surgical Society of Kenya.
* Dr. Mark Awori is vice chairman of the Kenya Cardiac Society

Other individual staff members continue to involve themselves in community activities.