





THEME: ACCESS TO ESSENTIAL EMERGENCY SURGICAL CARE IN THE GAMBA SUBTHEME: USE OF AI IN SURGICAL TRAINING AND PRACTICE IN DEVELOPING COUNTRIES



# BOOK OF ABSTRACTS

# BISSC 3 11 & 12 APRIL 2025

SIR DAWDA KAIRABA JAWARA INTERNATIONAL CONFERENCE CENTER



# ORGANISED BY





# EDWARD FRANCIS SMALL TEACHING HOSPITAL UNIVERSITY OF THE GAMBIA

# **CONFERENCE HOSTS**



Dr Mustapha Bittaye CHIEF HOST Chief Medical Director Edward Francis Small Teaching Hospital



Prof Gabriel Ogun Co-CHIEF HOST Provost School of Medicine and Allied Health Sciences University of The Gambia



Dr Cherno S Jallow Event Custodian Deputy Chief Medical Director & Head of Department of Surgery Edward Francis Small Teaching Hospital

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Dr Patrick Idoko Senior Consultant Obstetrician Gynaecologist Scientific Committee Lead



**Dr Rohey Jarju** *Registrar OBGN* Welfare Lead



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**Dr Neneh Bah** Senior Registrar, OBG YN Fundraising Committee Lead



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Dr Dado Jabbie Senior Registrar, OBGN Member LOC



Dr Fatoumata Jarjusey Senior Registrar OBGYMMember LOC



Dr Massirending Njie CEO Bansang General Hospital Member LOC

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## FUNDRAISING COMITTEE

Dr Fatoumata A Bah Dr Fatou Taal Dr Mariama Nyang Dr Aminata Jarjou Dr Ramatoulie Drammeh Dr Isatou M Ceesay

## WELFARE COMMITTEE

Dr Sohna Joof Dr Mama Sankareh Dr Fatou Faburay Dr Kumba Senghore

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Dr Lamin Jaiteh **Dr Charles AP Roberts** Dr Firas Aliregsousi Dr Kebba S Marenah Dr Matthew Anyanwu Dr Egwu Wabs Onuwabuchi Dr Kajali Camara Dr Abdoulie Keita Dr Egwu Wabs Onwuabuchi Dr Neneh Bah Dr Alagie Manneh Dr Sabina Kangakan Dr Lamin O Beyai Dr Neneh Jewo Baldeh Dr Momodou Lamin Conteh Dr Musa Saidy Khan Dr Yankuba Jabbie

## **OUTREACH TEAM**

Dr Alagie Manneh Dr Aminatta Manneh Jallow Dr Sabina Kangakan Dr Michael PK Mendy Dr Makumba Cham Dr Ridhwan Sanni Dr Almamy Kanteh Dr Saikou Manka







# PROGRAM Schedule



**EFSTH** 

University of

## 7<sup>th</sup> -10<sup>th</sup> April 2025

## EFSTH BANJUL

## EFSTH NDEMBAN CENTER

## KANIFING GENERAL HOSPITAL

## BANSANG GENERAL HOSPITAL

14<sup>th</sup> -18<sup>th</sup> April 2025

## EFSTH BANJUL

## EFSTH NDEMBAN CENTER

## KANIFING GENERAL HOSPITAL

## BANSANG GENERAL HOSPITAL



## CONFERENCE PROGRAM SUMMARY

## DAY 1: FRIDAY 11<sup>TH</sup> APRIL 2025

Time	Activity	Location
8:00-9:00	Arrival and Registration	Reception
9:00-10:50	Plenary 1	Plenary Hall
10:50-11:30	Tea break	Banquet Hall
11:30-13:20	Opening Ceremony	Plenary Hall
14:00-15:00	Lunch	Banquet Hall
15:00-15:45	Breakout Sessions Woman Centered Abortion Care Workshop	Thematic Hall 2 Thematic Hall 3 Thematic Hall 4 Plenary Hall
15:50-16:45	Breakout Sessions Abortion workshop	Thematic Hall 2 Thematic Hall 3 Plenary Hall

## DAY 2: SATURDAY 12th APRIL 2025

Time	Activity	Location
08:30-9:30	Plenary 2	Plenary halls
9:30-10:20	Breakout sessions VVF Workshop	Thematic Hall 2 Thematic Hall 3 Thematic Hall 4 Plenary Hall
10:20-11:00	Tea break	Banquet Hall
11:00-12:30	Plenary 3	Plenary Hall
12:30-14:00	UTG @ 25	Plenary Hall
14.15 - 1500	Closing Ceremony	Plenary Hall
15:00	Lunch	Banquet Hall
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## DAY 1: FRIDAY 11th April 2025

## 9:00-10:50: Plenary 1 Chair: Dr Pamela Esagnbado Rapporteurs: Dr Anthony R Jatta, Meeta Bah

## Meeting Room: Plenary Hall Co-Chair: Dr Mustapha Bittaye

Time	Title	Speaker
9:00-9:15	Levelling access to emergency trauma/fracture care - The implant conundrum	Kebba S Marenah
9:15-9:30	Access to emergency paediatric surgery care in The Gambia	Cherno S Jallow
9:30-9:45	Quality maternity care in The Gamboa – the case for a volunteer obstetrician scheme.	Patrick Idoko
09:45:09:55	The role of surgical volunteer organisations in enhancing surgical healthcare in low- income countries: A case study of AMISURG foundation in The Gambia.	Lamin O Beyai
09:55-10:10	Paediatric ocular trauma in The Gambia: Is access to care influencing outcomes?	Olufunmilola A Ogun
10:10-10:25	Achieving quality urological outcomes	George Fowlis
10:25-10:50	Q&A	All

## 10:50-11:30 Tea Break 11:30- 13:20 Opening Ceremony Meeting Room: Plenary Hall

11:20-11:30	Arrival of members of the high table	Welfare committee/ MC
11:30-11:35	National Anthem	Police band
11:35-11:45	Welcome address LOC Chair	Dr Abubacarr Jah
11:45-11:55	Address by Chief Host	Dr Mustapha Bittaye
11:55-12:05	Address by VC UTG	Prof Herbert Robinson
12:05-12:15	Statement by the Minister of Higher Education, Research, Science and Technology	Prof Pierre Gomez
12:15-12:25	Statement by Minister of Health	Dr Ahmadou L Samateh
12:25-12:35	Goodwill message WACS past president	Prof Serigne Magueye Gueye
12:35-13:00	Keynote Lecture: Access to emergency surgical care in The Gambia	Dr Melville Omorlabie George
13:00-13:15	Address by the President and Declaration of the Conference Open	His Excellency
13:15-13:20	National Anthem: VIPs exit and Group Photographs	Police Band



## DAY 1: FRIDAY 11th April 2025 Thematic Hall 1

13:30-13:50: Lunch break

#### Meeting Room: Thematic Hall 1 15:00-15:45 Chair: Dr Abdoulie Keita Rapporteur: Dr Mariama Fatty

**Co-Chair: Dr Elizabeth Innis Akaneme** 

15:00-15:07	The burden of postpartum psychosis in EFSTH	Aminata Cham
15:08-15:15	Prevalence, common causes and predictors of primary postpartum hemorrhage; a one- year review in the Edward Francis Small Teaching Hospital,Banjul, The Gambia.	Mariama Gibba
15:15-15:22	Longitudinal studies on the leading cause of Neonatal mortality in preterm births at EFSTH	Modou Lamin Conteh
15:22-15:29	Rapid weight gain in pregnancy	Modou Lamin Conteh
15:30-15:45	Q&A	All

#### 15:55-16:45 Chair: Dr Firas Alireqsousi Co-Chair: Dr Dado Jabbie Rapporteur: Kulaymata Mamburay

15:55-16:02	Chemosensitivity of Granulosa cell tumour - what is the evidence?	Mariama Gomez
16:02-16:09	Characteristics and Outcomes of Abortion at EFSTH in Banjul, The Gambia: A Retrospective Study	Aishatou Jallow
16:09-16:16	Factors affecting the uptake of papanicolaou(pap) smear for cervical cancer screening in women in EFSTH, The Gambia: a quantitative study	Fatoumata Jarjusey
16:16-16-23	Prevalence and risk factors of preterm births at EFSTH	Modou Lamin Conteh
16:23-16:30	Factors that influence choice of medical specialization/Career of medical students at UTG	Mariama Bass
16:30-16:45	Q&A	All





The Gambia

## DAY 1: FRIDAY 11<sup>th</sup> April 2025 Thematic Hall 2

**Meeting Room: Thematic Hall 2** 15.00 - 15.45 **Chair: Dr. Kebba S Marenah Co-Chair: Dr Aminata Manneh** 

### **Rapporteur: Dr Alhagie O Ceesay**

15:00-15:07	Access to essential emergency neurosurgical care in the Gambia-role and impact of mobile CT scan	John Nute Jabang
15:08-15:15	Decompressive craniectomy in acute malignant ischemic infarction of the middle cerebral artery. Experience in Ethiopia and Gambia. Report of 2 cases.	Damian Lastra Copello
15:16-15:23	Microneurosurgery in the Gambia - where are we?	John Nute Jabang
15:23-15:30	Surgical Management of Epidural Hematoma at Edward Francis Small Teaching Hospital from January 2019- December 2024	Makumba Cham
15:30-15:45	Q&A	All

15.55 - 16.45 **Chair: Prof Augustine E Agbakwuru Co-Chair: Dr Cherno S Jallow** Rapporteur: Dr Abdou Aziz Jammeh

15:55-16:02	The first comparison of hip fracture incidence across 4 countries in Africa	Kebba S Marenah
16:04-16:09	Surgical Management and Outcome of Spinal Tuberculosis in Edward Francis Small Teaching Hospital	Yohana Camejo Sanchez
16:09-16:16	Challenges to fracture service availability and readiness provided by allopathic and traditional health providers; national surveys across The Gambia and Zimbabwe	Kebba S Marenah
16:16-16-23	Comparative analysis of total hip replacement approaches at EFSTH from 2022 to 2024.	Richard C Oguocha
16:23-16:30	Diagnosis and treatment of giant cell benign tumour in low income countries- a case study at EFSTH.	Modou Jeng
16:30-16:45	Q&A	All





The Gambia

# DAY 1: FRIDAY 11th April 2025 Thematic Hall 3

#### **Meeting Room: Thematic Hall 3** 15.00 - 15.45 **Chair: Prof Abubakar Ballah Co-Chair: Dr Alagie Manneh Rapporteur: Dr Mariama Sidibeh**

15:00-15:07	Use of trans-urethral snares for JJ stent removal without cystoscopy	Esther Westwood
15:07-15:15	Spectrum of urological diseases at the surgical outpatient clinic at Edward Francis Small Teaching Hospital in Banjul (January 2025 – December 2024): The implication on training and policy.	Aishatou Jallow
15:15-15:22	Challenges in the management of a Giant Condyloma Acuminatum in a sexually active male driver in The Gambia: A case report	John Chukwuemeka Amamdikwa
15:22-15:29	Epidemiology and Outcome of Biliary Atresia in a Low-Income Country: The Gambia	Alagie Baldeh
15:30-15-45	Q&A	All

### 15.55 - 16.45 **Chair: Dr Winston O Ceesay Co-Chair: Dr Ousman Sanyang Rapporteur: Ndey Jorr Jadama**

15:55-16:02	Profile and management outcomes of patients admitted at Edward Francis Small Teaching Hospital on account of diabetic foot ulcer.	Amfaal Mbye
16.02 – 16.09	Access to Emergency Care: Evisceration and bowel injury due to Penetrating abdominal injury.	Lamin O Beyai
16:09-16:16	Histopathological findings of upper gastrointestinal endoscopy biopsies in a tertiary hospital in The Gambia: A 2 year retrospective study.	Ndey Mariam Joof
16:16-16:23	Severe Burns in a Socially Isolated Patient Who Was Burnt Alive by a Group of vigilantes	Pa Samba Secka
16:23-16:30	Exploring Breast Cancer Awareness and Screening Practices Amongst Rural Women in the Gambia	Fatoumatta Jitteh
16:30-16:45	Q&A	All
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## DAY 1: FRIDAY 11th April 2025 Thematic Hall 4

## Meeting Room: Thematic Hall 4: Workshop: Woman centered abortion Care 15.00 – 16.45 Moderator: UNFPA Rapporteur: Hadiza Mariam Sesay

15:00-15:10	Overview of Abortion	Patrick Idoko
15:10-15:20	Medical Management of Abortion	Neneh Bah
15:20-15:40	Surgical manangement and steps of the MVA Procedure	Egwu Wabs Onwuabuchi
15:40-16:00	Pain Management during MVA	Matthew O Anyawu
16:00-16:15	Processing MVA aspirator and cannulae	Nadia Pitt
16:15-16:25	Post abortion Care	Patrick Idoko
16:25-16:45	Q&A	All



## DAY 2: Saturday 12th April 2025

Meeting Room: Plenary Hall 8.30 – 09.30 Chair: Prof Serigne Magueye Gueye Co-Chair: Dr Charles AP Roberts Rapporteur: Dr Ndey Cham, Mariama Bass

08:30-08:37	Knowledge, practice and barriers of infection control among healthcare workers	Yankuba Jabbie
08:37-08:44	Health Care Providers' Knowledge, attitude and Practice of Antimicrobial Resistance in EFSTH	Haddy Tunkara Bah
08:44-08:51	Improving operating room efficiency: reducing delays between Anesthesia induction and surgical start times and turnaround time	Abubakar Ballah
08:51-08:58	Improper Usage of WHO Surgical Safety Checklist in Operating rooms at Edward Francis Small Teaching Hospital (EFSTH)	Balogun Selimat Oluwatoyin
8:58-9:05	Assessment of pain management satisfaction among surgical Patient at the Edward Francis Small Teaching Hospital	Jung Manneh
09:09-09:24	Q&A	All

#### Meeting Room: Thematic Hall 1 9.30 – 10.25 Chair: Dr Haddy Tunkara Bah Rapporteur: Aminata Cham

09:30-09:37	Analysis of Maternal Mortality Trend at Edward Francis Small teaching hospital from January 2020 to August 2024	Oluwabusola Juliet Adebesin
09:37-09:44	Prevalence, outcomes and common factors of labour induction among women delivered in a secondary health facility in west central region The Gambia	Rohey Jarju
09:44-09:51	Prevalence of acute kidney injury in hypertensive disorders of pregnancy in The Gambia	Haddyjatou Awe
09:51-9:58	Epidemiology of Severe Hypertensive Disorders of Pregnancy in Pregnancy in EFSTH from 5th of August-2nd of September 2024.	Olajumoke Akinyemi
09:58-10:05	Access to essential emergency surgical care in The Gambia - A literature review	Ndey Jorr Jadama
10:05-10:25	Q&A	All

**Co-Chair: Dr Masirending Njie** 



# DAY 2: Saturday 12th April 2025

Meeting Room: Thematic Hall 2 9.30 – 10.25			
Ch	air: Dr Anu Paul	Co-Chair: Dr Sabina Kangakan Rapporteur: Fatin	na Drammeh
	09:30:09:37	The indication and patterns of adult eye theatre procedure at Sheikh Zayed Regional Eye Care Centre	Kulaymata Mamburay
	09:37-09:44	Indications for General Anesthesia at Shiehk Zayed Regional Eye Care Center from August 2020 to August 2023	Musa Kunkung Jobarteh
	09.44 - 09.51	Psychogenic non epileptic seizures	Modou Lamin Conteh
	09.51 – 09.58	Treatment outcomes of work-related injury at EFSTH-The Gambia.	Modou Jeng
	09.58 – 10.05	Indications and diagnosis of upper gastrointestinal endoscopy in EFSTH	Fanta Jabbie
	10:05-10:12	Risk Factors and non union after intramedullary nailing of tibial fractures in EFSTH.	Isatou Barry
	10.12 -10.30	Q&A	All

## Meeting Room: Thematic Hall 3 9.30 – 10.25

Chair: Prof Olufunmilola Ogun Co-Chair: Dr John Jabang Rapporteur: Dr Fatoumata A Bah

09.30 – 09.37	Burden of Head Injury in the Neurosurgery unit at Edward Francis Small Teaching Hospital from July 2022 to June 2023.	Anthony R Jatta
09.37 – 09.44	Awake Craniotomy in Sharab Hospital with endoscopic support, guided by intraoperative ultrasound, Imeka Neuronavigator and MRI for excision of low-grade Astrocytoma. Case Report.	Damian Lastra Copello
09.44 - 09.51	The beginning of neurosurgical practice at Sharab hospital. Republic of the Gambia. Period 2024-2025.	Damian Lastra Copello
09.51 - 09.58	1st Global Neurosurgery Fellowship in the Gambia	Pia M Sarto
09.58 – 10.05	Review of the impact of the Swedish African Neurosurgical Collaboration (SANC) mission to The Gambia	
10.05 - 10.12	Intubation without muscle relaxants; haemodynamic variability among children aged less than 5 induced with halothane compared to sevoflurane	Abubakar Ballah
10.12 -10.30	Q&A	All



## DAY 2: Saturday 12th April 2025

## 9.30 – 10.30 Meeting Room: Thematic Hall 4 VVF workshop Moderator:

Rapporteur: Mariama K Drammeh

09.30 - 09.45	Principles of repair of simple midvaginal VVF	Serigne Magueye Gueye
09:45-10:00	Complex Fistula	Abubacar Jah
10:00-101;10	Prevention of Obstetric Fistula	Patrick Idoko
10:10-10:30	Q&A	All

### 10.30 – 11.00 Tea Break

#### 11.10 – 12.30 Meeting Room: Plenary 3 Chair: Prof Gabriel Ogun Co-Chair: Dr George Fowlis Rapporteurs: Dr Kebba Camara, Aishatou Jallow

11:15-11:22	From Scalpels to Algorithms: The Risk of Dependence on Artificial Intelligence in Surgery	John Chukwuemeka Amamdikwa
11:25-11:29	Influence of artificial intelligence (AI) in healthcare – a review of current literature.	Meeta Bah
11:29-11:36	Use of an artificial intelligence scribe in Paediatric Urology clinics	Esther Westwood
11:36-11:45	The use of artificial intelligence in medical research	Lamin Jaiteh
11:45-11:25	Q&A	All

#### 12.30 - 14.00

#### Meeting Room Plenary 4: UTG @25 ( session sponsored by University of The Gambia) Moderator: Prof Herbert Robinson

12:35-12:40	Opening Remarks	Moderator
12.40 - 13:00	SMAHS -the beginnings	Prof Ousman Nyan
13:00-13:20	SMAHS - future	Prof Gabriel Ogun
13:20-13:35	Alumni call	Dr Mustapha Bittaye
13.35 - 13.55	Response	All





## DAY 2: Saturday 12th April 2025 CLOSING CEREMONY

#### Meeting Room: Plenary Hall 14.00 – 14.45 Closing ceremony Moderator: Dr Masirending Njie

14.00 - 14.10	Remarks by co-host	Dr Cherno S Jallow
14.10 - 14.25	Recognition and certificate ceremony	Dr Mustapha Bittaye
14.25 - 14.35	Closing statement: co-chair LOC	Dr Charles Roberts
14.35 - 14.45	Vote of Thanks: Chair Scientific Committee	Dr Patrick Idoko
14.45 -14.55	Group Photograph	All

15.00 – 15.45 Lunch LOC debrief at lunch

## ABSTRACTS

## THE ROLE OF SURGICAL VOLUNTEER ORGANIZATIONS IN ENHANCING SURGICAL HEALTHCARE IN LOW-INCOME COUNTRIES: A CASE STUDY OF AMISURG FOUNDATION IN THE GAMBIA.

Lamin O. Beyai<sup>1</sup>, Alagie Manneh<sup>2</sup>, Cherno S Jallow<sup>2</sup>, Abdulhamid Kanteh<sup>3</sup>, Ebrima Charty<sup>4</sup>, Fatoumatta Baldeh<sup>2</sup>

<sup>1</sup>Kanifing General Hospital
<sup>2</sup>Edward Francis Small Teaching Hospital
<sup>3</sup>Brikama General Hospital
<sup>4</sup>Dr Alagie Manneh International Charitable Surgical Foundation

**Introduction:** Access to surgical healthcare remains a critical challenge in low-income countries. This is exacerbated by long waiting lists and limited resources, particularly in provincial areas. This paper examines the pivotal role of surgical volunteer organisations in addressing these challenges, focusing on the AMISURG Foundation in The Gambia.

AMISURG Foundation was founded and operated by Gambian surgical healthcare providers. Its mission is to shorten surgical waitlists by conducting surgical camps in provincial hospitals. Through proper patient recruitment and the mobilization of skilled surgeons, anaesthetists, and perioperative nurses, the foundation delivers essential surgical services to underserved populations. This paper also explores the impact of the AMISURG Foundation, shedding light on its contributions to improving surgical healthcare access and outcomes in The Gambia.

**Objectives:** To describe the impact of volunteer surgical foundations in low-resource settings like The Gambia.

**Method:** Surgical records from seven different surgical camps were reviewed and analysed, describing the total number and types of surgeries done.

**Findings:** Over a period of 3 years and eight surgical camps, AMISURG conducted 453 surgeries. These camps were held in hospitals with surgical capabilities all over the country. Cases ranged from General surgery to pediatric Surgery, Obstetrics and Gynecology, Plastic Surgery, and Urology. This has led to improved access to surgeries, especially non-emergency surgeries, reducing waitlists nationwide, improving surgical skills of Surgical Residents and Medical Officers, improving awareness of the importance of surgical care, and strengthening of regional healthcare systems.

**Conclusions:** The role of surgical foundations, exemplified by the case study of AMISURG Foundation in The Gambia, is paramount in addressing the challenges of surgical care in low-income countries. Including structured and well-organized surgical volunteer groups in the National Healthcare Service System will go a long way in temporarily bridging the gap between surgical care and patient needs. This intervention will last until enough surgeons care for our growing population.

## PAEDIATRIC OCULAR TRAUMA IN THE GAMBIA: IS ACCESS TO CARE INFLUENCING OUTCOMES?

Oluwatodimu J. OLAKULEHIN<sup>1</sup>, Olufunmilola A. OGUN<sup>1,2</sup>

<sup>1</sup>School of Medicine and Allied Health Sciences, University of The Gambia, Banjul <sup>2</sup>Sheikh Zayed Regional Eye Care Centre (SZRECC), Kanifing

**Introduction**: Pediatric eye injuries are a significant public health issue worldwide, particularly in low- and middle-income countries (LMICs) like The Gambia, where access to specialized ophthalmologic care is limited. In Africa, the burden of ocular trauma among children is high, with preventable blindness linked to delayed medical intervention, inadequate resources, and socio-

economic and cultural factors. Despite its prevalence, pediatric ocular trauma remains underreported and under-researched in The Gambia.

**Aim**: The study aimed to describe the profile, pattern, and visual outcomes of eye injuries among children aged 0-19 years, admitted to Sheikh Zayed Regional Eye Care Centre (SZRECC), The Gambia's only tertiary eye hospital. The research also sought to identify factors influencing good and poor visual outcomes.

**Study design/ Methods**: A retrospective cross-sectional study was conducted using medical records from July 2021 to June 2023. Data on demographics, injury history, clinical findings, surgical interventions, and visual outcomes were analyzed using SPSS v20.0. Cases with incomplete data were excluded.

**Results**: Out of 2,546 hospital admissions, 328 (12.9%) involved eye injuries, with 288 cases meeting inclusion criteria. The majority (80.6%) were males, with a male-to-female ratio of 4:1. The median age was 10 years, and most cases (77%) involved children. Injuries predominantly occurred at home (70%), often during unsupervised play. While 66% of patients accessed medical care within 24-48 hours, 10% delayed for over a week. Mechanical injuries accounted for over 90% of cases, with open globe injuries being the most common (52.4%). The cornea was the most frequently affected structure (41.2%), with wooden objects (24%) and metals (21%) being the primary causes of injury. Only 13.8% of cases presented with normal visual acuity, and the final visual acuity was good, in just 32% of patients.

**Conclusion**: This study highlights the high prevalence of severe paediatric eye injuries in The Gambia, particularly among boys engaged in unsupervised recreational activities at home. It underscores the need for improved preventive measures, timely access to medical intervention and enhanced public awareness to reduce the burden of paediatric ocular trauma.

## THE BURDEN OF POSTPARTUM PSYCHOSIS IN EFSTH

A Cham<sup>1</sup>, N J Jadama<sup>1</sup>, A Jallow<sup>1</sup>, M Bah<sup>1</sup>, M Bass1, J Barry<sup>1</sup>, B Touray<sup>2</sup>, P Idoko<sup>1,2</sup>

<sup>1</sup>School of Medicine and Allied Health Sciences, University of The Gambia <sup>2</sup>Edward Francis Small Teaching Hospital, Banjul, The Gambia

**Background**: Postpartum psychosis is a severe psychiatric disorder that emerges shortly after childbirth, characterized by hallucinations, delusions, confusion and behavioral disturbances requiring immediate psychiatric intervention. It is an important public health problem that has been reported to affect roughly about 1-2 for every 1000 childbirths worldwide. Postpartum poses substantial risk to both maternal and neonatal wellbeing. In the Gambia the prevalence of postpartum psychosis is not known. The aim of this study is to determine the prevalence of postpartum psychosis and evaluate the clinical presentation and outcome at EFSTH.

**Methodology**: A retrospective cross-sectional descriptive study reviewing postnatal ward records from January 2018 to December 2024 was done.

**Results**: A total of 58 cases of postpartum psychosis were recorded over the 7-year period, with a prevalence of 2.2% among postpartum women in EFSTH. The average age of affected patients was 24 years. Ethnic distribution included Fula (40%), Wolof (26.7%), Mandinka (13.3%), Jola (13.3%) and Sarahulle (6.6%). The Majority (73.3%) were married, with 54.5% in a monogamous marriage and 36.3% were in a polygamous marriage. Regarding occupation 60% were housewives and 13.3% had formal careers. The average parity was 2. In terms of obstetric history, 80% had vaginal delivery and 20% had caesarean section. About 13.3% of patients had a positive family history of postpartum psychosis and 13.3% had a previous mental disorder. The most common clinical symptoms were visual and auditory hallucinations (73.3%), aggressive behavior (26.7%), restlessness (26.7%), incoherent speech (20%) and refusal to breastfeed (20%). Symptoms overlap was frequently observed within individual cases. Among obstetric complications 33.3% had severe preeclampsia and eclampsia and 6.6% had postpartum haemorrhage. The average hospital stay was 7 days. At discharge, 26.7% had complete symptom resolution while 53.3% were followed up at the psychiatric clinic for continued care.

**Conclusion**: Postpartum psychosis accounts for 2.2% of all admissions in the postnatal ward of EFSTH. This calls for more resources to accurately screen or diagnose the condition and manage it effectively.

## PREVALENCE, COMMON CAUSES AND PREDICTORS OF PRIMARY POSTPARTUM HEMORRHAGE; A ONE-YEAR REVIEW IN THE EDWARD FRANCIS SMALL TEACHING HOSPITAL BANJUL HOSPITAL, THE GAMBIA.

Egwu Onuwabuchi<sup>1</sup>, Mariama Gibba<sup>1</sup>, Adiyatou Raschid<sup>1</sup>, Ismaila Ceesay<sup>1</sup>, Muhammed Camara<sup>1</sup>.

<sup>1</sup>Edward Francis Small Teaching Hospital Banjul.

**Background:** Primary postpartum haemorrhage (PPH) is a leading cause of preventable maternal death. Identifying and managing primary postpartum haemorrhage is crucial to reducing maternal mortality. Therefore, the intervention should start from recognition and active targeting of risk factors. Common association with the causes will be important in improving outcomes. The common causes should be continually reviewed to enable specific focus on identifying, preventing and efficient management and reduce morbidity and maternal mortality due to PPH. Edward Francis Small Teaching Hospital is a tertiary referral centre in the Gambia receiving referrals from all regions across the country. This study aimed to review the different causes of primary postpartum haemorrhage, identify associated factors and make recommendations to improve the quality of care directed at reducing morbidity and mortality from PPH.

**Methods:** An institutional-based retrospective study was employed from February 2024 to February 2025. Forty-two folders were obtained from the hospital records having met the criteria for diagnosis of primary postpartum haemorrhage. A data extraction tool was designed to retrieve data from these folders. The analysis covered the common causes of PPH and the identified associations.

**Results:** The prevalence of primary postpartum haemorrhage was 6.2% of complications within the study period. Uterine atony (43%) was the commonest cause with high parity (57%vs 43%) as the strongest association. Previous caesarean section leading to ruptured uterus contributed to 17% of primary postpartum haemorrhage. Majority (90%) of the cases were referrals.

**Conclusion:** Primary postpartum haemorrhage is still a concern in the study area. Multiparity and previous caesarean section are common association with PPH. Obstetric units should be prepared to identify those at risk to reduce complications from primary postpartum haemorrhage. **Keywords**: postpartum haemorrhage, causes, risk factors.

## LONGITUDINAL STUDIES ON THE LEADING CAUSE OF NEONATAL MORTALITY IN PRETERM BIRTHS AT EFSTH

Conteh Modou Lamin<sup>1</sup>, Jammeh Abdou Aziz<sup>1</sup>, Jabbie Yankuba<sup>1</sup>, Gomez Mariama<sup>1</sup>, Drammeh Ramatoulie<sup>1</sup>, Anyanwu M<sup>1</sup>

<sup>1</sup>Edward Francis Small Teaching Hospital Banjul.

**Background:** World Health Organization (WHO) has postulated that, 184 nations have a preterm birth prevalence of between 5 and 18%. About 1 million of the 3 million neonatal mortalities that are thought to occur annually around the world are directly attributable to prematurity. Very few research have been conducted locally to ascertain the prevalence of and risk factors for premature delivery. Therefore, the purpose of this study will determine the leading cause neonatal mortality from the preterm births in EFSTH, The Gambia.

**Methods**: This is a longitudinal study at Edward Francis Small Teaching Hospital to determine the prevalence of preterm births from January 1, 2021, to December 31, 2021, as well as the outcomes those preterm neonates who were subsequently admitted at the Neonatal Intensive Care Unit. The parameters for the mothers' age, parity, gestational age, birth weight, and maternal related medical problems was determined using the design proforma. The result of these preterm infants admitted to the neonatal ward was recorded in the study, including whether they were discharged, died, or were released against medical advice.

**Results**: the prevalence of preterm births was 15%. The average birth weight of the infants in the review records was 1.64 .573kg. For term and preterm newborns, the mean gestational age was 32.29 29.66 weeks and 33.3 weeks, respectively. Moreover half of the neonates (53.6%) were male, and nearly half (49.1%) of the records evaluated indicated that the gestational age range for mothers was between 32 and 35 weeks.

In this study, hypothermia (53.3%) and respiratory distress syndrome (43.5%) were the two most

frequently diagnosed conditions among all hospitalizations. The preterm neonatal mortality rate for this study was 38.7%.

More than 82.9% of inductions were successful, while more than half of the deliveries (62.1%) were spontaneous. 73.2 percent of pregnancies ended in singletons, and 74.5% of the newborns cried right away. Predisposing factors for preterm births can include obstetric conditions. According to our research, pregnancy-induced hypertension affected 42.4% of mothers. Even though it only made up 11.2% of cases, antepartum hemorrhage is nevertheless relevant. Additionally, 19.6% of preterm births had premature membrane rupture, while 11.2% had urinary tract infections.

## RAPID WEIGHT GAIN IN PREGNANCY AND ITS NEONATAL/MATERNAL OUTCOMES

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**Background**: Gestational weight gain (GWG) plays a crucial role in maternal and neonatal health. Deviations from recommended weight gain ranges are associated with increased risks of adverse pregnancy outcomes. This study evaluates the impact of normal and abnormal GWG on maternal and neonatal complications.

**Methods**: A prospective analysis was conducted on antenatal mothers, categorizing GWG as normal, excessive, or inadequate based on WHO recommendations. Maternal outcomes assessed included pregnancy induced hypertension, gestational diabetes, and mode of delivery. Neonatal outcomes included birth weight, APGAR scores, and Neonatal ICU admissions. The data was collected in the computer database and analyzed with SPSS version 20, Descriptive and inferential statistics were applied to determine associations.

**Results**: Rapid weight gain does not appear to influence the likelihood of neonatal complications such as premature birth, respiratory distress, low birth weight (LBW), or Neonatal ICU admission. Rapid weight gain does not appear to influence maternal complications such as pre-eclampsia, eclampsia, hypertension, or HELLP syndrome.

Women with a history of hypertension in previous pregnancies are not more likely to experience rapid weight gain in the current pregnancy. However, Parity had a strong association with neonatal complications. Women with higher parity are more likely to have babies with complications.

**Conclusion**: Parity appears to be an important factor in neonatal complications in this study. Since rapid weight gain does not significantly affect complications or birth weight, it may not be a major risk factor in this population. However, further studies with larger sample sizes or different populations may be needed to confirm these findings.

## CHEMOSENSITIVITY OF GRANULOSA CELL TUMOUR" WHAT IS THE EVIDENCE?

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**Background:** Adult granulosa cell tumors (AGCTs) are rare ovarian neoplasms that often present with nonspecific symptoms such as abdominal pain and distension. Early detection and appropriate intervention are crucial in improving patient outcomes.

**Case Presentation:** A 35-year-old woman presented with a two-month history of abdominal pain, swelling, and vomiting. Imaging revealed massive ascites and a left ovarian mass suspected to be a malignant teratoma. Exploratory laparotomy identified a ruptured left ovarian fibroma (8×15 cm) with no metastatic spread. Histopathology confirmed an adult granulosa cell tumor (FIGO Stage IC2). She remained under follow-up.

Three years later, she developed recurrent abdominal swelling and pain. Imaging suggested a right ovarian mass with severe ascites. She underwent emergency debulking surgery, and six weeks postoperatively, chemotherapy with Cisplatin and Etoposide was initiated. She completed six cycles of chemotherapy with regular monitoring and remains under gynecologic follow-up.

Given of GCTs, individualized treatment strategies based on tumor stage, genetic profiles, and fertility considerations are crucial for optimizing patient outcomes. Further research is needed to establish standardized chemotherapy protocols and evaluate the long-term efficacy of novel therapeutic approaches the complexity and heterogeneity.

**Conclusion:** This case highlights the diagnostic and therapeutic challenges of AGCTs, emphasizing the need for early detection, surgical management, and chemotherapy. Long- term follow-up is essential to monitor for recurrence and ensure optimal outcomes.

## CHARACTERISTICS AND OUTCOMES OF ABORTION AT EFSTH IN BANJUL, THE GAMBIA: A RETROSPECTIVE STUDY

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**Background:** Abortion remains a significant public health concern globally, particularly in low- and middle-income countries like The Gambia. Abortion is defined as the spontaneous or induced termination of pregnancy before the age of viability. Understanding abortion trends at EFSTH is crucial for informing healthcare policy and improving access to safe and comprehensive reproductive healthcare services in the region. The aim of this study is to characterize the demographics, management, outcome and complications of patients seeking abortion care at the Edward Francis Small Teaching Hospital (EFSTH) in Banjul, The Gambia, from January 2024 to December 2024.

**Methodology:** This study employed a retrospective design to investigate the epidemiology of abortion in EFSTH. Data were collected from the ward's register and a sample of case notes.

**Results:** From January to December 2024, 654 patients were admitted to the gynecology ward at EFSTH. Of these, 180 (27.5%) presented for management of abortion of which 127 (70.5%) were analyzed, indicating a significant proportion of admissions related to this condition. The average age of patients presenting for abortion was 28.6 years. The most common type of abortion was incomplete (33.1%), followed by complete (12.6%). Surgical management was the primary approach in 73.3% of cases, while medical management was used in 6.7% of cases. Complications occurred in 40% of patients, and 26.7% had other health issues. Most patients were married (86.7%). Additionally, 26.7% of abortions occurred in the second trimester, 20% were in primiparous patients, and 20% of patients had experienced more than one abortion. Upon discharge from the hospital, 86.7% of patients were followed up at the gynecology clinic and counseled on contraception.

**Conclusion:** The findings of this study underscore the substantial burden of abortion in The Gambia, highlighting the need for comprehensive reproductive health services, including access to safe abortion care to improve maternal health outcomes, promoting family planning and improving access to contraception in The Gambia.

## FACTORS AFFECTING THE UPTAKE OF PAPANICOLAOU(PAP) SMEAR FOR CERVICAL CANCER SCREENING IN WOMEN IN EDWARD FRANCIS SMALL TEACHING HOSPITAL, THE GAMBIA: A QUANTITATIVE STUDY

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**Introduction**: Cervical cancer is an important public health problem worldwide accounting for approximately 12% of all cancers in women and is after breast cancer the second most common cancer in women worldwide, with a global estimate of about 530,000 new cases and 275,000 deaths each year. In The Gambia, current estimates indicate that every year 98 women are diagnosed with cervical cancer and 57 die from the disease.

**Aims**: This study was designed to determine the demographic, knowledge, attitudinal and accessibility factors influencing women's willingness to obtain Pap smear in The Gambia and to

provide suggestions for future research and informing policy as well as ways of creating awareness for cervical cancer screening.

**Methods**: A cross-sectional descriptive quantitative study was conducted with 150 Gambian women aged 18 and above with a pre-existing modified interviewer-questionnaire using systematic random sampling done in the gynecological clinic at the EFSTH, the only main referral hospital of the country. The Swansea University, EFSTH and the Gambia Government/MRC joint ethics committees gave ethical approval for the study and informed consent was obtained from participants. Data was analysed with SPSS software (v22.0) using descriptive statistics and chi-square test.

**Results**: The results revealed that 68.7% had never heard about cervical cancer, only 20.7% of the respondents were aware of availability of cervical cancer screening services. Only 34 (22.7%) of the 150 respondents had ever done a cervical cancer screening test and all were referred for screening by a physician because of gynaecological complaints. The most important factors hindering the use of available cervical cancer screening services were lack of knowledge (88%) and not knowing where to go for the screening 5 (4.4%).

**Conclusion**: The study found that there is poor knowledge and practice of cervical cancer screening among Gambian women as well as barriers associated with the lack of using the available services. Women have also suggested ways of raising and improving cervical cancer screening awareness including the use of women gatherings.

**Recommendations**: Comprehensive education on cervical cancer screening and free mass screening are necessary for any successful cervical cancer screening programme in Gambia.

## PREVALENCE AND RISK FACTORS OF PRETERM BIRTHS AT EFSTH

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**Background**: According to the World Health Organization (WHO), 184 nations have a preterm birth prevalence of between 5 and 18%. Most nations lack accurate information on the cost of preterm birth. About 1 million of the 3 million neonatal mortalities that are thought to occur annually around the world are directly attributable to prematurity. In spite of this, not much research have been conducted locally to ascertain the risk factors for premature delivery. Therefore, the purpose of this study will determine the prevalence and risk factors with contributing variables for preterm births in The Gambia.

**Methods**: This study used a descriptive design to examine pregnant women who gave birth at the Edward Francis Small Teaching Hospital to determine the risk factors of preterm births from January 1, 2021 to December 31, 202. The parameters for the mothers' age, parity, gestational age, birth weight, and maternal related medical problems was determined using the design proforma.

Results: the prevalence of preterm births was 15%. The majority of mothers (46.8%) were between the ages of 26 and 35, while 25.3% were between the ages of 20 and 25. The mean maternal age was 28.19 6.673 years. Only 6.4% of moms were alone, leaving the majority of mothers (93.6%) married. A little over 45.7% of the mothers had no formal education. 19.6% of the registered mothers received tertiary education, while about 29.7 completed their secondary education. The majority (73.2%) of the patients gave birth to a singleton, followed by twin deliveries (23.3%). Males made up 53.6% of all the infants in the study. The average birth weight of the infants in the review records was 1.64 .573kg. For term and preterm newborns, the mean gestational age was 32.29 2.966 weeks and 33 3 weeks, respectively. 26–35 year old mothers made up probably 46.8% of the population, while 20-25 year old mothers made up 25.3%. Moreover half of the neonates (53.6%) were male, and nearly half (49.1%) of the records evaluated indicated that the gestational age range for mothers was between 32 and 35 weeks. 69.2% of the mothers' marriages were not consanguineous, making up 93.6% of the total. Mothers were primarily from the west coast (56.1%) and Kanifing (27.1%). About 57.9% of mothers were housewives, compared to 14.9% who worked in business, according to data on mothers' occupations. The Fula made up about 30.6% of the mothers, while Mandinka made up about 29.5%. More than 82.9% of inductions were successful, while more than half of the deliveries (62.1%) were spontaneous. 73.2 percent of pregnancies ended in singletons, and 74.5% of the newborns cried right away. Predisposing factors for preterm births can include obstetric conditions. According to our research, pregnancy-induced hypertension affected 42.4% of mothers. Even though it only made up 11.2% of cases, antepartum hemorrhage

is nevertheless relevant. Additionally, 19.6% of preterm births had premature membrane rupture, while 11.2% had urinary tract infections.

**Conclusion**: This study draws conclusions on the factors that are most frequently associated with preterm deliveries, including prolonged premature rupture of the membranes, pregnancy induced hypertension, and antepartum hemorrhage. Future risk prediction models for preterm births should take the risk factors found in this study into consideration.

## FACTORS THAT INFLUENCE CHOICE OF MEDICAL SPECIALIZATION/CAREER OF MEDICAL STUDENTS AT UTG

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**Background**: Physicians speciality choices significantly influence the medical workforce. Medical students are exposed to a broad range of specialties, and their career preferences can impact their learning and academic performance. Societal and cultural factors including influences from family and mentors also shape career decisions. Research indicates that many doctors spend years persuing specialities for which they may not be suited, with only 65% remaining in their initially preferred speciality over time.

The aim of this study is to identify medical students' choice of specialization and to determine the factors that influence students' choice of medical specialty.

**Methodology**: A cross-sectional survey was conducted using google forms to collect data. from medical students in the university of the Gambia. The questionnaire included sections on demographic information, specialty preferences and factors influencing career choices. The survey link was distributed through relevant channels, ensuring voluntary participation and anonymity.

**Results**: In total, 108 students participated in the survey (58.3% female and 41.7% male). With 77 aged between 20-24 and 31 aged between 25-34. With 25.9% in their second year of study, 7.4% in their third year of study, 3.7% in fourth year, 19.4% in sixth year and 36.1% in their final year of study. 51.9% have decided on their specialty preference, 10.2% have not decided whilst 38% have different specialty preferences. The most chosen specialties were Radiology (7%), cardiology (5.3%), dermatology (5.3%) and orthopedic surgery (5.3%) The main factors influencing the choice of specialty were community impact, personal interest, work-life balance considerations and career opportunities.

**CONCLUSION**: This study highlights Key factors influencing medical students' choice of specialization including personal interest, community impact, work-life balance considerations and career opportunities. The findings reveal that while some students enter medical school with a clear career preference, many change their choices based on clinical experiences or mentorship.

## ACCESS TO ESSENTIAL EMERGENCY NEUROSURGICAL CARE IN THE GAMBIA- ROLE AND IMPACT OF MOBILE CT SCAN

Jabang JN<sup>1,2</sup>, Sorto PM<sup>3</sup>, Manneh E<sup>1</sup>, Tisell M<sup>4</sup>, Janneh L<sup>1</sup>, Sanchez J<sup>1</sup>, Cham M<sup>1</sup>, Goswell PG<sup>1</sup>, Fredrick G<sup>5</sup>, Ballah A<sup>1</sup>, Omeje UK<sup>1</sup>, Magnus H<sup>6</sup>, Jallow F<sup>1</sup>, Engstrom A<sup>6</sup>, Sundblom J<sup>7</sup>

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Introduction: It is known that a major fraction of the neurosurgical patients need a

surgical intervention within emergency or urgent time window. It is well known that "time is brain". In worst case of a patient with pending risk of brain herniation, immediate actions need to be taken to both treat the ICP and arrange an emergency operation. Is the question of minutes to few hours. For extradural hemorrhages, < 2 hours is critical (Mendelow 1979). In patient with an acute subdural hemorrhage, a critical door-to-skin time limit of 4 hours has shown to decrease the survival from 30% to 90% (Seelig 1981). One rate limiting step in the provision of care is the availability of a CT scan. This was made possible by the donation of a mobile CT scan to EFSTH by the SANC team.

**Study design, materials and methods:** We conducted a retrospective study on the emergency utilisation of a donated Mobile CT scan from SANC to EFSTH neurosurgery unit and access its role and impact on the provision of emergency neurosurgery care.

**Results:** The first emergency case treated timely due to the immediately available CT scan was admitted to the EFSTH Bakau unit during the 2nd SANC mission, January 22, 2025. A 19-year old male has suffered an occupational injury in a workplace with lowered safety measures. A large glass fibre object flew from a cutting machine to his upper face, splitting his frontal and nasal bones and frontal skull base, and caused a left-sided frontal intracerebral hemorrhage. A bifrontal craniotomy was performed, the skull base fracture was revised and the dura was repaired, the split nasopharynx, nose and upper lip repaired. The EFSTH neuro unit also witnessed a 15 minutes timeframe between the admission and a CT-confirmed diagnosis of a young patient with loss of consciousness. **Conclusion:** The mobile CT serves various roles in quickly establishing diagnosis of traumatic brain injury thus providing access to emergency neurosurgical care. This paper shows the role of a mobile CT in the emergency care of traumatic brain injury among others.

Keywords : mobile CT Scan, emergency, neurosurgery.

## DECOMPRESSIVE CRANIECTOMY IN ACUTE MALIGNANT ISCHEMIC INFARCTION OF THE MIDDLE CEREBRAL ARTERY. EXPERIENCE IN ETHIOPIA AND GAMBIA. REPORT OF 2 CASES.

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Abstract: We present two cases, both male patients aged 45 years, who underwent decompressive craniotomy and marsupialization of the bone flap in the lower limbs for 90 days with repositioning of the flap 3 months after the first surgical intervention as a treatment to relieve intracranial pressure in the course of malignant ischemic infarction of the middle cerebral artery with satisfactory results. Acute malignant infarction of the middle cerebral artery is defined as the sudden obstruction of cerebral blood flow in the irrigation territory of the Middle Cerebral Artery (MCA) of ischemic-thrombotic etiology and cardio-embolic etiology. <sup>(1-4)</sup> Epidemiological study that includes both types of CVD (ischemic and hemorrhagic) revealed an annual incidence per 100,000 inhabitants of 218 and 127 for men and women respectively. The crude mortality reported at 28 days after stroke was 36%, with mortality occurring outside the hospital setting in 62.5% of cases. Until a few years ago, it was considered a fatal and untreatable condition, since the mortality associated exceed 80%. In this unfavorable context, decompressive craniectomy has re-emerged as an effective therapeutic alternative in selected cases, with a reported decrease in mortality between 15 and 40% <sup>(2-6)</sup> Decompressive craniectomy is a surgical removal of a considerable part of the cranial vault, associated with a durotomy of the exposed area, with the purpose of increasing the volume of the cranial continent, decrease intracranial pressure (ICP) and relieve mechanical compression secondary to the displacement of Brain structures Keywords: Decompressive Craniectomy. Durotomy.

## MICRONEUROSURGERY IN THE GAMBIA – WHERE ARE WE?

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**Introduction:** Since the beginning of the 20th century, neurosurgery has experienced diverse change and innovation. One advance that has evolved in this field is microneurosurgery, which is defined as accessing and exploring lesions of the brain and spinal cord by navigating the natural cisternal pathways. By designing a surgical strategy based on following these existing pathways to access a lesion, and applying microneurosurgical techniques, a complete removal of a lesion is achieved. We report our experioence in the use of microneurosurgery.

**Study design, materials and methods:** We conducted a retrospective study on the use of microneurosurgery in Edward Francis Small teaching Hospital since the advent of an operating microscope over a period of 2 years. Data was collected from the electronic files of the surgical notes **Results:** Microneurosurgery was mainly done for tumor resection both in the brain and spine, however it was also done in the following; Traumatic brain injury and spine injury, Neural tube defects, Potts Disease and brain abscesses, degenerative spine disease. The learning curve was steady. This has also lead to the possibilities of performing 5 microscopic endonasal transsphenoidal surgeries.

**Conclusion:** The donation of operating neurosurgical microscopes to the Neurosurgery Unit of Edward Francis Small teaching hospital occasioned the era of Microneurosurgery in The Gambia. Complex cases like brain tumors and spine surgeries are now routinely and safely done. **Keywords** : Microneurosurgery, brain tumor,

## SURGICAL MANAGEMENT OF EPIDURAL HEMATOMA AT EDWARD FRANCIS SMALL TEACHING HOSPITAL FROM JANUARY 2019-DECEMBER 2024

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**Introduction**: Epidural hematoma (EDH), a life-threatening neurosurgical emergency, requires prompt intervention to prevent morbidity and mortality. With an overall EDH incidence of 8.2 % and an operative rate of 55.5 %, 3.1 million people worldwide require surgery for traumatic EDH every year, most of who are in prime working age.

**Methods**: This retrospective study evaluates the surgical management and outcomes of EDH at Edward Francis Small Teaching Hospital (EFSTH), The Gambia's primary referral center, from 2018 to 2023. Data was collected from the ledger and patients' folders.

**Results**: 25 cases were done during this period of which 100% were male. 80% were adults while 20% where in the pediatric age group. 100% had brain CT-scan done prior to surgery and all the surgeries done were craniotomies. Out of the 25 cases done, the medical records of 11 were able to be retrieved and analyzed, focusing on demographics, clinical presentation, imaging use, surgical techniques, time-to-intervention, complications, and outcomes (Glasgow Outcome Scale [GOS]). **Conclusion**: Delays in imaging, surgical intervention, and postoperative care infrastructure significantly affect outcomes. Despite resource constraints, the neurosurgical team at EFSTH achieved commendable outcomes, underscoring the critical need for sustained investment in neurosurgical infrastructure including strengthening the Ndemban Trauma Center, having a

neurosurgery ICU, prioritizing CT access and also to invest in personnel to enhance patient care in The Gambia.

**Keywords** : Epidural hematoma, surgical management, postoperative, craniotomies, Glasgow Outcome Scale (GOS)

### THE FIRST COMPARISON OF HIP FRACTURE INCIDENCE ACROSS 4 COUNTRIES IN AFRICA

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**Objectives**: To determine age- and sex-specific hip fracture incidence rates in adults age  $\geq$ 40 years in The Gambia, West Africa and compare with those from other African countries.

**Methods**: All hip fracture cases in adults aged  $\geq$ 40 years, presenting to a hospital or traditional bone setter (TBS) in the study area over 2-years, were identified. Age- and sex-specific hip fracture incidence per 100,000 person-years were estimated using the 2024 Gambian Population census. Incidence estimates were compared between The Gambia, Zimbabwe1, South Africa2 and Botswana3. Future hip fracture numbers were estimated to 2054 using UN population projections. **Results**: Over 2-years, 238 (67% female) patients, mean(SD) age 71.3(12.5) years, presented to hospital (197[82.8%]) or TBS (37[15.5%]). Most reported fragility fractures (217[91.2%]). Presentation >2 weeks after injury was common (70[29.4%]). Incidence rates in The Gambia were 28.0 and 56.2/100,000 person-years for men and women, respectively. Hip fractures numbers are predicted to nearly quadruple, from 175 in 2024, to 656 in 2054.

Age-standardised hip fracture incidence rates were broadly comparable between The Gambia, Zimbabwe, Botswana, and the Black South African population (Figure-1). All countries see higher incidence in men than women until age >50 years. The highest incidence rates in women age 60-74 years were in The Gambia, and in women age >75 years in Zimbabwe.

**Conclusions**: These are the first hip fracture incidence data from West Africa. Fragility fractures in Gambian adults were common, indicative of age-associated osteoporosis. Across the 4 countries, hip fracture cases are predicted to at least double over coming decades; in The Gambia they will quadruple. Healthcare systems now need to pivot to provide fracture services for ageing populations.

## SURGICAL MANAGEMENT AND OUTCOME OF SPINAL TUBERCULOSIS IN EDWARD FRANCIS SMALL TEACHING HOSPITAL

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**Introduction:** Extrapulmonary tuberculosis (TB) represent approximately 3% of all forms of TB.Spinal TB (STB) accounts for approximately 50% of osteoarticular TB. Diagnosis range from 2 weeks to several years from the onset of symptoms. In endemic areas, the value of a history or contact, and a positive skin test (Mantoux Test) decreases. An elevated erythrocyte sedimentation rate (ESR) is more important. Clinical, radiological, and pathological correlation is equally important, with Magnetic Resonance Images (MRI) being the most sensitive study. STB can

cause kyphosis with neurological deficit despite antibiotic treatment. In the absence of response to medication, curettage of the focus, debridement, and fusion should be performed. The biological characteristics of Mycobacterium tuberculosis do not prevent osteosynthesis on the infected bone.

**Study design, materials and methods:** A retrospective study was conducted of patients surgically treated for STB between 2021 and 2024. For diagnosis, in addition to clinical features, MRI, Mantoux test, ESR, C-reactive protein (CRP), and Gen X-pert were requested. The surgical indication was neurological deficit and segmental kyphosis. Patients had previously received antituberculosis treatment for three weeks or more. We analyzed the postoperative results through clinical and radiological assessment.

**Results:** Sixteen patients underwent surgery via a posterior approach with laminectomy and transpedicular fixation and one combined 1800 approach. Eleven patients were men with a mean age of 42.9 years and six women with a mean age of 43.1 years. The most affected levels were the thoracic and lumbar spine for both men and women.

**Conclusion:** Surgery for the management of Potts disease has become a main stay in the treatment. This allows early neurologic recovery and prevents progressive kyphosis and pain control. As an endemic disease, the incidence keeps increasing and thus will need more surgical treatment each year.

Keywords : spinal tuberculosis, potts disease

## CHALLENGES TO FRACTURE SERVICE AVAILABILITY AND READINESS PROVIDED BY ALLOPATHIC AND TRADITIONAL HEALTH PROVIDERS; NATIONAL SURVEYS ACROSS THE GAMBIA AND ZIMBABWE

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**Background**: Populations in Africa are ageing, hence the number of age-related fragility fractures, including hip fractures, is rising. Hip fractures are an indicator condition for older adult health provision, as they require a multifaceted pathway of care. To enable health service planning, detailed national level understanding of current fracture service provision is needed.

**Methods:** The WHO Service Availability & Readiness Assessment survey was modified to evaluate fracture service availability and general readiness, and hip fracture service-specific readiness. All health care facilities to which a patient with a hip fracture could present in The Gambia and Zimbabwe were invited to participate between October 2021 and January 2023. A further traditional bone-setter (TBS)-specific survey assessed TBS care in The Gambia. Availability of services per 100,000 adults ≥18 years, and general, fracture-specific, and hip fracture-specific care readiness were determined.

**Findings:** All invited facilities in Zimbabwe (n=186), 98% in The Gambia (n=150), and 35 of 42 (83%) TBS participated in the survey. General availability of hospital facilities was low in both Zimbabwe and The Gambia, with 2.2 and 12 facilities per 100,000 adults identified respectively. Many facilities lacked regular electricity, reliable oxygen supplies, and sharp/infectious waste disposal. In The Gambia, 78.6% public hospitals and 53.8% other

facility types (e.g. NGO/mission) had no doctors.

## COMPARATIVE ANALYSIS OF TOTAL HIP REPLACEMENT APPROACHES AT EDWARD FRANCIS SMALL TEACHING HOSPITAL FROM 2022 TO 2024.

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**INTRODUCTION**: Total Hip Replacements provides reliable outcomes for patients suffering from end-stage degenerative hip osteoarthritis (OA), specifically pain relief, functional restoration, and improved quality of life. This study was done at Edward Francis Small Teaching Hospital to evaluate postoperative recovery, complication rates, length of hospital stay, and postoperative functional outcomes.

**METHOD**: The Study was a retrospective study that compared anterior and posterior total hip replacement surgeries performed at EFSTH from 2022 to 2024. The study included all patients who underwent both anterior and posterior approach primary total hip replacement (THR) at EFSTH between January 1, 2022, and June 30, 2024. Data was collected from the patient's Hospital folder and physiotherapy follow-up clinic notes.

**RESULTS**: A total of 30 Primary Total Hip Replacements were performed in EFSTH between January 1st, 2022, to June 30th, 2024. There were 20 (66.67%) posterior approach total hip replacements and 10 (33.33%) anterior approach total hip replacements cumulatively. At 3 months, the Anterior group had a higher function outcome score than the posterior group, with an average functional outcome of 7.39 (1.515) compared with 5.46(1.998) days in the posterior group (p-value= 0.012). The Anterior group had less hospital length of stay than the posterior group 2.29 (1.473) days compared with 3.07(1.770) 2 days in the posterior group (p-value= 0.240). Of note, there was also a small difference in surgical operating time between the anterior and posterior groups (104.7 mins (0.5631) vs 106.6 mins (0.5508) respectively, p- value= 0.885). 10% of patients in the posterior approach group. 5% of patients in the posterior approach group developed infections, with none in the anterior group. Both approaches had revision surgeries, but the posterior approach had a 10% revision rate compared to 20% in the anterior approach group (p = 0.568).

**CONCLUSION**: Both anterior and posterior approaches to THR are effective in improving postoperative recovery and reducing complications. The anterior approach may provide slight advantages in terms of early functional recovery and shorter hospital stays, this suggests that surgeon preference and expertise should guide the choice of approach, as both techniques provide safe and reliable outcomes.

**KEYWORDS**: Total Hip Replacement (THR), Anterior Approach, Posterior Approach

## DIAGNOSIS AND TREATMENT OF GIANT CELL TUMOR IN LOW INCOME COUNTRIES- A CASE STUDY AT EFSTH.

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<sup>1</sup>Edward Francis Small Teaching Hospital

**Objective**: Giant cell benign tumour (GCBT) is a common benign tumour with complexity in management. The aim is to study how to establish diagnosis in low income countries and discuss some of the new evolutions in management of such cases.

**Case Presentation:** A 39yrs old policeman and a welder man, seen at the orthopaedic unit with 6 months history of left wrist swelling and intractable pain. Swelling was progressive and with time limited him from doing his work. X-ray done showed expansile radiolucent lesion in the distal radial epiphysis. It has well defined margin, non-sclerotic with extension into the subchondral region. It has narrow transition zone with no periosteal reaction. MRI done with Impression of hondromyxoid fibroma and Aneurysmal bone cyst made.

Surgery was done by Excision of tumor of left distal Radius, Cement spacer and Bridge plating done under regional anesthesia. Findings of tumor right up to subchondral surface of distal radius

through both volar and dorsal cortices with extensive cortical loss. He was discharged 48hrs postsurgery. Seen on follow up 3 months post-surgery, He has resumed work and pain has markedly subsided.

**Conclusion:** GCTB is an intermediate, locally aggressive but rarely metastasizing tumor. It is typically benign but may demonstrate aggressive imaging features or fluid-fluid levels and can mimic or be mimicked by a variety of other bone lesions. Pain is the most significant symptom they present with. Diagnosis mostly establish with x-ray but should be confirmed by Biopsy. Newer techniques in management involves use of systemic targeted adjuvant therapy to reduce risk of intralesional recurrence. Recent studies have shown Denosumab may be administered as neoadjuvant chemotherapy in GCTB patients where surgical resection is the preferred main treatment option in order to facilitate tumour excision.

**Limitation:** Lack of Biopsy result to confirm diagnosis prior to surgery as it's a key factor in stablishing diagnosis.

Keywords: Giant cell benign tumor, lesion, EFSTH

## USE OF TRANS-URETHRAL SNARES FOR JJ STENT REMOVAL WITHOUT CYSTOSCOPY

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**Introduction/aims of the study**: Double J "JJ" stents are commonly used in Paediatric Urology. Their removal usually requires general anaesthetic (GA) and cystoscopy (conferring increased risk of infection and requiring prophylactic antibiotics). Other, less invasive methods of stent removal have been described, including extraction strings and magnetic stents. An alternative novel technique is a custom-made catheter-snare. We aim to report on a single centre experience of custom-made catheter-snares for JJ stent removal in children.

**Study design, materials and methods:** Prospective data collection of children (0-18 years) undergoing JJ stent removal, July 2020-November 2024. Snare removal was attempted based on operator preference, either under GA or awake. Patients who had concomitant procedures were excluded. The catheter-snare is made by passing a 0-Polydiaxonone (PDS) suture (no needle) retrogradely into an 8 or 10 Fr Nelaton Jacques catheter, forming a loop through the side holes and passing it back through the end. With the patient in lithotomy position, the catheter-snare is passed through the urethra and withdrawn after a few rotations to trap the stent. The catheter is then gently withdrawn whilst maintaining tension on the suture. If the bladder empties, 10-20ml of normal saline is instilled via the catheter. If unsuccessful up to four times, catheter-snare is abandoned and cystoscopic removal is performed. Antibiotics are administered for cystoscopy.

**Results**: 86 patients had catheter-snare attempted. Successful removal achieved in 57 patients (66.2%, median age 16 months, IQR 9-66 months). Median age of unsuccessful group 45 months (IQR 10.75-111.75 months). 12/57 had stent removal without anaesthetic (2 with entonox, 10 awake). The median age of the 10 awake patients was 8 months (IQR 6-19 months). Median anaesthetic time (time from entry into theatre until closure) 10 minutes (IQR 7-15.5 minutes). Median surgical time 5 minutes (IQR 2-10.5 minutes)

**Conclusion:** This technique involves minimal instrumentation of the urethra, resulting in less pain and faster recovery than cystoscopy. Avoiding cystoscopy decreases cost and reduces anaesthetic time. It is a safe and effective approach that can be considered as an alternative to cystoscopic removal. Further study is required to formally compare the technique to planned cystoscopic removal.

Key words: Minimally invasive, Paediatric urology, Surgical technique, Tips and tricks

## SPECTRUM OF UROLOGICAL DISEASES AT THE SURGICAL OUTPATIENT CLINIC AT EDWARD FRANCIS SMALL TEACHING HOSPITAL IN BANJUL JANUARY 2025 – DECEMBER 2024): THE IMPLICATION ON TRAINING AND POLICY.

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**Background**: The urology outpatient clinic is busy but there are no publications on the activities. This review aims at evaluating the spectrum of diseases to determine the implication on training and policy.

**Methods**: We reviewed data of patients seen at the urology outpatient clinic over a year period (January 2025 – December 2025) from the outpatient book. Parameters studied were age, sex, and diagnosis. Incomplete data due to poor hand writing and repetition were excluded. Data was analysed using simple statistics of mean, range, percentages, figures, and tables. **Results**: A total of 1340 were seen of which 1274 (95%) were analysed. There were 1148 males and 126 females giving a male to female ratio of 9:1. The common diseases in men were benign prostatic hyperplasia (472, 41.4%), prostate cancer (119, 10.4%), male infertility

(108, 9.4%), urethral strictures (71, 6.2%), hydrocele (53, 4.6%), and renal stones (52, 4.5%). While diseases in the females were kidney and ureter stones (26, 20.7%), urogynaecological fistulas where eleven (8.7%) presented vesicovaginal, rectovaginal fistula was 6 (4.8%) and 7(5.6%) had urinary tract infections.

**Conclusions**: We advocate focused attention of medical students and surgical trainees to management of these common urological diseases in both male and female. The hospital, government, and non-governmental organization must intensify efforts on health talks, providing appropriate equipment to medical facilities and training of manpower in urology subspecialty. **Keywords**: spectrum, urology outpatient clinic, training, policy.

### CHALLENGES IN THE MANAGEMENT OF A GIANT CONDYLOMA ACUMINATUM IN A SEXUALLY ACTIVE MALE DRIVER IN THE GAMBIA: A CASE REPORT

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**Background**: Giant condyloma acuminatum, GCA, (Buschke-Lowenstein tumour) is a rare slowgrowing sexually transmitted disease that affects 0.1% of the general population. It is locally invasive but not metastatic. Histologically, it is benign but clinically, it is locally destructive and has ability to reoccur. Some Risk factors that play a role in this condition include long-standing phimosis, unsatisfactory penile hygiene mostly seen in uncircumcised males, human immunodeficiency virus (HIV), immunosuppressive drugs, diabetes mellitus, smoking, substance abuse and poor socioeconomic status. Giant condyloma acuminatum occurs more frequently in uncircumcised males than females. The aim and objective is to describe the clinical presentation and challenges in managing a 43-year-old, male driver. Although he was sexually active, the retrieval study was negative. He had an extensive hyperpigmented, hypopigmented nodular lesion with areas of ulceration and sloughy exudates

that affected the lower abdomen, penis, and scrotum with skip lesions on both thighs. He underwent repeated excision of the lesion and translocation of the left testis. He was referred for skin grafting, which was unavailable, but stayed at home, only to present with lesions on the abdomen.

**Conclusion** Giant condyloma acuminata is a rare, locally invasive and recurrent lesion which occurred in a non-HIV sexually active male and absent single testis. A Multi-disciplinary approach is necessary.

Keywords: giant condyloma acuminatum, sexually active, HIV negative. The Gambia

## EPIDEMIOLOGY AND OUTCOME OF BILIARY ATRESIA IN A LOW-INCOME COUNTRY: THE GAMBIA

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**Introduction:** Biliary Atresia (BA) is characterised by obliteration or discontinuity of the extrahepatic biliary system, resulting in obstruction to bile flow. It is more common in Females than in males, and the perinatal form typically occurs within the first two weeks of life, while the postnatal type typically presents in infancy, between two and eight weeks. If not operated on within the first two years, the fatality is very high. With Kasai procedure, 25% will survive into their 20s without Liver transplant (LT), 80% will require liver transplant, and long-term survival after LT is over 90% similar to other children receiving a LT for different reasons. This is to assess the outcome of Biliary atresia in the Gambia

**Method:** A retrospective review of a prospectively maintained database of all paediatric surgery patients presenting to the Edward Francis Small Teaching Hospital from December 2022 to December 2024. The collected data included demographic variables, age at presentation, and information on management and outcomes.

**Results:** The number of cases was eight, with a sex ratio of 1:1. Approximately 75% of the cases originated from the urban region, and the average age at presentation was 2 months. Out of the 62.5 % that had surgery, 60% of them had bile in the stool.

**Conclusion**: More community engagement and sensitisation are needed to increase the rural presence. Additionally, given the high number of patients who have been successfully operated on, there is a need to establish a pathway for accessibility to LT services.

## PROFILE AND MANAGEMENT OUTCOMES OF PATIENTS ADMITTED AT EDWARD FRANCIS SMALL TEACHING HOSPITAL ON ACCOUNT OF DIABETIC FOOT ULCER Amfaal Mbye<sup>1</sup>

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**Background**: Diabetic foot is a condition that arises from longstanding diabetes and comprises ulcers, infection, foot deformities and necrotic processes. It is one of the commonest complications of diabetes mellitus and the most common cause of hospitalization in diabetics. The process to achieving healing of foot ulcers has a slow progress, high recurrence rate and the possibility for further complications. The main objective of this study was to determine the management outcomes of diabetic foot at Edward Francis Small Teaching Hospital.

**Methodology**: This was a hospital based retrospective study, 107 case files of patients admitted at Edward Francis Small Teaching Hospital on account of diabetic foot ulcer from January 2023 to December 2023 were reviewed. Data was collected on patient demographics, history of diabetes, glycemic control, type and duration of ulcer at admission, comorbidities, treatments initiated and outcomes.

**Results**: The study showed that the mean age of patients was  $58.59 \pm 3.3$  years, male predominance at 57%, the mean random blood sugar level at admission was 14.05mmol/l, the mean ulcer duration before presenting to EFSTH was 2 months and 69.2% of patients presenting at Wagner grade 3 or higher ulcer Grades 4 and 5. The most common recorded comorbidities were anemia and

hypertension at 75.6% and 53.5% respectively. The outcomes were 61.7% major amputation, 13.1% minor amputation, 17.8% discharged with a clean wound, 0.9% to continue dressing at nearest health facility and 11.2% died.

**Conclusion**: This study highlights the high rates of major amputations and mortality associated with diabetic foot ulcers at Edward Francis Small Teaching Hospital. It underscores the need for diabetic foot sensitization, early presentation, improved management strategies and comprehensive care of diabetic patients.

Keywords: Diabetes, Diabetic foot, Amputation, Ulcer, Glycemic Control, Wagner grade

## ACCESS TO EMERGENCY CARE: EVISCERATION AND BOWEL INJURY DUE TO PENETRATING ABDOMINAL INJURY.

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<sup>3</sup>Brikama District Hospital
<sup>4</sup>Basse District Hospital
<sup>5</sup>Dr Alagie Manneh International Charitable Surgical Foundation

**Case**: A 49-year-old woman was allegedly stabbed in the left side of the abdomen during a family dispute; she sustained a penetrating abdominal injury with evisceration of abdominal contents. She was eventually taken to the nearest Health Center (Yoro Baol Minor Health Center). On arrival, she was received by a dedicated nursing team supervised by a physician assistant posted in the area, who promptly started management. A primary survey was done, secured vascular access, and IV Fluids were initiated. Sterile gauze was used to pack the eviscerated bowel contents, and the patient was subsequently referred to Basse District Hospital, 16km away. The hospital is the largest in the Upper River Region, but no general surgeon was posted there. The nearest General Hospital with a Surgeon was Bansang General Hospital, which was 59km away from Basse. However, upon arrival at Basse District Hospital, a team of volunteer Gambian surgeons, perioperative nurses, and anaesthetists from the AMISURG Foundation conducted a free surgical camp, AMISURG Foundation. The foundation included a team of specialists who performed the surgery on this patient.

**Intraoperative findings:** Penetrating injury to the left side of the abdomen with evisceration of the small bowel with areas of soiling and perforations. A resection and anastomoses of the small bowel were done, and the drain was left in situ. The patient was discharged post-op day 7 a week with no obvious complications.

**Problems**: (1)Distance to surgical care provider: Patients are transported a significant distance to access emergency care. If the surgical camp had not been ongoing and to Banjul if Bansang had no surgeon, the patient would have been a fatality. (2) There are not enough local specialist Surgeons to cover major health facilities in the country.

**Lessons learnt**: Emergency care must not be taken for granted, and conscious effort must be made to build capacity and infrastructure in regional hospitals.

#### HISTOPATHOLOGICAL FINDINGS OF UPPER GASTROINTESTINAL ENDOSCOPY BIOPSIES IN A TERTIARY HOSPITAL IN THE GAMBIA: A 2 YEAR RETROSPECTIVE STUDY

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Background: Upper gastrointestinal endoscopy and analysis of the biopsies taken are important

and necessary procedures to establish the diagnosis of upper gastrointestinal disorders. The study therefore aimed to determine the histopathological findings of upper GI endoscopy biopsies in a tertiary hospital in The Gambia.

**Method:** This was a retrospective study conducted at the pathology department in Edward Francis Small Teaching Hospital in The Gambia. All histology reports of upper GI endoscopy biopsies from the 1<sup>st</sup> January 2023 to 31<sup>st</sup> December 2024 were reviewed and demographic, clinical and histopathological data retrieved.

**Results:** The histopathology report of 105 upper gastrointestinal endoscopy biopsies were analysed; 55 (52.4%) females and 50 (47.6%) males. The mean age of the study population was 55 years with majority of the participants in the 41-70 years age group 62 (60.2%). The majority of the biopsies were taken in 2023 57 (54.3%) with most of them coming from a Government health facility 65 (61.9). Most of the biopsies were also taken from the stomach 82 (78.1%). The most common indication for biopsies to be taken during endoscopy was abdominal pain 39 (49.4%), followed by vomiting 26 (32.9%) and weight loss 22 (27.9%). The most common histopathological findings were gastritis 46 (43.8%), followed by gastric ulcer 9 (8.6%) and gastric cancer 9 (8.6%). Gastric cancer patients were more likely to present with vomiting 7 (87.5%) vs 19 (26.7%), p value=0.001 and weight loss 6 (75%) vs 16 (22.5%), p value=0.005 as indications for biopsies to be taken during endoscopy.

**Conclusion:** Abdominal pain was the most common indication of the biopsy samples and gastric disorders were the most common histopathological findings in this study. This confirms the importance of histopathology in endoscopic services to early diagnose upper gastrointestinal disorders and prevent complications in The Gambia.

## SEVERE BURNS IN A SOCIALLY ISOLATED PATIENT WHO WAS BURNT ALIVE BY A GROUP OF "VIGILANTES"

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**Background:** The Gambia is well known for being a peaceful country. This is largely due to the people's respect for the rule of law. However, there are sporadic reports of mob justice, often involving alleged thieves. The outcome is usually a patient with severe injuries ending up in the hospital with little social support. This case highlights the impact that such actions have on social isolation, malnutrition, prolonged hospitalization and patient outcomes.

**Case Presentation**: A 26-year-old male was set on fire on 8-12-24 after being accused of theft. He was allegedly forced to drink gasoline, which was then poured on his clothes and set ablaze! On admission, he was conscious, alert, and well-hydrated, with normal vital signs except for slightly elevated blood pressure. He had mixed superficial partial-thickness and deep partial-thickness burns involving the face, upper limbs, lower limbs, and trunk but no signs of inhalation injury. The total body surface area (TBSA) of burns was estimated to be 60%.

He was managed with intravenous fluids, antibiotics, analgesics, vitamin supplementation, proton pump inhibitors, DVT prophylaxis and regular wound dressings. Initial laboratory investigations included a full blood count, urea, and electrolytes, which were normal. During hospitalization, he developed an infection of the burn wounds, requiring surgical debridement and a transfusion of three units of blood. His recovery was complicated by malnutrition, social neglect, and a lack of family or community support. He later developed knee joint contractures and progressive wasting.

Despite being medically stable, he had persistent anemia and malnutrition. His discharge was delayed due to the absence of a caregiver or escort to take him home. Three months into admission, he experienced a sudden deterioration in condition and succumbed, with inanition being the probable cause of death.

**Discussion:** This case underscores the dangers of taking the law into one's own hands. It also shows importance of holistic burn care, including nutritional and psychosocial support. Compared to other burn cases with similar injury severity, this patient's outcome was significantly worsened by social isolation, prolonged hospitalization, and inadequate nutrition. Literature suggests that early nutritional intervention and rehabilitation improve burn survival, but these were lacking in

this case due to external socio-economic factors. In contrast, burn patients with strong social support and early rehabilitation show better recovery and reduced morbidity.

**Conclusion:** This case highlights the devastating consequences of social neglect in burn patients. While medical interventions addressed the initial injury and complications, the lack of social support and nutritional care contributed to a fatal outcome. A multidisciplinary approach incorporating medical, nutritional, and social rehabilitation is essential in managing vulnerable burn patients. There is a dire need for people to be sensitised on the consequences of burns, especially when it is done with the aim of meting out justice.

## EXPLORING BREAST CANCER AWARENESS AND SCREENING PRACTICES AMONGST RURAL WOMEN IN THE GAMBIA

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**Background:** Breast cancer is a significant public health challenge in The Gambia, where it ranks as the second most diagnosed cancer among women. Rural women face unique challenges in accessing screening services; however, evidence about their breast cancer awareness and screening uptake remains limited. This study aimed to assess breast cancer awareness and identify associated factors influencing screening uptake among rural women in The Gambia.

**Methods:** A community-based cross-sectional study was conducted among rural women in The Gambia. Using multistage sampling, we recruited 985 women from two local government authorities (response rate: 97.3%). Data were collected using a structured questionnaire administered in Kobo Toolbox. Statistical significance was set at p<0.05and adjusted odds ratios with 95% confidence intervals were reported.

**Results:** The mean age of the study population was 32 years with 34% of the participant aged 18-24 years. Although breast cancer awareness was high (87.7%), screening uptake was low (12.6%). Clinical breast examination was the most common screening method used (62.6%). Multivariable analysis revealed that Students and civil servants were more likely to undergo screening compared to unemployed women.

**Conclusion:** Despite the high awareness of breast cancer (87.7%), screening uptake among rural women in The Gambia was notably low at 12.6%, primarily due to limited knowledge (58.7%), service unavailability (13.5%) and financial constraints (13.1%).

Keywords: Breast Cancer, Screening Practices, Rural Gambian Women.

## KNOWLEDGE, PRACTICE AND BARRIERS OF INFECTION CONTROL AMONG HEALTHCARE WORKERS IN EDWARD FRANCIS SMALL TEACHING HOSPITAL.

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**Introduction**: Healthcare associated infection is a major cause of morbidity and mortality among patients in hospitals. Infection Control refers to the measures taken by healthcare workers in hospitals or other healthcare institutions to reduce the spread and acquisition of infectious pathogens. Despite the presence of Infection Prevention and Control Unit in Edward Francis Smalls Teaching Hospital (EFSTH), we do not have enough relevant data and research work published assessing the infection control measures of the main referral hospital in The Gambia. Therefore, there is an urgent need to bridge the research gap. This study seeks to assess the

knowledge, practice and barriers of infection control among healthcare workers in Edward Francis Small Teaching.

**Objectives***:* This study to aimed to assess the knowledge, practice and barriers of infection control among healthcare workers in Edward Francis Small Teaching Hospital.

**Method**: A prospective cross-sectional study was conducted at Edward Francis Small Teaching Hospital using structured interview questionnaires. A convenience sampling was done and the sample size was a minimum of 150 including all the doctors, nurses, laboratory officers, pharmacists and domestic service staff who are employees of EFSTH and have been working there for at least a month. The variables exploited in this study were based on the socio-demographic factors, knowledge, practice, and barriers of infection control.

**Results**: The finding showed that 70% of the healthcare workers had good knowledge of infection control measures. A fair amount of 65% of the healthcare workers had good practice of infection control measures. The barriers faced by healthcare workers in observing infection are in existence even though there are variations in the level of perceived barriers although 60% of respondents reported to have faced some barriers in their practice of infection control measures. **Conclusions**: The study concludes that healthcare workers have good knowledge of infection control but that is not correspondent to their level of practice. Additionally, they are faced with barriers that hinder their practice.

**KEYWORDS**: Infection Control, Healthcare associated infections, knowledge, practice, barrier

## HEALTH CARE PROVIDERS' KNOWLEDGE, ATTITUDE AND PRACTICE OF ANTIMICROBIAL RESISTANCE IN EFSTH

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**Background:** Global assessment of antimicrobial resistance (AMR) burden has estimated that AMR caused 4.95 million deaths in 2023. Although AMR burden is global, it is disproportionately high in resource-limited countries, where healthcare systems often lack robust antibiotic stewardship programs and infection control practices. This study assessed the knowledge, attitudes, and practices regarding AMR among healthcare providers at the Edward Francis Small Teaching Hospital (EFSTH) in The Gambia.

**Methods:** A cross-sectional survey was conducted with 100 respondents, of whom 97% completed the questionnaire. Data was analyzed with IBM SPSS Software, version 21.

**Results:** The results showed gaps in awareness and understanding of antimicrobial stewardship (AMS), with 78.4% of respondents unaware of AMS principles. While the majority demonstrated knowledge of basic antibiotic use principles, misconceptions were common regarding the conditions that require antibiotics, with more than half incorrectly associating antibiotics with the treatment of diarrhea, fever, and malaria. Additionally, 78.4% mistakenly believed that AMR occurs when the body itself becomes resistant to antibiotics. Most respondents agreed that inadequate hygiene, inappropriate prescribing, and limited diagnostic tools contribute to AMR at EFSTH, but more than half questioned the existence of hospital- based protocols for antimicrobial prescribing. Varied prescribing practices were observed, including frequent antibiotic use for conditions such as acute diarrhea and acne vulgaris. While many endorsed supervised medication administration and discouraging patient self- medication to prevent misuse, only 42.3% recognized the importance of patient counseling in AMR prevention.

**Conclusion:** These findings highlight a need for enhanced AMS training, adherence to hospital prescribing protocols, and improved patient education strategies to combat AMR effectively at EFSTH. Addressing these gaps could strengthen local healthcare providers' roles in reducing AMR. **Keywords**: Antimicrobial resistance, antimicrobial stewardship, healthcare providers, Edward Francis Small Teaching Hospital, antibiotic prescribing practices

#### IMPROVING OPERATING ROOM EFFICIENCY: REDUCING DELAYS BETWEEN ANESTHESIA INDUCTION AND SURGICAL START TIMES AND TURNAROUND TIME.

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**Introduction:** The operating theater (OT) is one of the most important units in any hospital setting, and the efficiency of this unit is a cornerstone of effective healthcare delivery. The process to transition patients from readiness for surgery to completion of the procedure needs to be standardized as a pathway to improve efficiency. Surgical services account for between 40-80% of hospital income depending on the country and the hospital setting. Inefficiencies in the OT have been linked to poor patient satisfaction and outcomes, as well as an increased burden on both the patients and the healthcare system. The aim of this study was to analyze the causes of these inefficiencies and propose evidence-based solutions to reduce anesthesia-to-surgery time and turnaround time, ultimately improving the utilization of the operating theatres.

**Methodology**: The study was conducted across four tertiary health institutions in Nigeria with a total surgical bed capacity 190. Ethical approval was granted by the Research and Ethical Committee of all hospitals. Data from Anaesthesia records of these institutions was used to identify the Anaesthesia induction time of all adult patients and the time between induction of Anaesthesia to surgical incision while data from the perioperative nurses was used to determine the turnaround time for elective operations from January 2024 to December 2024. Data collection included anesthesia induction, surgical start, and room turnover. Root cause analysis was performed through staff interviews, workflow observations, and process mapping. Potential interventions were identified through a review of best practices and collaborative discussions with OT teams.

**Results**: Data from 8, 450 patients was reviewed. Of these, 23.4% were gynecology and obstetrics surgeries, 21.5% were general surgeries, 16.2% were orthopedic surgery procedures, 12.4% were urological procedures, 10.9% were neurological procedures, 8.7% were ENT procedures and 6.9% were Dental and maxillofacial procedures. The study revealed that delays in anaesthesia-to-surgery time were primarily due to inefficient preoperative preparation (38%), lack of coordination between anesthesia and surgical teams (26%), equipment unavailability (19%), indecision within the surgical team (11%), staff related delay (6%) and other causes. Turnover delays were attributed to inadequate staffing during turnover periods (34%), prolonged room cleaning (28%), delays in patient transfer (26%) and miscellaneous causes (12%).

**Conclusion**: Operating theatre efficiency can be improved through a targeted intervention focused on streamlining workflows, enhancing team coordination, improving manpower, and leveraging technology. These strategies can improve OT efficiency, reduce costs, and enhance patient satisfaction.

#### IMPROPER USAGE OF WHO SURGICAL SAFETY CHECKLIST IN OPERATING ROOMS AT EDWARD FRANCIS SMALL TEACHING HOSPITAL (EFSTH), THE GAMBIA.

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**INTRODUCTION:** The WHO Surgical safety checklist is utilized for every patient undergoing a surgical procedure and is now employed by a majority of surgical providers around the world. The checklist is designed to significantly reduce surgical errors and complications by promoting better communication and team work within the surgical team members. This approach improves patient safety by systematically checking critical steps before, during and

after surgery. Surgical procedures are intended to save lives as unsafe surgical care can lead to substantial harm to patients. The implementation of this checklist reduces the rates of death and major complications after surgery in diverse setting.

**AIM:** To determine the proper utilization of WHO Surgical Safety Checklist among surgical team members (Surgeon, Nurse Anaesthetist, Anesthesiologist and operating room nurse) in Edward Francis Small Teaching Hospital (EFSTH) operating room.

**METHODOLOGY:** A descriptive quantitative study design was utilized. Study participants included surgical team members (Surgeon, Nurse Anaesthetist, Anesthesiologist and Operating room nurse) at Edward Francis Small Teaching Hospital. A detailed questionnaire was utilized to collect respondent's demographic information, levels of understanding in regards to proper utilization of WHO SSC and its implementation to prevent surgical error. Data collected was coded, entered and analysed using IBM SPSS analysis tool and Microsoft Excel. Descriptive statistics such as Pie Charts with percentages, were used to present the study findings.

**RESULTS:** The subjective ratings regarding the overall implementation of the WHO SSC between the surgical team members were significantly different. Majority of the participants, 23 (76.6%) had recently been using the WHO SSC for an average of 1 year, and five (16.6%) for average of 3 years. However, two (6.6%) participants had missing data. While 96.6% of the participants had used the WHO SSC before, 3.3% had not. Almost half of the participants (46.7%) had inadequate knowledge on the proper usage of the WHO SSC, and 50% acknowledged the need to be trained. Using the pre-test questionnaire to quantify data only14 (46.7%) participants had adequate knowledge on proper usage of WHO SSC, while the post implementation showed significant rise of participant knowledge with 25 (83.3%).

**CONCLUSION:** Although majority of the participants agreed to have used the WHO SSC and that it improves surgical safety. Due to factors like lack of compliance by surgical team members, the WHO SSC was considered to cause interruption of workflow during surgery especially when it's chaotic and in emergency situations. It is advisable to enhance their understanding on importance of its implementation. Furthermore, improving surgical team members' attitude with WHO SSC implementation and facilitating compliance of WHO SSC will prevent surgical errors. **KEYWORDS:** WHO Surgical Safety checklist, Surgical team members, patient safety, Safe surgery save lives, Surgical error.

#### ASSESSMENT OF PAIN MANAGEMENT SATISFACTION AMONG SURGICAL PATIENT AT THE EDWARD FRANCIS SMALL TEACHING HOSPITAL (EFSTH).

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**Introduction:** Appropriate pain management among surgical patients enhances fast recovery and satisfaction, reduces hospital stay, and burden. This study was aimed at assessing patients' satisfaction following post-operative pain management in the first 24 hours at the Edward Francis Small Teaching Hospital (EFSTH), Banjul.

**Methodology:** A descriptive cross-sectional study design conducted on 338 surgical adult patient admitted at the EFSTH from January to March 2024. A convenience sampling method was used to sample participants who had at least 24 hours postoperative in the surgical wards. Data was collected using the Revised American Pain Society Patient Outcome Questionnaire (APS-POQ-R) for Quality Improvement of Pain Management in Hospitalized Adults. Ethical approval was granted by the EFSTH Ethical and Research Committee (Ref. No. EFSTH\_REC\_2024\_011). Data was analyzed using SPSS version 20. P-value > 0.05 was considered to be statistically significant.

**Result:**The results indicated that most of the study participants were female 208 (61.5%). The mean age of the study participants was 34 +- 1.23 years (Mean +- SD). Educational levels were

primary 98 (29%), Secondary 79 (23.4%) and no formal education 73 (21.3%). Surgical patients experienced moderate 220 (65.1%) to severe 93 (27.5%) pain in the first 24 hours postoperatively. Despite the significant pain experienced, their satisfaction with pain management was 323 (96.6%). Common analgesics prescribed were (paracetamol + diclofenac 317 (93.8%)) and (paracetamol + diclofenac + opioids 21 (6.2%)). This high level of satisfaction was associated with sex, level of education, ASA Status, type of surgery, pain score, surgical status (emergency or elective), type of anesthesia, believes, pain interference with activities on bed, pain interference with activities off bed, falling asleep, staying asleep, depression and helplessness. Whiles age, surgical history, access to pain management information, and anxiety, were found to be statistically not significant.

**Conclusion** Acute postoperative pain was significantly high among surgical patients in the first 24 hours. This highlights the need for adequate postoperative analgesia at EFSTH. Despite the level of pain experience, surgical patients were satisfied with pain management in the first 24 hour at EFSTH.

Key Words; Satisfaction, Pain, Management, Surgical Patients.

# ANALYSIS OF MATERNAL MORTALITY TREND AT EDWARD FRANCIS SMALL TEACHING HOSPITAL FROM JANUARY 2020 TO AUGUST 2024

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**INTRODUCTION**: Maternal mortality has been in decline since 1990 globally as well as in Africa. The United Nations Sustainable Development Goals state that by 2030, the global maternal mortality rate (MMR) should be lower than 70 per 100,000 live births and although maternal mortality has drastically reduced over the years, it remains the leading cause of death among women in Africa therefore still poses a problem. Maternal mortality ratio (MMR) has been in decline in the Gambia since 1990, however there hasn't been a significant decline in Edward Francis Small teaching hospital (EFSTH), one of the 4 tertiary institutions and the main referral hospital in the Gambia.

**OBJECTIVES**: To determine the trend of maternal mortality, causes and most common age group affected in the Edward Francis Small Teaching hospital, Banjul over the last 5 years from January 2020 to August 2024.

**METHODS**: A retrospective review of all maternal deaths occurring at the Edward Francis Small Teaching Hospital from January 2020 to August 2024. The study period was set from 2020 onward to ensure access to a more complete dataset, acknowledging the common limitations of retrospective studies in our setting such as missing data. Ethical approval was gotten from the EFSTH ethical committee.

**RESULTS**: Total of 234 maternal deaths occurred over the study period, the MMR was 1,353/100,000 live births. Most common primary cause of maternal death was hypertensive disorders in pregnancy (36.6%) and the most common secondary cause was hypovolemic shock (24.1%). Most common affected age group were ages 21-30 (48%). This shows a fluctuating trend in EFSTH with a decline in comparison to previous studies.

**CONCLUSION**: The study showed that the maternal mortality ratio (MMR) in Edward Francis Small Teaching Hospital (EFSTH) during the study period was fluctuating and on the decline when compared to the previous studies done in the same hospital and the major primary cause of maternal mortality was hypertensive disorders in pregnancy while the major secondary cause was hypovolemic shock with the ages 21-30 being the major age groups affected by MM throughout the study period with a percentage of 48%.

#### PREVALENCE, OUTCOMES AND COMMON FACTORS OF LABOUR INDUCTION AMONG WOMEN DELIVERED IN A SECONDARY HEALTH FACILITY IN WEST CENTRAL REGION THE GAMBIA.

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**Background:** Induction of labour refers to the iatrogenic stimulation of uterine contractions before the onset of labour. This is usually a therapeutic option when the benefit delivery of the fetus outweighs the risk of intrauterine stay. The research was to study the prevalence, outcome and associated factors of labour induction among women delivered at Bwiam General Hospital over six months in the Gambia.

**Methods**: A hospital-based cross-sectional study was conducted between February 2024 and September 2025 on 53 women who went into labour after induction of labour. A structured questionnaire was used to collect data from the eligible participants who had induced labour following the use of Misoprostol or Foley catheter for induction of labour. The data was analysed using STATA 15C for descriptive and inferential statistics.

**Results**: A total of 771 women delivered in the facility within the six months under study. Out of which 53 were induced making a 7% prevalence of induction. Out of these 53 women, 48 (92%) delivered vaginally while 3 (6%) had caesarean section and 1 had instrumental delivery. The induction was successful in 92% of the patients while hypertensive disorders (43.4%) was the commonest indication. All who failed were delivered by Caesarean section.

**Conclusion:** From the study, successful induction rate was 92% and hypertensive disorders (43%) was the commonest indication for induction of labour. This shows that proper patient selection and close monitoring are necessary for successful the induction of labour.

Keywords: induction of labour, outcome, common factors.

# PREVALENCE OF ACUTE KIDNEY INJURY IN HYPERTENSIVE DISORDERS OF PREGNANCY IN THE GAMBIA

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**Introduction**: Hypertensive disorders in pregnancy is an obstetrics medical urgency with estimated prevalence of 15-25% and the leading cause of maternal and fetal morbidity and mortality in our practice. A very pertinent morbidity associated with hypertension is pregnancy related acute kidney injury (AKI). The aim of this study was to determine the prevalence of AKI in hypertensive disorders of pregnancy.

**Methodology**: It was a hospital based retrospective study conducted between June 2022 to June 2024 at Edward Francis Small Teaching Hospital (EFSTH) Banjul. Data collection tool was used to extract information from patient's medical records (folders). Data was transferred to computer database and analyzed with SPSS version 26. Simple descriptive statistics was used to express the findings on the variables.

**Results**: During the study period, a total of 313 patients with hypertensive disorder were admitted at the obstetric and gynecological ward of EFSTH and out of this number, 46 of them were diagnosed of AKI in hypertensive disorder in pregnancy, thus giving a prevalence of 15%. The extremes of ages were 17 and 42 years the modal age was 35 years. Multiparity was seen in 67.6% of the patients. Hypertensive disorders present during the study was eclampsia and severe preeclampsia Severe preeclampsia was the most common hypertensive disorder and was diagnosed in 55.9% of the patients.

**Conclusion**: The prevalence of AKI in hypertensive disorders in pregnancy was 15% which is high. Preeclampsia is the leading cause. Therefore, prevention and early intervention in preeclampsia may reduce the prevalence of AKI.

Keywords: Acute Kidney Injury, Prevalence, Hypertensive Disorders of Pregnancy

# EPIDEMIOLOGY OF SEVERE HYPERTENSIVE DISORDERS OF PREGNANCY IN EFSTH FROM 5TH OF AUGUST-2ND OF SEPTEMBER 2024.

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**Background**: Hypertensive disorders of pregnancy, especially preeclampsia/eclampsia is one of the leading causes of maternal and perinatal mortality worldwide and about 1 in 10 pregnancies in Africa, specifically west and central Africa are affected by hypertensive diseases in pregnancy. The aims of the study were to find the risk factors associated with severe hypertensive disorders of pregnancy, the most common severe hypertensive disorders of pregnancy in Edward Francis Small teaching hospital (EFSTH) and the region, that is, where most cases of severe hypertensive disorders of pregnancies come from, in the Gambia.

**Methods**: A cross-sectional study was conducted in Edward Francis Small teaching hospital between August and September 2024. Structured questionnaires were administered to participants. Data was collected using interviewer-administered structured questionnaire in English and was translated to the local languages for participants who do not understand English. The diagnosis of severe hypertension by clinicians at the respective hospitals was used as well as the antenatal cards of the patients to confirm some of the information they provided.

**Results**: A Previous history of hypertension or renal disease (P <0. 001) was a significant risk factor in the development of severe hypertensive disorder of pregnancy, while age (P< 0.30), parity (P<0.15), place of residence (P < 0.28) and Folic acid intake (P< 0.21), were found to not be statistically significant factors in the development of severe hypertensive disorders of pregnancy in the study population.

**Conclusion**: This study found that the majority of cases of SHDP occurred in women aged 25-34, followed by those aged 15-24. Severe preeclampsia was the most common severe hypertensive disorder of pregnancy in the West Coast Region of The Gambia.

#### ACCESS TO ESSENTIAL EMERGENCY SURGICAL CARE IN THE GAMBIA- A LITRATURE REVIEW

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Background: The Gambia, with a population of approximately 2.6 million, faces significant challenges in accessing essential emergency surgical care. The challenges range from limited infrastructure, workforce shortages, financial constraints which still persist despite the introduction of a National Health Insurance Scheme and geographic inaccessibility, which hinders timely surgical interventions, especially for the rural population. The Gambia's healthcare system is structured into three tiers: primary health centers, regional hospitals, and a single tertiary hospital. While regional hospitals offer some emergency and surgical services, access to essential emergency surgical care remains inadequate. The country's only tertiary hospital handles specialized procedures, leaving much of the population without access to advanced surgical care. The aim of this study was to identify barriers to emergency surgical care in The Gambia from available literature and to explore evidence-based solutions and situate the country's challenges within a global context to highlight areas for improvement and collaboration, as well as aligning it with global efforts to achieve Universal Health Coverage. Methods: A literature review was conducted using PubMed and Google Scholar, initially identifying 40 articles. Of these, six articles were selected due to their direct relevance to the topic.

**Results**: The reviews showed persistent barriers, including geographic inaccessibility, with about 30% of the population living over two hours from a hospital. Infrastructure deficits, such as unreliable electricity and water supply, further limit surgical capacity. Human resource shortages are severe, with only 38.9% of surgical facilities having a surgeon and 16.7% having a physician anesthetist. Financial constraints also hinder access, as health insurance remains inadequate. While immediate investments in infrastructure and workforce expansion are necessary, long-term improvements depend on sustainable financing and policy reforms.

**Conclusions**: To improve access to emergency surgical care in The Gambia, key strategies include strengthening healthcare infrastructure, expanding and training the surgical workforce, and enhancing financial protection through hybrid health financing models, which are achievable with government commitment and partnerships. Strengthening referral systems and data collection can yield immediate improvements with strategic investment. Policy integration is essential, with a focus on developing a national surgical plan and strengthening governance.

**KEYWORDS:** Emergency surgical care, healthcare access, The Gambia

#### THE INDICATIONS FOR ADULT ELECTIVE EYE THEATRE PROCEDURES AT SHEIKH ZAYED REGIONAL EYE CARE CENTRE OVER A SIX MONTH PERIOD.

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**Introduction**: This study investigates the demographic and clinical characteristics of patients undergoing eye surgery at Sheikh Zayed Regional Eye Care Centre (SZRECC), The Gambia. It aims to highlight regional disparities in patient presentation, surgical indications, and the implications for healthcare access and outcomes.

**Aim**: To document the patterns and indications of adult Eye Theatre Procedures in Sheikh Zayed Regional Eye Care Center (SZRECC), The Gambia. This study offer important insights for enhancing the provision of eye care services and maximizing patient outcomes in the area by clarifying the landscape of adult eye surgeries in this region of the Gambia.

**Method**: A retrospective cases series of 913 eligible Surgeries performed at Sheikh Zayed Region Eye Care Centre from January 2023 to June 2023 was undertaken. The Surgical Registers were assessed for the eligible candidates in this study period. Data were categorized based on the administrative regions with a focus on the gender distribution and age of recipients. Surgical indications were documented, with a particular emphasis on cataract surgeries.

**Results**: The analysis revealed that 49.7% of patients originated from the Greater Banjul Area, while only a small percentage came from other regions, indicating significant disparities in healthcare access. The female-to-male ratio among patients was 1.2:1, with 55.55% of those undergoing surgery being female. Cataract surgery was the most common procedure, accounting for 66.8% of cases, consistent with global trends as a leading cause of vision impairment. The mean age of recipients was 61 years, with 84% being over 40 years old. Small Incision Cataract Surgery (SICS) combined with Posterior Chamber Intraocular Lens (PCIOL) implantation was identified as the predominant surgical technique.

**Conclusions:** The findings underscore the need for targeted interventions to improve awareness and access to eye care, particularly in underserved rural areas. The study highlights the importance of collaborative approaches among healthcare providers to enhance patient outcomes. Future research should explore the implications of demographic trends on health service delivery in ophthalmology to better address the needs of the aging population. **Keywords**: elective eye procedure, surgical indications.

# INDICATIONS FOR GENERAL ANESTHESIA AT SZRECC FROM AUGUST 2020 TO AUGUST 2023

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**Background**; The use of anesthesia is pivotal in the success and outcome of surgical procedures, from its discovery in the mid nineteen century, it has resulted in the advancement of surgical interventions in the management of disease conditions. Anesthesia is coined from two Greek terminologies namely: An meaning without and Aisthesis meaning sensation which summarily depicts the purpose of anesthesia; to carry out surgical procedures without causing pain. General anesthesia is one of the forms of anesthesia with a cardinal goal of inducing loss of consciousness, amnesia and analgesia. The use of general anesthesia in Ophthalmology is uncommon compared to

other forms of anesthesia such the various forms of topical anesthesia. The use of GA predominantly is seen in children, mentally unstable patients and patients with chronic conditions that produce uncontrolled involuntary movement.

**Methodology**: a retrospective study over a three year period in The Gambia's main eye care center, the study was based on case files of patients that have undergone ocular surgery using general anesthesia at the center. The information retrieved included; age, address, gender, risk stratification and indication for the use of general anesthesia. The data collected was be analyzed using SPSS version 20 and Microsoft excel.

**Results:** The main indications for general anesthesia at SZRECC from August 2020 to August 2023 are Cataracts 33.27%, Corneal laceration 25.56%, Glaucoma 7.14%, Hyphema 5.63%, Ruptured globe 2.47% etc. The pattern of pediatric conditions ranges from high risk conditions which is largely trauma accounting for 49.3% of total cases followed by congenital abnormalities and acquired conditions. 78.4% of cases are under 10 years of age with a regional distribution of mainly WCR 52.1% and KMC 25.8%.

**Conclusion;** General anesthesia is a pivotal component of ocular surgery despite the predominant usage of local anesthesia, it remains a cornerstone in pediatric cases.

#### A CASE REPORT OF PSYCHOGENIC NON-EPILEPTIC SEIZURES IN A 19- YEAR-OLD ADOLESCENT PRESENTING AT EDWARD FRANCIS SMALL

#### TEACHING HOSPITAL, BANJUL, THE GAMBIA.

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Psychogenic non-epileptic seizures (PNES) are events that resemble epileptic seizures but lack epileptiform activity on electroencephalogram (EEG). Distinguishing PNES from epileptic seizures (ES) presents a significant diagnostic challenge. Clinicians typically rely on various clinical signs to differentiate between the two conditions. PNES is frequently associated with underlying psychological distress or psychiatric disorders.

Evidence from the literature suggests that specific features, such as prolonged seizure duration, occurrence from apparent sleep with EEG-confirmed wakefulness, fluctuating course, asynchronous movements, pelvic thrusting, side-to-side head or body movements, closed eyes during the episode, ictal crying, memory recall, and absence of postictal confusion, are indicative of PNES rather than ES. Additionally, postictal stertorous breathing has been found to distinguish convulsive PNES from generalized tonic-clonic seizures (GTCS), warranting its inclusion as a critical clinical sign.

A comprehensive clinical diagnosis should incorporate all available data, rather than relying on a single sign alone. This case report presents a 19-year-old male diagnosed with PNES at

Edward Francis Small Teaching Hospital (EFSTH) in Banjul, The Gambia, with a focus on his clinical presentation, diagnostic workup, and management approach.

# TREATMENT OUTCOMES OF WORK RELATED INJURY AT EFSTH- THE GAMBIA.

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**Background:** Work related injuries (occupational injuries) cause significant public health problems globally, resulting in socio-economic burden on victims. There is a significant rise in numbers of workplace injuries despite advances in modern technology and protections. Low-income countries like The Gambia have a high burden of these injuries. Determining the burden of work-related injury is an important step in developing work related injury prevention strategies to reduce their incidence.

**Methods:** A retrospective descriptive study design conducted on 113 patients who presented to Edward Francis Small Teaching Hospital Trauma Unit between January to December 2024. The patient's age, mechanism of injury, injuries sustained and disposals were analyzed. Additionally, Patterns of injury related to body regions, and outcome of interventions were discussed.

**Results:** Majority of patients were aged 13- 30 years. Majority (68%) sustained injuries to the upper limb. The mechanisms of injury included lacerations, crushed injuries, fall from height and injuries from falling objects. The majority were construction workers (23%), mechanics (12.4%), millers (15%) and welder men (5.3%). The severity of injuries suffered by victims range from soft tissue to bony injuries, however some presented with combination of both.

Majority of patients (90%) went on to have interventions and only 10% did not need orthopaedic procedures. Among those who had intervention, 26% had amputation of the affected body part, whilst the rest (74%) had limb salvaging interventions. No mortality was recorded.

**Conclusion/Recommendation:** Many victims sustain debilitating injuries leading to permanent loss of function, disabilities and poverty. It is crucial to address factors leading to such injuries such as lack of proper Protective equipments and workplace policies to minimize the prevalence of work related injuries in The Gambia.

**Limitations:** Some of the limitations of the study are: low quality of record keeping, access to patients to assess functional outcomes. Data on follow up also lacking.

Keywords; Work related (occupational) injuries, Low-income countries, The Gambia

#### INDICATIONS AND DIAGNOSIS OF UPPER GASTROINTESTINAL ENDOSCOPY IN EDWARD FRANCIS SMALL TEACHING HOSPITAL FROM DECEMBER 2020 TO OCTOBER 2024

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**Introduction**: Upper gastrointestinal endoscopy has revolutionized the diagnosis and treatment of gastrointestinal diseases. It may be used to evaluate a variety of signs and symptoms in patients who range from normal to severely ill. It may be also helpful in the diagnosis of upper gastrointestinal abnormalities. This study was to document the common indication and diagnosis of UGIE in Edward Francis Small teaching hospital in The Gambia. **Methods**: this study used a cross-sectional design to recruit the records of patients who underwent UGIE in EFSTH during the study period. Demographic data, indications, endoscopic diagnosis as well as biopsy findings for each participant were recorded. Participants vitals before and after the procedure were recorded to assess immediate complications.

**Results**: A total of 1102 patients had upper GI endoscopy during the study period. The median age of this study population was 39 years, range (14-88 years). Most of the patients were within the 21-40 years age group (47.8%). The majority of the participants were also females 658 (58.7%). Abdominal pain 629 (57.1%) and dyspepsia 520 (47.2%) were the commonest indications for UGIE in these patients. The commonest endoscopic diagnosis was gastritis 848 (77%) followed by duodenitis 495 (44.9%). Male patients undergoing UGIE were more likely to have oesophageal cancer (13 (2.9%) vs 7 (1.1%), p value: 0.023, Gastric ulcer (43 (9.7%) vs 41 (6.2%), p value: 0.035 and Duodenal ulcers (39 (8.8%) vs 25 (3.8%), p value: 0.001 as compared to female patients.

**Conclusion**: The most common indication of UGIE in EFSTH during the study period was abdominal pain and the main diagnosis of these patients was gastritis. This confirms the importance of endoscopic services in the early diagnosis of upper gastrointestinal diseases in the Gambia.

#### RISK FACTORS OF NON-UNION AFTER INTRAMEDULLARY NAILING OF TIBIAL FRACTURES IN EFSTH

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**Background**: Intramedullary nailing is a common surgical treatment for lower limb fractures. Despite its effectiveness, the incidence of nonunion remains a significant clinical challenge. Tibial fractures are the most prevalent type of long bone fracture.

**Objectives**: To determine the key risk factors associated with non-union after intramedullary nailing of patients with tibial fractures.

**Methods**: A hospital-based retrospective study was conducted which included 178 patients who sustained tibial fracture and underwent intramedullary nailing between January 2021 to January 2024. Out of the 178 patients who had tibial fracture, 40 patients met the inclusion criteria for a 12 week follow-up. Data was collected on potential risk factors such as patient demographics, fracture characteristics, mechanism of injury, surgical techniques, and post-op factors. The primary outcome measured was on sign of healing on x-ray by 12 weeks post-surgery. The variables were summarized using mean, charts and tables.

**Results**: Of the 40 patients, 12(30%) developed non-union and 75% of the non-union cases occurred in males. High-energy trauma occurred in 82.1% of the healing group and 83.3% of the non-union group. Closed fractures had a higher healing rate (75%) compared to open fractures. Open fractures were graded using the Gustillo classification. Open fracture (Grade I) had a healing rate of 90.9%, while (Grade II) fractures had a lower healing rate of 50%. More severe fractures, like (Grade IIIc) showed no healing highlighting the increased risk of non-union in more complex fractures. Post-operative infection significantly influenced outcomes, with 50% of non-union group experiencing infections, compared to only 3.6% in the healing group. Additionally, 89.3% of patients in the healing group achieved painless weight-bearing compared to 58.3% in the non-union group.

**Conclusion**: The study identifies male gender, infection, and high-grade open fractures as key risk factors associated with non-union of tibial fractures. Post-operative infection and the inability to weight-bear painlessly have a more impact on non-union. Patients in the healing group achieved better functional outcomes, as indicated by higher rates of painless weight-bearing. Further studies should focus on early intervention strategies to minimize these risks and improve healing outcomes.

**KEYWORDS**: Tibial fracture, non-union, intramedullary nailing

#### BURDEN OF HEAD INJURY IN THE NEUROSURGERY UNIT AT EDWARD FRANCIS SMALL TEACHING HOSPITAL FROM JULY 2022 – JUNE 2023

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**Introduction**: Head injury sometimes referred to as Traumatic Brain Injury (TBI) is any external force that causes damage to the scalp, skull, or brain. About 69 million individuals yearly suffer from TBI globally. Head injuries remain among the leading causes of morbidity and mortality in the neurosurgery unit at EFSTH. Cases usually result from Road Traffic Accidents (RTA), falls from height and Physical Assaults with the incidence increasing over the years, causing a significant burden to the health system.

**Methodology**: We conducted a retrospective study of head injury cases seen at the Accident and Emergency unit at Edward Francis Small Teaching Hospital, from July 2022 to June 2023. This data was collected from the inpatient record book of the Orthopaedics and neurosurgery units combined and entered into a computer-based google form.

**Results**: A total of 2034 patients were seen at the orthopaedics & neurosurgery units at the accidents and Emergency. 208 (10%) patients presented with head injuries. Males accounted for 164 (79%) with young adults (15-47 years) making 43.3% of the cases. Motor vehicle accidents/RTAs was the commonest cause of head injuries - 94(45.2%), followed by Falls from Height 42(20%) and assault 19(9%). The GCS was as follows: mild-25%, severe-21% and moderate head injuries 14%. The total number of neurosurgeries performed for head injuries was 31 surgeries (22% of the total surgeries) with subdural haematoma being the commonest indication for surgery – 45%, followed by depressed skull fractures -26%. The commonest neurosurgical procedure performed for head injuries was Burr hole - 39%, followed by Elevation of Depressed skull fracture – 26%.

**Conclusion**: This study has shown that head injuries remain a significant burden to the Neurosurgery unit at EFSTH as the high incidence places a considerable strain on resources of the unit. This therefore highlights that improved preventive measures such as road safety awareness, and good road use habits by drivers and pedestrians, are essential to reducing the incidence of head injuries.

KEYWORDS: Neurosurgery, Head Injury, Subdural haematoma, depressed skull fracture.

#### AWAKE CRANIOTOMY WITH ENDOSCOPIC SUPPORT, GUIDED BY INTRAOPERATIVE ULTRASOUND, IMEKA NEURONAVIGATOR AND MRI FOR EXCISION OF LOW-GRADE ASTROCYTOMA IN SHARAB HOSPITAL. CASE

#### **REPORT.**

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**Abstract:** We present the case of a 70-year-old male patient admitted to our center presenting a picture of progressive consciousness deterioration, with central facial paralysis, mixed aphasia, disorientation and proportional left hemiplegia. It was decided to perform a minimal frontal awake craniotomy guided by intraoperative ultrasound, endoscopic support and Imeka-Neuronavigator, achieving maximum safe resection of Intracranial lesion with Satisfactory result.

Awake craniotomy is mainly used for mapping and resection of lesions in vitally important brain areas where imaging is not sufficiently sensitive. These are most commonly speech and motor areas. In all sedation-anesthesia techniques, the patients are awake and able to speak and/or move during the mapping phase.

It is a technique used to improve perioperative outcomes, achieving a faster recovery of the patient with a reduction in the percentage of postoperative complications.

Awake craniotomy is a modern and safer technique than conventional approaches for treating intra-axial lesions of gliomatous origin. Along with MRI- and transcranial ultrasound-guided, endoport technique and neuro-navigation, it allows for obtaining a biopsy and performing safe excision, reducing intracranial pressure and improving patients' neurological symptoms. More diagnosed and operated cases of low-grade gliomas in The Gambia need to be reported to scientifically validate this surgical technique as the primary treatment.

Keywords: Awake craniotomy. Glioma

#### THE BEGINNING OF NEUROSURGICAL PRACTICE AT SHARAB HOSPITAL. REPUBLIC OF THE GAMBIA. PERIOD 2024-2025.

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**Objective**: To describe the experiences, main pathologies treated in the Neurosurgery service and progress achieved during the start of neurosurgical practice at Sharab Hospital from January 2024 to January 2025. To characterize the study population according to epidemiological, clinical, and neurosurgical variables of interest.

**Method**: A descriptive, observational, and cross-sectional study was conducted to characterize patients diagnosed with brain and spine pathologies undergoing surgical and conservative treatment at Sharab Hospital from January 2024 to January 2025, based on clinical, epidemiological, and neurosurgical variables. Qualitative research and participatory observation techniques were applied. **Results**: A total of 2000 patients were treated, 42 surgical interventions were performed, the remaining cases received conservative treatment, Neuroimaging studies that included simple X-rays of the skull and spine, Axial Tomography and Nuclear Magnetic Resonance allowed us to identify and diagnose different pathologies, predominating patients diagnosed with lumbosacral canal stenosis, overall mortality was 2%. A chronicle was presented on the background of neurosurgical practice in The Gambia, main challenges and particularities of the Specialty in the country <sup>(1-8)</sup>

**Keywords**: craniotomy; decompression; endoscopy, microdisectomy, hemilaminectomy; laminectomy

# **1ST GLOBAL NEUROSURGERY FELLOWSHIP IN THE GAMBIA**

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"Global neurosurgery" is part of the Global surgery movement announced in 2015 by the Lancet. The purpose is to extend the availability of surgical care globally to ensure the access to lifesaving surgical services for all those in need also in the low and middle income countries. The Unit of Neurosurgery in the EFSTH has actively collaborated with African, European and North American neurosurgical units, leading to the advances in the neurosurgical care in the Gambia both in the form of available infrastructure as well as advances in the clinical practice and surgical approaches.

One of the latest initiatives by the Unit was the hosting of the first Global Neurosurgery fellowship in the department, which is the topic of this presentation. Presentation describes the full Gambian neurosurgery experience of a Finnish specialist neurosurgeon at the Unit from October 2024 to January 2025 and presents the clinical and scientific projects that were initiated during this fellowship.

Hosting of international clinical specialist fellows is a common practice in the western neurosurgical units. It is an effective way to share and expand knowledge and expertise and create connections and friendships. For the visiting clinician, it is also a deeper learning experience culturally and psychologically beyond the clinical practice. Although the neurosurgical patients, their pathologies and treatments remain largely the same, the overall differences of the sociocultural environment, hospital practices and even the geographical differences will reveal multiple new features of clinical neurosurgical diseases, their diagnostics and treatment options are presented from a new viewpoint. Overall, having the possibility to attend an international fellowship in the African region strengthens the clinical skills of an European visitor. Bidirectional fellowships between high and low/middle income countries are highly useful for all the parties and a recommendable practice, ensuring the international clinical and academic collaboration of the units in the future as well.

#### REVIEW OF THE IMPACT OF THE SWEDISH AFRICAN NEUROSURGICAL COLLABORATION (SANC) MISSION TO THE GAMBIA

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Introduction: Swedish African Neurosurgical Collaboration (SANC) a member of the Global Neurosurgery Collaboration aims to provide improved accessibility and affordability to neurosurgical care, especially in developing countries through cooperation and sharing of expertise. The key concepts of this collaboration include improving access, capacity building, knowledge sharing and collaboration, multidisciplinary approach, and sustainability. Moreover, the relevant programs of this global neurosurgery are as follows: Research, training, twinning programs, internet-based platforms, and advocacy.

Despite being not the first of its kind in Africa and globally, the first mission of the SANC to The Gambia took place between June 5th and 16th, 2023, at the Edward Francis Small Teaching Hospital (EFSTH) in Banjul. Subsequently, due to a successful mission and impact on neurosurgical care in the country, the mission visited the EFSTH between January 19th and 31st, 2025.

**Method**: Study databases from EFSTH data, and journals, such as PubMed, and Google Scholar, were searched factoring in relevant studies with emphasis on the following terminologies and phrases: "global neurosurgery," "SANC mission to Gambia, and adaptation of twinning concept were of great benefit.

**Results**: During the first mission, 22 operations were carried out, the most common being degenerative spinal conditions (n = 9). In the 3 months following the mission, 43 operations were performed compared to 24 during the 3 months leading up to the mission. Also, during this debut mission, an operating microscope (Möller-Wedel) was donated and installed, drill bits, and operating theatre consumables and the neurosurgeons on-site underwent training in microneurosurgery. On the next subsequent mission almost one year and six months later a total of 11 surgical interventions were conducted, more than half of which were degenerative spine cases. The mission as a norm yet demonstrated a vibrant partnership by donating a mobile 8\_slice CT scanner, a complete drill set Medtronic type, drill bits, consumables

**Conclusion**: This study revealed the positive influence of the SANC mission on The Gambian health system in terms of capacity and equipment development. The availability of an operating

microscope and a mobile CT scanner with other vital instruments have further strengthened neurosurgical care, especially for microsurgical procedures and traumatic brain injury cases improving the neurosurgical care in The Gambia.

**KEYWORDS**: Global Neurosurgery, concept, mobile CT scanner

#### INTUBATION WITHOUT MUSCLE RELAXANTS; HAEMODYNAMIC VARIABILITY AMONG CHILDREN AGED LESS THAN 5 INDUCED WITH HALOTHANE COMPARED TO SEVOFLURANE

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**INTRODUCTION:** The use of deep inhalational Anaesthesia to facilitate tracheal intubation has been practised for a long time, however, recently it has been reserved for patients with anticipated difficult airway or suspected airway obstruction. Halothane an older induction agent is cheap, readily available, non-irritant and pleasant to breathe with rapid loss of pharyngeal and laryngeal reflexes has been used as an induction agent of choice when using a muscle relaxant is not desired. However, it is a potent cardiac depressant that can cause arrhythmias and possible liver toxicity. Sevoflurane, a newer inhalational induction agent has a sweet smell too and a relatively low blood solubility which permits the rapid equilibration between alveolar gas and arterial blood with consequently swift induction of Anaesthesia after inhalation. The choice of inhalational anaesthetic agents in paediatric patients is critical due to their distinct haemodynamic effects. This study aimed to compare the haemodynamic variability in children induced with halothane compared to sevoflurane.

**METHODOLOGY**: A prospective, randomised controlled trial was conducted on 110 paediatric patients aged less than 5 years, equally divided into two groups: Group H (halothane induction, n = 55) and Group S (sevoflurane induction, n = 55). Ethical approval was granted by the Research and Ethical Committee of the Federal Teaching Hospital, Gombe. Haemodynamic parameters, including heart rate (HR), systolic blood pressure (SBP), diastolic blood pressure (DBP), and mean arterial pressure (MAP), were recorded at baseline, during induction, and at regular intervals post-induction.

**RESULTS**: Results indicated that there is no significant difference in haemodynamic parameters between Groups H and S during induction of anaesthesia.

#### FROM SCALPELS TO ALGORITHMS: THE RISK OF DEPENDENCE ON ARTIFICIAL INTELLIGENCE IN SURGERY

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Artificial Intelligence (AI) is transforming surgery, advancing robotic-assisted procedures, preoperative risk prediction, and intraoperative decision-making. However, increasing reliance on AI raises concerns, particularly regarding the potential deskilling of surgeons and

overdependence on algorithmic recommendations. This overreliance risks diminishing surgeons' skills, increasing surgical errors, and undermining their decision-making autonomy. The "black-box" nature of many AI systems also presents ethical challenges, as surgeons may feel pressured to follow AI-driven recommendations without fully understanding the underlying logic. Additionally, AI biases from inadequate datasets can result in misdiagnoses and worsen healthcare disparities.

While AI offers immense promise, a cautious approach is vital to prevent overdependence. Ensuring that AI enhances rather than replaces human skills in surgery is critical to maintaining patient safety. Ongoing research, ethical considerations, and robust legal frameworks are essential for guiding AI's integration into surgical practice.

Surgeons must receive comprehensive training to incorporate AI into their work without compromising clinical judgment. This emphasizes the need for clear guidelines, thorough surgeon training, and transparent AI systems to address the risks associated with AI dependence. By taking these steps, healthcare systems can harness the benefits of AI while preserving the essential human aspects of surgical care.

#### INFLUENCE OF ARTIFICIAL INTELLIGENCE (AI) IN HEALTHCARE – A REVIEW OF CURRENT LITERATURE.

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**Background:** Artificial intelligence (AI) is affecting and influencing every facet of modern living as we know it and the healthcare industry is no exception. AI is revolutionizing healthcare by enhancing diagnostics, treatment planning, and patient care. AI-driven technologies, including machine learning, deep learning, and natural language processing, have significantly improved medical imaging, drug discovery, and robotic-assisted surgery. Despite its benefits, AI integration in medicine faces challenges such as ethical concerns, data privacy risks, and regulatory limitations.

**Objective:** The aim of this review is to examine the impact of AI in healthcare, focusing on its role in surgical practice, potential for further integration, and the challenges hindering its widespread adoption. The study aims to highlight AI's contributions while addressing the critical barriers to its ethical and effective implementation.

**Methodology:** A literature search was done using PubMed and Google scholar to identify published articles on artificial intelligence in healthcare. where initially 10 articles were identified, out of which 4 papers were more aligned with the objective of this review.

**Results:** Ten articles were found that addressed the subject, of these, 4 papers were more specific in addressing the objective of this study. Out of 4 papers, 3 delve into how AI has been optimizing clinical workflows, supporting evidence-based decision-making, and how AI- driven predictive models facilitate early disease detection to help in managing chronic conditions. Evidenced by 2 papers, in surgical practice, AI-powered robotic systems provide greater precision, minimizing complications and improving post-operative recovery. Despite these

benefits, all 4 papers address concerns related to bias in AI models, data security vulnerabilities, lack of transparency, and inadequate regulatory frameworks remain significant obstacles. This review highlights how AI has revolutionized healthcare and recommendations for its potential integration into the healthcare system.

**Conclusions:** Al has immense potential to improve medical practice, but its successful integration requires addressing technical, ethical, and legal challenges. Strengthening

transparency, mitigating bias, enhancing cybersecurity, and fostering interdisciplinary collaboration will be critical for AI's future in medicine. Ultimately, AI should complement human expertise, not replace it! ensuring a balance between technological innovation and compassionate, patient-centered care.

#### USE OF AN ARTIFICIAL INTELLIGENCE SCRIBE IN PAEDIATRIC UROLOGY CLINICS

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**Introduction/Aims:** Accurate records of clinic appointments improve patient safety by ensuring continuity of care between healthcare teams and contribute to patient satisfaction as they help them to engage with and understand their care. However, writing records is time consuming for the clinician, taking time which could be spent on the clinician-patient relationship. It increases cognitive load, which can lead to errors and burnout.

Artificial intelligence (AI) is increasingly being utilised in healthcare. Several 'scribe' programs exist, which use automatic speech recognition technology and language learning models to listen to a consultation and generate a note within seconds. We aim to describe the use of an AI scribe in paediatric urology outpatient clinics.

**Materials and methods:** Paediatric urology consultants in a single centre were surveyed for their impressions of the advantages and disadvantages of AI scribe technology after using 'Heidi' (an AI scribe app), to generate notes for clinic consultations.

The Heidi app was used on a smartphone or computer. The 'SOAP' (subjective, objective, assessment and plan) template was used for notes. Heidi listened to the consultation and generated a note, which was checked for accuracy before committing it to the patient record. **Results**: 2 paediatric urology consultants have regularly used Heidi for 2-3 months. The main benefit of using the software was felt to be time saved, freeing up the clinician to focus on the patient during the consultation. Other benefits include decreasing cognitive load, and efficient, contemporaneous production of complete medical records by a program that cannot be fatigued or stressed. Concerns with the use of Heidi included significant errors, especially with rare conditions (of particular concern in paediatric urology). Another concern was patient confidentiality – this was overcome by not entering patient identifiable data to Heidi. A concern around wider use of AI scribes is the impact on training, as automation diminishes the learning opportunity from writing notes.

**Conclusion**: Al scribes can dramatically improve efficiency and free up clinicians to spend more time relating to patients. Careful checking for errors is mandatory, and thoughtful adoption is required to ensure its integration into skilled practice.

Keywords: Record keeping, Artificial intelligence, Efficiency

# USE OF ARTIFICIAL INTELLIGENCE (AI) IN MEDICAL RESEARCH

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**Introduction**: Artificial Intelligence (AI) has shown transformative potential in various domains of healthcare, particularly in enhancing the quality and effectiveness of medical research. This review explores the impact of AI on healthcare research globally and in Africa in particular, a region where healthcare infrastructure and educational resources often face significant

challenges.

**Methods**: A comprehensive literature review was conducted, analyzing studies and reports on the implementation and outcomes of AI technologies in healthcare research within Africa. Sources included peer-reviewed articles, conference papers, and expert analyses from PubMed and ResearchGate.

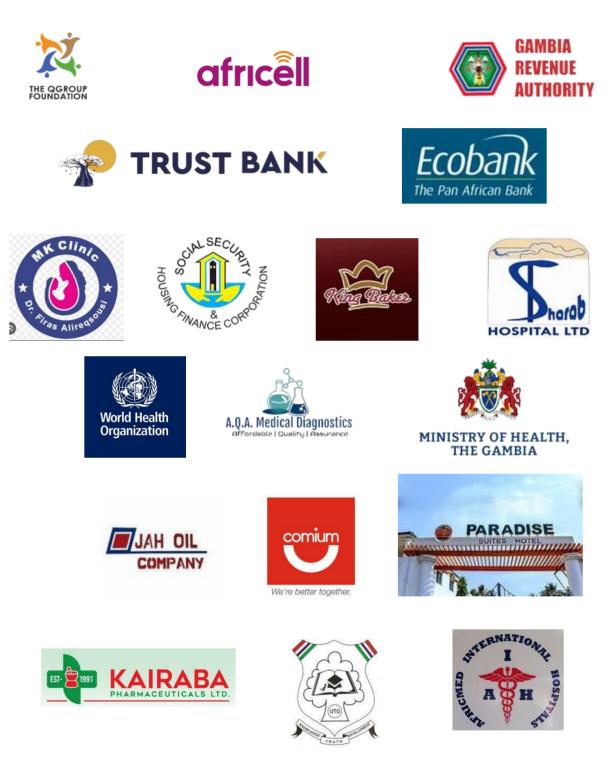
**Results**: The application of AI in healthcare research and training in Africa has demonstrated promising results. AI driven tools have not been integrated into medical curricula in most regions. Challenges to the adoption of AI into research include lack of large clinical datasets, infrastructural limitations, and insufficient training for implementing AI technologies.

**Discussion**: While AI has the potential to significantly improve healthcare research in Africa, addressing the aforementioned challenges is crucial. Efforts must focus on building local capacity, improving digital infrastructure, and fostering collaborations between educational institutions, governments, and international bodies. Additionally, developing AI solutions tailored to the unique needs and conditions of African healthcare worker will be essential for sustainable impact.

**Conclusion**: Al holds substantial promise for revolutionizing healthcare research in Africa, potentially leading to better healthcare outcomes and enhanced medical education. Future research should aim at creating scalable and region-specific Al tools that address the diverse needs of African healthcare professionals and patients.

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