



**CCTH MAIDEN SCIENTIFIC RESEARCH CONFERENCE  
HELD ON 13TH NOVEMBER 2018 @ CCTH LECTURE HALL.**



# **CAPE COAST TEACHING HOSPITAL**

## **REPORT & THE BOOK OF ABSTRACT**

**MAIDEN SCIENTIFIC RESEARCH CONFERENCE  
HELD ON 13<sup>TH</sup> NOVEMBER 2018 @ CCTH LECTURE HALL**

**Theme:**

**Optimising Outcome of Health Care Delivery: The Role of Research in Policy Decision Making in (CCTH) Ghana.**

**NOVEMBER 2018**



**REPORTED BY:**

.....  
**Ms. Princess G. Ofori**  
The Conference Coordinator and  
Head, Research, Monitoring and Evaluation  
Cape Coast Teaching Hospital

**APPROVED BY:**

.....  
**Dr. Eric Kofi Ngyedu**  
Chief Executive Officer,  
Cape Coast Teaching Hospital



**CCTH MAIDEN SCIENTIFIC RESEARCH CONFERENCE  
HELD ON 13TH NOVEMBER 2018 @ CCTH LECTURE HALL.**



**TABLE OF CONTENT**

ACKNOWLEDGEMENT .....	3
CONFERENCE REPORT .....	6
CONFERENCE REPORT .....	6
1.1 CONFERENCE AIM:.....	6
1.2 CONFERENCE OBJECTIVE: .....	6
1.3 CONFERENCE OUTCOME:.....	6
1.3.1 TOTAL ABSTRACTS RECEIVED AND PRESENTED: .....	6
1.3.2 PANEL DISCUSSION/CONFERENCE OUTCOME: .....	6
1.3.2.1 RESEARCH AND POLICY ISSUES: .....	6
1.3.2.2 HEALTH SCREENING (INFECTIONS, CANCERS, ANAEMIA ETC.) AND MEDICINE/TREATMENT:.....	7
1.3.2.3 MEDICO-LEGAL ISSUES: .....	7
1.3.2.4 OCCUPATIONAL HEALTH AND SAFETY OF HEALTH PERSONNEL: .....	7
1.3.3 AWARD: .....	7
1.3.4 PUBLICATION OF THE CONFERENCE:.....	8
SECTION TWO .....	9
2.1 AWARD WINNERS: .....	9
SECTION THREE.....	10
BOOK OF ABSTRACTS PRESENTED AT THE CONFERENCE.....	10
BOOK OF ABSTRACT .....	11
CCTH INSTITUTIONAL STUDY: .....	13
PUBLISHED RESEARCHES:.....	15
UNPUBLISHED ABSTRACTS (Submitted For Publication in a Peer – Review Journal).....	32
CLINICAL CASE REPORTS .....	42
SECTION FOUR.....	46
SELECTED PICTURES FROM THE CONFERENCE .....	46



**CCTH MAIDEN SCIENTIFIC RESEARCH CONFERENCE  
HELD ON 13TH NOVEMBER 2018 @ CCTH LECTURE HALL.**



## ACKNOWLEDGEMENT

The management of Cape Coast Teaching Hospital (CCTH) would like to express its sincerest gratitude to all stakeholders who contributed in diverse ways to make the Maiden Scientific Research Conference a success. Appreciation goes to the Ministry of health for their support and participation at the conference. Acknowledgement also goes to CCTH Board Chairman and members of the board for their support and contribution to the effectiveness of the conference. Also, to the Chairperson of the conference, Dr. Juliana Yartey Enos, for ensuring effective time management at the conference.

Profound gratitude goes to the technical committee members and the entire working group for their hard work and dedication towards ensuring an effective conference. Thanks to all the researchers and presenters for taking time to prepare and present quality abstracts (research and clinical case reports) at the conference.

Sincere thanks to all the sponsors (Awards and Décor) for their immense contributions.

Many thanks to all participants (Staff of; CCTH, UCC School of Medical Sciences, UCC College of Nursing and Midwifery, UCC College of Allied Health Sciences and Kintampo Health Research Centre) for their active contributions throughout the conference. The media is also appreciated for their support in publishing the conference and the key issues discussed.

Acknowledgement also goes the following;

NAMES	
<b>SPONSORS</b>	
<ol style="list-style-type: none"> <li>1. LightWave Ltd - Ghana</li> <li>2. Jephong Pharmacy - Ghana</li> <li>3. Safe Life Pharmacy - Ghana</li> <li>4. Emcure Pharmaceuticals - Ghana</li> <li>5. Denk Pharma - Ghana</li> </ol>	Awards Sponsors
<ol style="list-style-type: none"> <li>6. Mrs. Susie Davies – Cape Coast Teaching Hospital</li> </ol>	Décor Sponsor
<b>CCTH BOARD MEMBERS/DIRECTORS PRESENT</b>	
Dr. Juliana Yartey Enos	- Conference Chairperson and Board Member
Dr. Eric Kofi Ngyedu	- Chief Executive Officer
Mr. Albert Nathaniel Essuman	- Board Member
Prof. Ivy Ekem	- Dean, School of Medical Science – University of Cape Coast
Mr. Fred Mensah-Acheampong	- Director of Administration
Mrs. Sophia Blankson	- Director of Nursing Services
Dr. Joseph Tawiah Turkson	- Director of Pharmacy
Mr. Samuel Asare Tieku	- Director of Finance
<b>PANEL DISCUSSION - MEMBERS</b>	
1. Prof. Samuel Debrah	- Consultant Surgeon - UCC/SMS – CCTH - <b>Moderator</b>
2. Prof. Mawuli Gyakobo	- Professor, Internal Medicine - UCC/SMS – CCTH - <b>Moderator</b>
3. Mr. Benjamin Nyakutsey	- Head of Policy, Ministry of Health - Ghana
4. Mr. Fred Mensah Acheampong	- Director of Administration – Cape Coast Teaching Hospital (CCTH)
5. Prof. Ivy Ekem	- Dean – University of Cape Coast - School of Medical Sciences (UCC – SMS)
6. Dr. Dorcas Obiri-Yeboah	- Dean – University of Cape Coast – College of Nursing and Midwifery

**CCTH MAIDEN SCIENTIFIC RESEARCH CONFERENCE  
HELD ON 13TH NOVEMBER 2018 @ CCTH LECTURE HALL.**

7. Prof. Rahman Ganiyu	- Consultant Surgeon – University of Cape Coast - School of Medical Sciences
8. Dr. Joseph Tawiah Turkson	- Director of Pharmacy - CCTH
9. Dr. Patrick Akakpo	- Head, Pathology – CCTH and Senior Lecturer UCC - SMS
10. Mrs. Sophia Blankson	- Director of Nursing Services - CCTH
11. Dr. Stephen Laryea	- Head, Child Health Sub-BMC - CCTH
12. Dr. Evans Kofi Agbeno	- Senior Lecturer - Obstetrics and Gynaecology – UCC-SMS/CCTH
13. Dr. Momade Ami Eszter	- Head, Accident and Emergency – CCTH
<b>PRESENTERS PRESENTATIONS</b>	
1. Mr. Fred Mensah-Acheampong	Up-take of research in health policy making in Ghana: Current Situation with practical examples
2. Dr. Eric Kofi Ngyedu	Evaluation study: Effectiveness of the E-Health Project (LHIMS Software) At CCTH, Ghana and Its Impact on Patients Waiting Time ( <b>INSTITUTIONAL STUDY</b> )
3. Dr. Ethel Osei-Tutu	Peripheral Intravenous Cannulation And Phlebitis Risk In CCTH. ( <b>AWARDED</b> )
4. Mrs. Elizabeth Quartson	Cancellation of Surgeries at Cape Coast Teaching Hospital: Causes And Effects
5. Dr. Francis Agyarko-Wiredu	A 6 Year Analysis of Fatal Gunshot Injuries in The Central Region of Ghana
6. Ms. Pearl Essuman-Gwira	Evaluation of Surgical Outcome of age related Cataract Operation at Cape Coasts Teaching Hospital
7. Miss. Constance Cobbold	Explorative Assessment of Prescribing Pattern at Cape Coast Teaching Hospital
8. Dr. Akoto-Gyamera	Review Of Errors In The Issue Of Medial Certificates Of Cause Of Death In A Tertiary Hospital In Ghana ( <b>AWARDED</b> )
9. Prof. Ivy Ekem	The prevalence of anaemia in in-patients at a tertiary centre
10. Dr. Hagan Richmond	Patterns, Indications And Outcome Of Amputations In Cape Coast Teaching Hospital; A Four-Year Retrospective Study
11. Dr. Peter Appiah-Thompson	Tympanoplasty With Mastoidectomy – The Initial Cape Coast Experience
12. Dr. Kelvin Akoto Gyamera	Ovarian burkitts
13. Dr. Boateng Abigail Serwaa	Failed Bilateral Tubal Ligation With A Successful Medical Management Of A Left Tubal Pregnancy – Case Report.
14. Dr. Dorcas Obiri Yeboah	Epidemiology Of Cervical Human Papillomavirus (HPV) Infection And Squamous Intraepithelial Lesions (SIL) A Cohort Of HIV-Infected And Uninfected Ghanaian Women ( <b>AWARDED</b> )
15. Dr. Dorcas Obiri Yeboah	Immunologic and virological response to ART among HIV infected individuals at a tertiary hospital in Ghana
16. Dr. Kofi Ulzen-Appiah	Diagnosing and treating rare lesion in a low resource setting lessons from a hybrid epithelioid trophoblastic tumour and choriocarcinoma
17. Dr. Elizabeth Tabitha Botchway	Renal dysfunction among adult HIV/AIDS patients on antiretroviral therapy at a tertiary facility in Ghana
18. Dr. Anna Hayfron Benjamin	Hematological changes among HIV positive persons on antiretroviral therapy at a tertiary facility in Ghana
19. Dr. Adjoa Boatemaa Bonsu	A review of intra-uterine foetal deaths at the Cape Coast Teaching Hospital. ( <b>AWARDED</b> )
20. Dr. Dorcas Obiri Yeboah	Knowledge and experience of human papillomavirus and cervical cancer screening in a cohort of HIV-positive and HIV-negative Ghanaian women
21. Mr. Emmanuel Owuo	Chlamydia Trachomatis Related Neonatal Sepsis.
22. Mrs. Esther Nketia	Perception On Prophylactic Mastectomy Among Nurses In Cape Coast Teaching Hospital

**CCTH MAIDEN SCIENTIFIC RESEARCH CONFERENCE  
HELD ON 13TH NOVEMBER 2018 @ CCTH LECTURE HALL.**

23. Kintampo Health Research Centre	Malaria Vaccine From Research To Pilot Implementation (In Collaboration With WHO - Ghana)
<b>WORKING GROUP</b>	<b>ABSTRACT TECHNICAL REVIEW TEAM</b>
<ol style="list-style-type: none"> <li>1. Dr. Eric Ngyedu – Ag. Chief Executive Officer</li> <li>2. Mr. Fred Mensah-Acheampong – Director of Administration</li> <li>3. Ms. Princess G. Ofori – Head, Research, Monitoring and Evaluation Unit and Conference Coordinator</li> <li>4. Mr. Robert Incoom – Deputy Director Clinical Pharmacy</li> <li>5. Mr. Kafui Akpedonu – Head, Policy Planning and Budget Unit</li> <li>6. Mr. Eric Koranteng – Head, Health Information Management Unit</li> <li>7. Mr. Fred Yankah - Public Relations Officer - CCTH</li> </ol>	<ol style="list-style-type: none"> <li>1. Professor Ganiyu Adebisi Rahman – Chairman</li> <li>2. Professor Samuel Debrah – Member/ Moderator</li> <li>3. Ms. Princess G. Ofori – Conference Coordinator</li> <li>4. Dr. Patrick Akakpo – Member</li> <li>5. Dr. Yaw Asante Awuku – Member</li> <li>6. Mr. Robert Incoom – Member</li> </ol>



**CCTH MAIDEN SCIENTIFIC RESEARCH CONFERENCE  
HELD ON 13TH NOVEMBER 2018 @ CCTH LECTURE HALL.**



## **CONFERENCE REPORT**

**Theme:** *Optimizing Outcome Of Health Care Delivery; The Role Of Research In Policy Decision Making In CCTH, Ghana.*  
**Target Audience:** *Policy Makers, Health Personnel, Researchers and Lecturers*

Research has become a globally promoted approach for Evidence-Based Policy Decision-Making and CCTH is mandated to undertake research towards the improvement of quality health care delivery system.

### **1.1 CONFERENCE AIM:**

To create a platform for disseminating research findings by health researchers and bring together researchers and policy makers to engage in the uptake of the research findings in policy decision-making and institutional reforms.

### **1.2 CONFERENCE OBJECTIVE:**

- To peruse and select research abstracts and clinical case reports for presentation at the conference
- To group the topics presented into policy oriented themes for two panel discussions involving key actors/stakeholders (policy makers, Managers, academia and clinicians) with moderators.
- To award the outstanding research papers.
- To publish the conference proceeding in the media, journal and disseminate the outcome, key challenges and mitigating strategies to the key stakeholders (MOH and CCTH Board/management) for consideration in future policy decision-making and implementation).

### **1.3 CONFERENCE OUTCOME:**

The conference received support from all the key stakeholders (MOH-PPME, CCTH Board Members/Management, Professors, and Senior/Lecturers from University of Cape Coast (UCC) - School of Medical Sciences (SMS) and UCC - College of Nursing and Midwifery, The Individual Academicians, Clinicians (from UCC-SMS and CCTH) as well as CCTH Staff (from all departments/specialties and professional backgrounds). The key outcomes of the conference were as follows;

#### **1.3.1 TOTAL ABSTRACTS RECEIVED AND PRESENTED:**

Total Abstracts received and presented at the conference were = 23

- Total CCTH Institutional Study (evaluation of the E-Health project) = 1, Total Published Research = 11, Total Unpublished Research = 8, Case Report = 3 and one presentation from Kintampo Health Research Centre (on '*Malaria Vaccine: from Research to Pilot Implementation in Collaboration with WHO Ghana*').

#### **1.3.2 PANEL DISCUSSION/CONFERENCE OUTCOME:**

The highlights of the panel discussions were centered on four key areas based on the presentations. Under; **i.** Research and Policy Issues, **ii.** Health Screening (Infections and Cancers), **iii.** Medico-legal issues, and **iv.** Occupational Health and Safety of health personnel.

These are;

##### **1.3.2.1 RESEARCH AND POLICY ISSUES:**

*The key concerns raised by the panel included;*

- Inadequate allocation of funds by the Ministry of Health to research activities in the country
- The absence of a national research policy to guide all research activities in Ghana.
- The challenge in accessing research funding

*The Mitigating Strategies Proposed by the Panel;*

- ✓ A call for the development of a National Research Policy And Guidelines in Ghana

- ✓ The need for the Ministry/Government to establish a national research funds that is transparent, competitive and open to all researchers and accounted for annually.
- ✓ A call to scale up the CCTH Scientific Research Conference and involve all the Teaching Hospitals in Ghana as well as the Ghana Health Service and other health sector development partners, towards effective uptake of research findings in evidence-based policy decision-making across board.

### **1.3.2.2 HEALTH SCREENING (INFECTIONS, CANCERS, ANAEMIA ETC.) AND MEDICINE/TREATMENT:**

#### *The Key Concerns Raised By the Panel Included;*

- Inability of the National Health Insurance Scheme (NHIS) to cover major health screening services and medicines/treatments.  
E.g. Cancer cases (HPV, Prostate Cancer etc.)

#### *The Mitigating Strategies Proposed By the Panel;*

- A call for the Ministry to engage the government and key stakeholders to include the cost of health screening services especially for cancers into the National Health Insurance Scheme (NHIS). This would increase access and the prevention/control of diseases in Ghana.
- A call for Policy to regulate Diagnostic Services (access and cost control).

### **1.3.2.3 MEDICO-LEGAL ISSUES:**

#### *The Key Concerns Raised By the Panel Included;*

- Increasing errors in death certificates being issued by clinicians and its implication e.g. inaccurate data/information such as the cause of death. This ultimately would affect evidence-based decision making at all levels.

#### *The Mitigating Strategies Proposed By the Panel;*

- A call for the Ministry to engage the Medical and Dental Council of Ghana to consider adding into their curriculum, the standard way of completing and signing of medical death certificates.
- Periodic medical audit of death certificates by the ministry and health facilities in Ghana.

### **1.3.2.4 OCCUPATIONAL HEALTH AND SAFETY OF HEALTH PERSONNEL:**

#### *The Key Concerns Raised By the Panel Included;*

- Inadequate provision by the health sector to support (funds and treatment) health personnel when exposed to occupational hazards especially in the course of duty (e.g. vaccinating against Hepatitis B. etc.).

#### *The Mitigating Strategies Proposed by the Panel;*

- A call for the Ministry and health institutions to develop a support system and access guidelines for all health personnel in Ghana especially those working at high risk-prone environment.

### **1.3.3 AWARD:**

Four categories of award were presented to abstract presenters and were determined by six technical committee members constituted by the hospital management with clear Terms of Reference.

That is;

- ✓ The study with best originality/innovation
- ✓ The study with best relevance/impact
- ✓ The study with best presentation
- ✓ The overall best study



**CCTH MAIDEN SCIENTIFIC RESEARCH CONFERENCE  
HELD ON 13TH NOVEMBER 2018 @ CCTH LECTURE HALL.**

**1.3.4 PUBLICATION OF THE CONFERENCE:**

1. Published in the Ghana News Agency (please click on the link)  
[http://www.businessghana.com/site/news/general/176594/Ghana-needs-a-National-Health-Research-Policy-%E2%80%93-Panellists?fbclid=IwAR2y9jHk658eaTID\\_R6lChYu\\_zbG8wqvJOjE5Y4f6eYlwZQdIVm7Ahu9nVM](http://www.businessghana.com/site/news/general/176594/Ghana-needs-a-National-Health-Research-Policy-%E2%80%93-Panellists?fbclid=IwAR2y9jHk658eaTID_R6lChYu_zbG8wqvJOjE5Y4f6eYlwZQdIVm7Ahu9nVM)
  
2. The unpublished abstracts presented at the conference were published in the Post Graduate Medical Journal of Ghana as: Abstracts / Proceeding: 1st Cape Coast Teaching Hospital Scientific Research Conference. Postgraduate Medical Journal of Ghana. Vol. 8 No. 2. Available Online through:  
<https://gcps.edu.gh/journal-current-volume/>

**Note:** Attached below:

Award Winners, The Book of Abstracts presented at the conference and selected pictures from the conference.



**CCTH MAIDEN SCIENTIFIC RESEARCH CONFERENCE  
HELD ON 13TH NOVEMBER 2018 @ CCTH LECTURE HALL.**

**SECTION TWO**

**2.1 AWARD WINNERS:**

<b>NAMES OF AWARDEE</b>	<b>CATEGORY OF AWARD</b>	<b>RESEARCH TOPIC</b>	<b>AWARD RECEIVED</b>	<b>SPONSOR</b>
<p><b>Presenter:</b> Dr. Akoto- Gyamera</p> <p><b>Authors:</b> Patrick K. Akakpo, Yaw A. Awuku, Leonard Derkyi-Kwarteng, Kelvin A. Gyamera and Sebastian Eliason</p>	Overall Best Study	<p>Review of errors in the issue of Medical Certificates of Cause of Death in a tertiary hospital</p> <p><b>Ref.:</b> Ghana Medical Journal Ghana Med J 2017; 51(1): 30-35 DOI: <a href="http://dx.doi.org/10.4314/gmj.v51i1.6">http://dx.doi.org/10.4314/gmj.v51i1.6</a></p>	32 inch flat screen TV and A cash price of GHC 500.00	<ul style="list-style-type: none"> <li>• LightWave LTD</li> <li>• Denk Pharma</li> </ul>
<p><b>Presenter:</b> Dr. Ethel Osei-Tutu</p> <p><b>Authors:</b> Ethel Osei-Tutu, Samuel Debrah, Derek Anamaale Tuoyire, Harold Ayetey</p>	Best Originality/ Innovation	<p>Peripheral Intravenous Cannulation and Phlebitis Risk at Cape Coast Teaching Hospital</p> <p><b>Ref.:</b> Postgraduate Medical Journal of Ghana (PMJG), Vol 4 No1 March 2015</p>	32-inch flat screen TV	Jephong Pharmacy
<p><b>Presenter:</b> Dr. Obiri Yeboah</p> <p><b>Authors:</b> Obiri-Yeboah Dorcas, Akakpo K. Patrick, Mutocheluh Mohamed, Adjei-Danso Emmanuel Allornuvor Gloria, Amoako-Sakyi Daniel, Adu-Sarkodie Yaw, Mayaud</p>	Best Relevance/ Impact	<p>Epidemiology of cervical Human Papillomavirus (HPV) Infection and Squamous Intraepithelial Lesions (SIL) a cohort of HIV-Infected and uninfected Ghanaian women</p> <p><b>Ref.:</b> BMC Cancer. 2017. 17(1): p. 688. DOI 10.1186/s12885-017-3682-x</p>	32-inch flat screen TV	Safe Life Pharmacy
<p><b>Presenter:</b> Dr. Adjoa Boatemaa Bonsu</p> <p><b>Authors:</b> Dr. Vincent Adjetey, Derek Anamaale Tuoyire, Adjoa Boatemaa Bonsu</p>	Best Study Presentation	<p>A review of intra-uterine foetal deaths at the Cape Coast Teaching Hospital.</p> <p><b>Ref.:</b> Ghana Medical Journal. January 2016 DOI: 10.4314/gmj.v50i4.5 <a href="https://www.ajol.info/index.php/gmj/article/view/150018">https://www.ajol.info/index.php/gmj/article/view/150018</a></p>	32-inch flat screen TV	Emcure Pharmaceuticals

**CCTH MAIDEN SCIENTIFIC RESEARCH CONFERENCE  
HELD ON 13TH NOVEMBER 2018 @ CCTH LECTURE HALL.**

## **SECTION THREE**

### **BOOK OF ABSTRACTS PRESENTED AT THE CONFERENCE**



**CCTH MAIDEN SCIENTIFIC RESEARCH CONFERENCE  
HELD ON 13TH NOVEMBER 2018 @ CCTH LECTURE HALL.**



## **BOOK OF ABSTRACT**

### **CCTH MAIDEN SCIENTIFIC RESEARCH CONFERENCE**

**HELD ON 13<sup>TH</sup> NOVEMBER 2018 @ CCTH LECTURE HALL**

---

**Theme:**

**Optimising Outcome of Health Care Delivery: The Role of Research in Policy Decision Making in (CCTH) Ghana.**

**NOVEMBER 2018**

**Total Abstracts = 23**

- A. Total CCTH Institutional Study = 1
- B. Total Published Research = 11
- C. Total Research yet to be published = 8
- D. Clinical Case Reports = 3

**CCTH MAIDEN SCIENTIFIC RESEARCH CONFERENCE  
HELD ON 13TH NOVEMBER 2018 @ CCTH LECTURE HALL.**

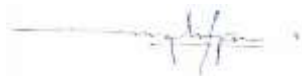
**SIGNATORIES:**

**APPROVAL**



.....  
**Dr. Eric Kofi Ngyedu**  
Ag. Chief Executive Officer,  
CCTH

**ABSTRACT TECHNICAL  
REVIEW COMMITTEE**



.....  
**Prof. Ganiyu Adebisi Rahman**  
Committee Chairman and  
Consultant Surgeon –  
CCTH & UCC-SMS



.....  
**Mr. Fred Mensah-Acheampong**  
Director of Administration,  
CCTH

**COMPILED BY**



.....  
**Ms. Princess G. Ofori**  
Conference Coordinator & Head,  
Research, Monitoring and  
Evaluation.  
CCTH

**WORKING GROUP**

1. Dr. Eric Ngyedu – Ag. Chief Executive Officer
2. Mr. Fred Mensah-Acheampong – Director of Administration
3. Ms. Princess G. Ofori – Head, Research, Monitoring and Evaluation Unit
4. Mr. Robert Inkoom – Deputy Director Clinical Pharmacy
5. Mr. Kafui Akpedonu – Head, Policy Planning and Budget Unit
6. Mr. Eric Koranteng – Head, Health Information Management Unit

**TECHNICAL REVIEW TEAM**

1. Professor Ganiyu Adebisi Rahman – Chairman
2. Professor Samuel Debrah – Member/Panel Moderator
3. Dr. Patrick Akakpo – Member
4. Dr. Yaw Asante Awuku – Member
5. Mr. Robert Inkoom – Member
6. Ms. Princess G. Ofori – Coordinator/Member

**CCTH INSTITUTIONAL STUDY:**

**1. Evaluation Study: 'Effectiveness of the E-Health Project (LHIMS Software) At CCTH, Ghana and Its Impact on Quality Health Care'.**

**Asare Daniel, Ofori Princess Gloria, Mensah-Acheampong Frederick, Akpedonu Kafui, Koranteng Eric, Ngyedu Eric Kofi, Blankson Sophia, Tiekou Asare Samuel, Turkson Tawiah Joseph.**

Cape Coast Teaching Hospital, P.O. Box CT 1363, Cape Coast, Ghana

**Corresponding Author:**

Name: Ofori Princess Gloria

Address: Research, Monitoring and Evaluation Unit

Cape Coast Teaching Hospital,

P.O. Box CT 1363,

Cape Coast – Ghana.

Email: [princessofori83@yahoo.com](mailto:princessofori83@yahoo.com)

Tel: +233 243333737, +233 205198893

**ABSTRACT**

**Background/Objective:** To evaluate the 'Effectiveness of the E-Health Project (LHIMS Software) At Cape Coast Teaching Hospital and Its Impact on Patients waiting time and Health Information Management System.

Implementing electronic health records system is a challenging one worldwide especially in developing countries considering the needed resources (technology and capacity building) and willingness of workers to change. However, the Ghana Ministry of Health (Ghana – MOH) in recognition of the benefits, made a policy decision to pilot the e-health (EHR) system at the Cape Coast Teaching Hospital (CCTH) in the Central Region of Ghana with the use of the Light Wave Health Information Software (LHIMS). The project was rolled out in January 2018.

**Method:** the study was conducted at the cape coast teaching hospital (CCTH), Ghana. A cross sectional design approach used and semi-structured questionnaire administered to 307 CCTH staff and 197patients by using purposive sampling method. An observatory data collection approach was also used to monitor 30 of the patients at the outpatients' clinic to measure their waiting time (from entry into the hospital to exit at the pharmacy) under the e-health project. Data was analysed with Microsoft office and presented in the form of evaluation logical framework table and charts.

**Results:** Staff response was 90% out of the 307 sampled whilst patients' response was 100%. Overall, the average waiting time for OPD recorded a reduction to 1hour, 36 seconds after the introduction of the E-Health system under the e-health system in 2018 compared to the 2hours under the folder system (paper system) recorded in 2015. Average waiting time in the consulting room was 17minutes, 33seconds whilst triaging area recorded

**CCTH MAIDEN SCIENTIFIC RESEARCH CONFERENCE  
HELD ON 13TH NOVEMBER 2018 @ CCTH LECTURE HALL.**

15minutes, 4seconds. 86% of the patients were satisfied with the e-health system. 59% of staff were able to access/generate performance report/data from the LHIMS software. 11% of the staff indicated inadequate computers whilst 49% complained about interrupted power supply and internet network instability. There are bottleneck in report and electronic financial claims (E-Claims) generation.

**Conclusion:** The patients waiting time have evidently improved under the e-health project. Data capture and retrieval have also improved. The e-claims need solution to enhance the efficiency of the project. Nevertheless, the project may be scaled up due to its inherent benefits. However, more studies ought to be conducted to ascertain the reasons behind the key bottlenecks identified.

**PUBLISHED RESEARCHES:**

**1. A review of Intra-uterine foetal deaths at the Cape Coast Teaching Hospital**

**Dr. Vincent Adjetey (Adjunct Snr Lecturer; MB. ChB MRCOG), Derek Anamaale Tuoyire, Adjoa Boatemaa Bonsu.**

Ghana Medical Journal.

January 2016 DOI: 10.4314/gmj.v50i4.5

<https://www.ajol.info/index.php/gmj/article/view/150018>

<sup>1</sup>Dr. Vincent Adjetey (Adjunct Snr Lecturer; MB. ChB MRCOG), Department of Obstetrics and Gynaecology, School of Medical Science, University of Cape Coast, Ghana.

<sup>2</sup>Derek Anamaale Tuoyire, Department of Community Medicine, School of Medical Sciences, University of Cape Coast, Ghana.

<sup>3</sup>Adjoa Boatemaa Bonsu, School of Medical Sciences, University of Cape Coast, Ghana.

Corresponding Author:

Name: Dr. Vincent Adjetey (Adjunct Snr Lecturer; MB. ChB MRCOG)

Address: Department of Obstetrics and Gynaecology, School of Medical Science, University of Cape Coast, Ghana.

Email: vincead@hotmail.com

Tel: +233 504067654

**ABSTRACT**

**Background/Objective:** To estimate the rate of IUFD/Stillbirths (SB) Study design: This is a retrospective review of delivery suite records from Jan 1 2013 to Dec 31 2014.

**Methods:** This is a retrospective review of delivery suite records from Jan 1 2013 to Dec 31 2014. Study was undertaken at the Cape Coast Teaching Hospital (CCTH) in the Central region of Ghana. Patients with IUFD/SB were identified from the delivery suite record book. Data collected included the age, parity, mode of delivery, total blood loss, sex of the foetus and condition of foetus i.e. Macerated stillbirth (MSB) or fresh still birth (FSB). Of 315 IUFDs identified, 26 were incompletely filled, and 13 were abortions (<28 weeks) thus were excluded. The analysis is therefore based on 276 completed documentations. Data collected were analysed using STATA version 11.0.

**Results:** Of the 315 IUFD/SBs documented in the delivery suite record book, 13 were abortions (<28 weeks), leaving 302 IUFD/SBs. Over the study period there were 5176 deliveries, giving a stillbirth rate of 58.5/1000 deliveries. Majority of the IUFD occurred in women 20-35 years of age (74.7%), and who have had two or less births (66.7%). The mean maternal age at which IUFD occurred was 29 years.



**Conclusion:** Our review shows that the SBR of 58.5/1000, over the two years, at CCTH is high. We suggest further studies to focus on the reasons for IUFDs and what interventions can be applied to reduce it.

## 2. Chlamydia Trachomatis Related Neonatal Sepsis.

Mate Siakwa<sup>1</sup>, Dzigbodi Kpikpitse<sup>2</sup>, Wisdom Azanu<sup>3</sup>, Robert Bella Kuganab-Lem<sup>4</sup>  
Emmanuel Hanson-Owoo<sup>5</sup>.

International Journal of Current Research

Vol. 8, Issue, 05, pp.30525-30528, May, 2016

<http://www.journalcra.com/article/chlamydia-trachomatis-related-neonatal-sepsis>

<sup>1</sup>School of Nursing, University of Cape Coast, Ghana.

<sup>2</sup>School of Nursing, Garden City University College Kumasi, Ghana.

<sup>3</sup>Department of Obstetrics and Gynaecology, Komfo Anokye Teaching Hospital, Kumasi, Ghana.

<sup>4</sup>School of Allied Health, University for Development Studies Tamale, Ghana.

<sup>5</sup>Cape Coast Teaching Hospital Cape Coast Ghana

Correspondence:

Name: Mate Siakwa, School of Nursing,

Address: University of Cape Coast, Ghana.

E-mail: msiakwa@yahoo.co.uk

Telephone: +233 0509181687.

### ABSTRACT

**Background/Objective:** is to determine neonatal sepsis among neonates born to Chlamydia trachomatis (CT) infected mothers.

**Methodology:** One hundred and one neonates born to CT infected mothers were screened for CT infection by polymerase chain reaction (PCR). Maternal and neonatal risk factors for sepsis were also assessed using a checklist.

**Result:** Thirty-four of the neonates had sepsis of these, twenty-two (22) were early onset and 12 late onset. Neonatal infections included respiratory tract infections (RTI) 16; blood stream infection (BSI) 7; gastrointestinal tract (GIT) infections 5; urinary tract infection (UTI) 3; conjunctivitis (CONJ) 2; otitis media (OM) 1. Premature rupture of membrane (PROM)  $p<0.001$ ; foul smelling liquor (FSL,  $p<0.001$ ) intra partum fever (IPF)  $p<0.001$  and meconium stained amniotic fluid (MSAF)  $p<0.001$  were maternal factors found to have significantly increased the risk for CT infection in the neonate. Preterm birth ( $p<0.0001$ ) low birth weight and APGAR score less than 7 were neonatal characteristics found to have increased the risk for CT associated sepsis in the neonate. Caesarian section significantly reduced the risk for vertical transmission of CT ( $p<0.05$ ).

**Conclusion:** Routine screening and treatment of pregnant women for CT infection is recommended to reduce neonatal morbidity and mortality.

### 3. Maternal and Perinatal outcomes of pregnant women with Urinary Tract Infections

Mate Siakwa<sup>1</sup>, Dzigbordi Kpikpitse<sup>2</sup>, Wisdom Azanu<sup>3</sup>, Mildred E. John<sup>4</sup>, Patience F. Doe<sup>1</sup>,  
Nancy I. Ebu<sup>1</sup>, Hanson Owur<sup>5</sup>

International Journal of Current Research

Vol. 8, Issue, 06, pp.33366-33371, June, 2016

<http://www.journalcra.com/article/maternal-and-perinatal-outcomes-among-pregnant-women-urinary-tract-infections>

<sup>1</sup>School of Nursing, University of Cape Coast, Cape Coast, Ghana

<sup>2</sup> School of Nursing, Garden City University College Kumasi, Ghana

<sup>3</sup>Komfo Anokye Teaching Hospital, Kumasi, Ghana

<sup>4</sup>Department of Nursing Science, University of Calabar, Calabar, Nigeria

<sup>5</sup>Diagnostic Department, Cape Coast Teaching Hospital

Corresponding Author:

Name: Mate Siakwa, School of Nursing,

Address: University of Cape Coast, Ghana.

E-mail: msiakwa@yahoo.co.uk

Telephone: +233 0509181687; +233 205613404

#### ABSTRACT

**Background/Objective:** Urinary Tract Infections (UTIs) are common during pregnancy because hormonal, physiologic and mechanical changes cause vesico-ureteral reflux and urinary stasis which facilitate bacterial growth. The association between UTI during pregnancy and high risk for adverse maternal and neonatal outcomes are widely reported globally although findings are inconsistent.

This study therefore determined the association between UTI during pregnancy and risk for adverse maternal and neonatal outcomes in a tertiary hospital in Cape Coast, Ghana.

**Method:** A cohort prospective study lasting six months was carried out with 220 pregnant women with UTI (cases) and 200 without UTI (control) attending the Antenatal Clinic of Central Regional Hospital, Cape Coast. Participants were assessed at each ANC visit and during labour for several outcomes. Data were analyzed on SPSS 16.

**Results:** The study showed statistically significant associations between maternal UTI and adverse outcomes including foul-smelling liquor ( $p=0.006$ ); premature rupture of membrane ( $p=0.001$ ); intra-partum bleeding (APH and PPH;  $p<0.001$ ). Neonatal outcomes included low birth weight ( $p=0.014$ ), preterm delivery ( $p<0.001$ ); Apgar score at 1 minute ( $p<0.001$ ); stillbirth ( $p=0.022$ ). Associations were not significant between maternal UTI and pregnancy-induced hypertension and baby's Apgar score at 5 minutes. We conclude that UTI in pregnancy adversely affects the mother and the neonate.

**Conclusion:** We therefore recommend urine culture for every pregnant woman at first antenatal visit, repeated urine cultures for those with UTI and effective treatment of urinary tract infection to forestall adverse effects on mother and baby.

#### 4. Review Of Errors In The Issue Of Medical Certificates Of Cause Of Death In A Tertiary Hospital In Ghana.

Patrick K. Akakpo<sup>1</sup>, Yaw A. Awuku<sup>2</sup>, Leonard Derkyi-Kwarteng<sup>1</sup>, Kelvin A. Gyamera<sup>3</sup> and Sebastian Eliason<sup>3</sup>

Ghana Medical Journal

*Ghana Med J* 2017; 51(1): 30-35 DOI: <http://dx.doi.org/10.4314/gmj.v51i1.6>

<sup>1</sup>Department of Pathology, School of Medical Sciences, University of Cape Coast, Cape Coast Teaching Hospital, Cape Coast, Ghana,

<sup>2</sup>Department of Internal Medicine and Therapeutics, School of Medical Sciences, University of Cape Coast, Cape Coast Teaching Hospital, Cape Coast, Ghana,

<sup>3</sup>Department of Community Medicine, School of Medical Sciences, University of Cape Coast, Cape Coast Teaching Hospital, Cape Coast, Ghana

Corresponding Author:

Name: Dr. Patrick Kafui Akakpo

Address: Department of Pathology, School of Medical Sciences,  
University of Cape Coast, Cape Coast Teaching Hospital,  
Cape Coast, Ghana,

Email: k.p.akakpo@uccsms.edu.gh

#### ABSTRACT

**Background/Objective;** Reliable mortality statistics are useful in determining national policies on preventive and interventional medicine. This study reviews, completed medical certificates of cause of death at the Cape Coast Teaching Hospital, in order to determine their accuracy and reliability.

**Methods:** A one-year review of Medical Certificates of Cause of Death (MCCD) signed between 01-01-2013 and 31-12-2013 in the medical, paediatric, surgical and obstetrics/gynaecology departments of Cape Coast Teaching Hospital were done, analyzing for errors using the WHO/ICD-10 guidelines as the standard. The errors were grouped into minor and major errors.

**Results:** In all, 337 medical certificates of cause of death were audited. Majority, 212(62.9%) were issued in the internal medicine and therapeutics department. 30.86% (104) MCCDs were completed by specialists while 69.14% (233) were completed by non-specialist medical officers. Over half (56.68%) of the MCCDs had major errors while all (100%) had at least one minor error.

**Conclusion:** Our study showed significant errors in MCCD records, with the errors more likely in certificates issued by non-specialist medical officers. All the certificates audited had at least one minor error. Training of doctors on proper completion of MCCDs is strongly advocated.

**5. Diagnosing And Treating Rare Lesions In A Low Resource Setting Lessons From A Hybrid Epithelioid Trophoblastic Tumour And Choriocarcinoma.**

**Patrick Kafui Akakpo<sup>1</sup>, Ulzen-Appiah<sup>1</sup>, Simon Naporo<sup>2</sup>, Evans Agbeno<sup>3</sup> and Leonard Derkyi-Kwarteng<sup>1</sup>**

Ghana Medical Journal

Ghana Med J. 2017 Dec; 51(4): 196–199.

<sup>1</sup>Department of Pathology, School of Medical Sciences, University of Cape Coast, Cape Coast Teaching Hospital, Cape Coast, Ghana

<sup>2</sup>Department of Pathology, Korle-Bu Teaching Hospital, Accra, Ghana

<sup>3</sup>Department of Obstetrics and Gynecology, Cape Coast Teaching Hospital, Cape Coast

**Corresponding author:**

Dr. Patrick Kafui Akakpo

Department of Pathology, School of Medical Sciences, University of Cape Coast,  
Cape Coast, Ghana

**Email:** [k.p.akakpo@uccsms.edu.gh](mailto:k.p.akakpo@uccsms.edu.gh) or [shortosh2002@yahoo.co.uk](mailto:shortosh2002@yahoo.co.uk)

Phone No: +233206301058

**Running title:** *Malignant trophoblastic tumours, challenges in low resource setting*

**ABSTRACT**

**Background/Objective:** To raise awareness of the existence of other rare types of malignant trophoblastic tumours and discuss the diagnostic challenges and management in low resource settings.

**Method:** Detailed clinical and histopathological findings of a patient diagnosed with a hybrid epithelioid trophoblastic tumour and choriocarcinoma are presented. The management challenges in a resource poor setting are highlighted and the existing literature reviewed.

**Results:** there are challenges in diagnosing rare malignant trophoblastic tumours and their hybrids in low resource settings. Epithelioid trophoblastic tumours may be passed off as moderately differentiated squamous cell carcinoma.

**Conclusion:** rare trophoblastic tumours and their hybrids may be misdiagnosed as squamous cell carcinoma especially in low resource settings where squamous cell carcinomas are relatively more common. A high index of suspicion, a serum  $\beta$  HCG test and close collaboration between clinicians and pathologists can help make the diagnosis.

**6. Evaluation of Impact of Training on Rational Use of Medicine (RUM) Indicators in Cape Coast Teaching Hospital**

**Turkson, J.T, Asare D, Ngyedu E.K, Incoom R, Cobbold C, Turkson S.**

The Ghana Pharmaceutical Journal. 2017. V12\_N1\_pp7-15  
[https://psgh.org/page/Ghana\\_Pharm\\_Journal](https://psgh.org/page/Ghana_Pharm_Journal)

Cape Coast Teaching Hospital, Pharmacy Directorate, P. O. Box CT 1363, Cape Coast, Ghana.

Corresponding Author:

Name: Dr. Turkson Joseph Tawia

Address: Pharmacy Directorate, Cape Coast Teaching Hospital, P. O. Box CT 1363,  
Cape Coast, Ghana.

Email: [tawiaturkson@gmail.com](mailto:tawiaturkson@gmail.com)

Tel: 00233 273457693; +233 244069044

**ABSTRACT**

**Background/Objective:** Approximately 50% of prescribed medicines worldwide are considered to be inappropriate with more than half of all medicines wrongly dispensed. About half of all patients take their drugs incorrectly. Education and training of healthcare personnel has been reported to contribute to improved rational use of medicines.

The study was conducted to assess rational use of medicine indicators and to evaluate impact of training and education on RUM indicators.

**Methods:** The study was a before and after study involving a review of 156 and 177 prescriptions, patients treatment folders and drug administration charts in 2015 and 2016 respectively at the Cape Coast Teaching Hospital over a 4 week period. RUM indicators assessed included prescribing indicators, indicators of a valid prescription, patient care indicators and drug administration indicators.

**Results:** A total of 156 and 177 prescriptions were assessed in 2015 and 2016 respectively. The average number of medicines prescribed per patient was 2.2 in 2015 compared with 2.8 in 2016. The proportion of generic prescribing was 77.4% in 2015 as against 81.9% in 2016. Antibiotics were prescribed in 30% in 2015 compared to 13.8% in 2016 of the prescriptions whereas injections were prescribed in 8.6% and 1.6% of patient encounters in 2015 and 2016 respectively. There was significant increase in dispensing time in 2016 over 2015 results i.e. 42.4 seconds vrs 60.2 seconds. The unpaired t-test showed a mean difference of 17.8 seconds with 95% CI (23.7, 11.2) and  $p < 0.001$ . There was marginal increase in the consulting time over the same period i.e. 12 mins vrs 13.2 mins Tracer medicines availability level was found to be 62.7% in 2015 compared to 84.7% in 2016.

**Conclusion:** There was significant improvement in most of the RUM indicators assessed in 2016 compared to the results obtained in the year 2015. RUM education and training has an impact on optimum prescribing and dispensing practices. The improved prescribing habit likely contributed to the increase in the tracer drug availability.

**CCTH MAIDEN SCIENTIFIC RESEARCH CONFERENCE  
HELD ON 13TH NOVEMBER 2018 @ CCTH LECTURE HALL.**

**Key words:** Rational use of medicines, consulting time, dispensing time, tracer medicines.



## 7. Explorative Assessment of Prescribing Pattern at Cape Coast Teaching Hospital

Turkson, J. T., Cobbold C., Incoom R.

The Ghana Pharmaceutical Journal

[https://psgh.org/page/GJP\\_V11\\_N1\\_2016\\_ori3](https://psgh.org/page/GJP_V11_N1_2016_ori3)

Cape Coast Teaching Hospital, Pharmacy Directorate, P. O. Box CT 1363, Cape Coast, Ghana.

### Corresponding Author:

Name: Dr. Turkson Joseph Tawia

Address: Pharmacy Directorate,  
Cape Coast Teaching Hospital  
P. O. Box CT 1363,  
Cape Coast, Ghana.

Email: [tawiaturkson@gmail.com](mailto:tawiaturkson@gmail.com)

Tel: 00233 273457693; +233 244069044

### ABSTRACT

**Background/Objective:** Prescribing pattern is said to exert a major effect on the consumption pattern of medicines at hospitals. A systematically evaluated prescribing pattern enables managers of hospitals to plan and make adequate budgetary allocations for the purchase and stocking of essential medicines for use by patients. Such planning ensures uninterrupted supply and availability of medicines which is a major determinant of improved treatment outcomes.

The aim of this study was to assess the prescribing pattern at a tertiary hospital.

**Method:** The study was a review of 1143 patient treatment records and prescription forms from all the pharmacy units of the hospital over a one week period. All the patient records within the study period were reviewed. The records were reviewed to assess the number of antibiotics, antihypertensives and analgesics prescribed. The records were also reviewed to determine the types of antibiotics, antihypertensives and analgesics prescribed.

**Results:** Most of the prescribed medicines were analgesics and antibiotics (n=719, 18.6%) and (n=717, 18.5%) respectively. These were followed by anti-hypertensives (n=538, 13.9%) with the least being anti-asthma medicines (n=26, 0.7%). The most frequently prescribed analgesics were paracetamol (n=335, 46.6%), diclofenac (n=174, 24.2%) and pethidine (n=91, 12.7%) with morphine being the least prescribed (n=7, 1%). Co-amoxiclav was the frequently prescribed antibiotic (n=231, 32.2%). The top five antihypertensives prescribed were losartan (21.7%), nifedipine (18.0%), amlodipine (17.5%), lisinopril (12.1%) and bendrofluazide (10.6%)

**Conclusion:** Antibiotics and analgesics were the frequently prescribed class of medicines at the Cape Coast Teaching Hospital with paracetamol and co-amoxiclav being the top 2 medicines in terms of frequency of prescribing.

**Key Words:** Medicines prescribing pattern, analgesics, antibiotics.

**8. Peripheral Intravenous Cannulation And Phlebitis Risk At Cape Coast Teaching Hospital.**

**Ethel Osei-Tutu<sup>1</sup>, Samuel Debrah<sup>2</sup>, Derek Anamaale Tuoyire, Harold Ayetey<sup>3</sup>.**

Postgraduate Medical Journal of Ghana (PMJG), Vol 4 No1 March 2015

<sup>1</sup>Cape Coast Teaching Hospital, Cape Coast, Ghana,

<sup>2</sup>Department of Surgery, University of Cape Coast School of Medical Sciences, Cape Coast, Ghana,

<sup>3</sup>Department of Internal Medicine and Therapeutics, University of Cape Coast School of Medical Sciences, Cape Coast, Ghana

Corresponding Author:

Name: Dr Harold Ayetey

Address: Senior Lecturer & Head of Department, Department of Internal Medicine and Therapeutics. University of Cape Coast School of Medical Sciences

Email: harold@cantab.net

## **ABSTRACT**

**Background/Objective:** Intravenous (IV) cannulation is the commonest invasive procedure among hospitalised patients. It is however associated with risks and complications that can have an adverse impact on the clinical outcome of the patient.

To assess the outcome of peripheral IV cannulation in Cape Coast Teaching Hospital (CCTH), identify risk factors responsible for the development of phlebitis and establish the optimal day for routine replacement of IV cannulas in our setting.

**Method:** A prospective observational study was conducted over a period of three months in September – November 2012 and November – December 2013 at the Medical and Surgical Wards at CCTH. Patients were assessed using the Visual Infusion Phlebitis (VIP) Score. Results were analysed and chi square was used to test associations and significance level set at  $p \text{ value} \leq 0.05$ .

**Results:** A total of 224 patients were assessed. The incidence rate of phlebitis was 56.2%. There were more females with phlebitis (56.3%) compared to males (56.2%) ( $p = 0.09$ ). Phlebitis was higher among patients who had cannulas in situ beyond day four (72.5%) compared to those who had cannulas for up to four days (47.2%) ( $p=0.00$ ). Phlebitis was also higher among patients with on-going infections (74.4%) ( $p=0.012$ ).

**Conclusion:** Over half of cannulated patients studied developed phlebitis. Phlebitis rates are significantly increased in patients with concomitant infections and after day four post-cannulation. Routine replacement of cannulas on day four is therefore recommended

**9. Epidemiology of cervical human papillomavirus (HPV) infection and squamous intraepithelial lesions (SIL) a cohort of HIV-infected and uninfected Ghanaian women**

**Obiri-Yeboah Dorcas<sup>1</sup>, Akakpo K. Patrick<sup>2</sup>, Mutocheluh Mohamed<sup>3</sup>, Adjei-Danso Emmanuel<sup>4</sup>  
Allornuvor Gloria<sup>5</sup>, Amoako-Sakyi Daniel<sup>1</sup>, Adu-Sarkodie Yaw<sup>3</sup>, Mayaud Philippe<sup>6</sup>.**

BMC Cancer. 2017. 17(1): p. 688. DOI 10.1186/s12885-017-3682-x

<sup>1</sup>Department of Microbiology and Immunology, School of Medical Sciences, University of Cape Coast, Ghana.

<sup>2</sup>Department of Pathology, School of Medical Sciences, University of Cape Coast, Ghana

<sup>3</sup>Department of Clinical Microbiology, School of Medical Sciences, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

<sup>4</sup>Researcher Officer, Mineworkers Union of Trade Union Congress, Ghana

<sup>5</sup>Department of Obstetrics and Gynaecology, Cape Coast Teaching Hospital, Ghana

<sup>6</sup>Department of Clinical Research, Faculty of Infectious and Tropical Diseases, London School of Hygiene and Tropical Medicine, UK

**Running Head (40 characters):** HPV, SIL and HIV in Ghana

Corresponding Author:

Name: Dorcas Obiri-Yeboah (MB.ChB., PhD)

Address: Department of Microbiology and Immunology

School of Medical Sciences, CoHAS

University of Cape coast, Cape Coast

Ghana

Email: [d.obiri-yeboah@uccsms.edu.gh](mailto:d.obiri-yeboah@uccsms.edu.gh) OR [castella.oy@gmail.com](mailto:castella.oy@gmail.com)

Tel.: 00233 264 527 387 OR 00233 244 527 387

## ABSTRACT

**Background/Objectives:** There is limited data in Ghana on the epidemiology of HPV and cervical neoplasia and their associations with HIV. This study aimed to compare among HIV-1 seropositive and HIV-seronegative Ghanaian women: (1) the prevalence, genotype distribution and risk factors associated with cervical HPV infection; (2) the prevalence and risk factors associated with cervical squamous intraepithelial lesions (SIL); and (3) the incidence, persistence, regression and progression of SIL over a 6-month period.

**Methods:** A comparative frequency-matched study was conducted in a systematic sample of women aged  $\geq 18$  years attending HIV and general outpatient clinics in Cape Coast Teaching Hospital, Ghana. Participants were interviewed and cervical samples collected for HPV genotyping (Seegene Anyplex-II HPV28) and cytological testing.

**Results:** Overall, 333 women were recruited, 163 HIV-1 seropositive and 170 HIV-seronegative women of mean age 43.8 years (SD  $\pm 9.4$ ) and 44.3 years (SD  $\pm 12.8$ ), respectively. The prevalence of 14 high-risk (hr) HPV genotypes was higher among HIV-1 seropositive women (65.6% vs. 30.2%,  $P < 0.0001$ ), as was proportion with multiple hr-HPV infections (60.6% vs. 21.3%,  $P < 0.0001$ ). HPV35 was the most prevalent hr-HPV genotype in

both groups (11.9% and 5.3%). The main factors associated with hr-HPV infection were age at first sex among HIV-positive women and circumcision status of main sexual partner for HIV-negative women.

SIL prevalence was higher among HIV-1 seropositive women (any SIL: 14.1% vs. 1.2%,  $P<0.0001$ ; low-grade SIL [LSIL]: 4.9% vs. 0.6%,  $P=0.02$ ; high-grade SIL: 1.8% vs. 0%,  $P=0.07$ ). Among HIV-1 seropositive women, number of pregnancies and CD4+ cell count were associated with LSIL+ lesions. There was strong association between LSIL+ and HPV35 (aOR=4.7, 95%CI: 1.3-17.7,  $P=0.02$ ). The rate of persistence of LSIL+ lesions was 100.0% vs. 0.0% ( $P=0.002$ ) respectively for HIV-positive vs. negative women at 6 months follow up.

**Conclusions:** HIV-1 infected women bear significant burden of HPV infection and related disease. Prevention and screening programmes should be specifically deployed for this population in Ghana.

**10. Immunologic and virological response to ART among HIV infected individuals at a tertiary hospital in Ghana.**

**Obiri-Yeboah Dorcas<sup>1</sup>, Pappoe Faustina<sup>1</sup>, Baidoo Ibrahim<sup>2</sup>, Arthur Francis<sup>3</sup>, Hayfron-Benjamin Anna<sup>4</sup>, Essien-Baidoo Samuel<sup>5</sup>, Kwakye-Nuako Godwin<sup>6</sup>, Ayisi-Addo Stephen<sup>7</sup>.**

BMC Infectious Diseases. 2018. 18(1): 230. <https://doi.org/10.1186/s12879-018-3142-5>

<sup>1</sup>Obiri-Yeboah Dorcas, Department of Microbiology and Immunology, School of Medical Sciences, University of Cape Coast, Cape Coast, Ghana, [d.obiri-yeboah@uccsms.edu.gh](mailto:d.obiri-yeboah@uccsms.edu.gh)

<sup>1</sup>Pappoe Faustina, Department of Microbiology and Immunology, School of Medical Sciences, University of Cape Coast, Cape Coast, Ghana, [f.pappoe@uccsms.edu.gh](mailto:f.pappoe@uccsms.edu.gh)

<sup>2</sup>Ibrahim Baidoo, Public Health Unit, Cape Coast Teaching Hospital, Cape Coast, Ghana, [ibrahimbaidoo@gmail.com](mailto:ibrahimbaidoo@gmail.com)

<sup>3</sup>Arthur Francis, Microbiology Unit, Cape Coast Teaching Hospital, Cape Coast, Ghana, [arcosus@yahoo.com](mailto:arcosus@yahoo.com)

<sup>4</sup>Hayfron-Benjamin Anna, Department of Maternal and Child Health, School of Nursing and Midwifery, University of Cape Coast, Ghana. [ahayfron-benjamin@ucc.edu.gh](mailto:ahayfron-benjamin@ucc.edu.gh)

<sup>5</sup>Essien-Baidoo Samuel, Department of Laboratory Technology, University of Cape Coast, Cape Coast, Ghana, [sessien-baidoo@ucc.edu.gh](mailto:sessien-baidoo@ucc.edu.gh)

<sup>6</sup>Kwakye-Nuako Godwin, Department of Biomedical Sciences, University of Cape Coast, Cape Coast, Ghana, [gkncarlos@yahoo.com](mailto:gkncarlos@yahoo.com)

<sup>7</sup> Ayisi-Addo Stephen, National AIDS/STI Control Program, Ghana Health Services, Accra, Ghana. [saddo@nacp.org.gh](mailto:saddo@nacp.org.gh)

**Corresponding Author:** Dorcas Obiri-Yeboah (MB.ChB, PhD)

Address: Department of Microbiology and Immunology  
School of Medical Sciences, CoHAS  
University of Cape coast, Cape Coast  
Ghana

Email: [d.obiri-yeboah@uccsms.edu.gh](mailto:d.obiri-yeboah@uccsms.edu.gh) OR [dobiri-yeboah@ucc.edu.gh](mailto:dobiri-yeboah@ucc.edu.gh)

Tel.: 00233 264 527 387 OR 00233 244 527 387

## ABSTRACT

**Background:** The need to study the outcome of Antiretroviral Therapy (ART) among Human Immunodeficiency Virus (HIV) infected individuals in Ghana, a sub-Saharan African country crucial in the era of the “Treat All” policy. The aim of this study was to analyze selected determinants of immunological and virological response to ART among HIV infected individuals in a tertiary facility in Cape Coast, Ghana.

**Methods:** An analytical cross sectional study with a retrospective component was conducted in the Cape Coast Teaching Hospital (CCTH), Central Region. Clients aged 18 years and above attending the HIV Clinics for ART and who were on ART for 6 months or more were recruited. The viral loads, CD4 count and other socio-demographic data were analyzed using STATA version 13 (STATA Corp, Texas USA). Descriptive analysis was done and presented with appropriate measures of central tendencies. In addition, bivariate and multivariate analysis was carried out with *p value* of 0.05 interpreted as evidence of association between variables.

**CCTH MAIDEN SCIENTIFIC RESEARCH CONFERENCE  
HELD ON 13TH NOVEMBER 2018 @ CCTH LECTURE HALL.**

**Results:** A total of 440 participants were included in this study with a mean age of 45.5 ( $\pm 11.6$ ) years. The mean CD4 count at baseline, 6 months on ART and currently at study recruitment were 215.1 cells/mm<sup>3</sup> ( $\pm 152.6$ ), 386.6 cells/mm<sup>3</sup> ( $\pm 178.5$ ), and 579.6 cells/mm<sup>3</sup> ( $\pm 203.0$ ) respectively. After 6 months and 12 months on ART, the number who had achieved viral copies <1000/ml were 149 (47.0%) and 368 (89.6%) respectively. There was strong evidence of an association between having CD4 count <350 cells/mm<sup>3</sup> after 6 months on ART and having a diagnosis of tuberculosis since HIV diagnosis (aOR 8.5, 95%CI 1.1-73.0, p=0.05) and clients having plasma viral load >1000 copies/ml after 6 months on ART (aOR 2.0, 95%CI 1.2-3.2, p=0.01).

**Conclusion:** There was good response to ART among clients, high virological suppression and immunological recovery hence low rates of change to second line ART regimen in this cohort studied. With strict adherence to the national policy on HIV testing, management of positive clients and full implementation of the “Treat All” policy, Ghana could achieve, if nothing at all, the third “90, 90, 90” target by 2020.

**Key Words:** Viral Load, HIV, Antiretroviral therapy, Ghana, CD4



**11. Renal dysfunction among adult HIV/AIDS patients on antiretroviral therapy at a tertiary facility in Ghana.**

**Obiri-Yeboah Dorcas<sup>1</sup>, Awuku Yaw Asante<sup>2</sup>, Alofa Wonderful<sup>3</sup>, Alice Charwudzi<sup>4</sup>, Aniakwa-Bonsu Ebenezer<sup>1</sup>, Obboh Evans<sup>1</sup>, Nsiah Paul<sup>5</sup>.**

Accepted for publication by BMC Nephrology. 2018.

<sup>1</sup>Obiri-Yeboah Dorcas, Department of Microbiology and Immunology, School of Medical Sciences, University of Cape Coast, Cape Coast, Ghana, [d.obiri-yeboah@uccsms.edu.gh](mailto:d.obiri-yeboah@uccsms.edu.gh)

<sup>2</sup> Awuku, Yaw Asante, Department of Internal Medicine and Therapeutics, School of Medical Sciences, University of Cape Coast, Cape Coast, Ghana. [y.a.awuku@uccsms.edu.gh](mailto:y.a.awuku@uccsms.edu.gh)

<sup>3</sup>Alofa Wonderful, Department of Medical Laboratory Technology, School of Allied Sciences, University of Cape Coast, Cape Coast, Ghana. [alofahwonderful@gmail.com](mailto:alofahwonderful@gmail.com)

<sup>4</sup>Alice Charwudzi, Department of Haematology, School of Medical Sciences, University of Cape Coast, Cape Coast, Ghana. [a.charwudzi@uccsms.edu.gh](mailto:a.charwudzi@uccsms.edu.gh)

<sup>1</sup>Aniakwa-Bonsu Ebenezer, Department of Microbiology and Immunology, School of Medical Sciences, University of Cape Coast, Cape Coast, Ghana, [ebeniakwa@gmail.com](mailto:ebeniakwa@gmail.com)

<sup>1</sup>Obboh Evans, Department of Microbiology and Immunology, School of Medical Sciences, University of Cape Coast, Cape Coast, Ghana, [e.obboh@uccsms.edu.gh](mailto:e.obboh@uccsms.edu.gh)

<sup>5</sup>Nsiah Paul, Department of Chemical Pathology, School of Medical Sciences, University of Cape Coast, Cape Coast, Ghana, [p.nsiah@uccsms.edu.gh](mailto:p.nsiah@uccsms.edu.gh)

**Corresponding Author:** Dorcas Obiri-Yeboah (MB.ChB, PhD)

Address: Department of Microbiology and Immunology, School of Medical Sciences, CoHAS

Private Mail bag, University of Cape coast, Cape Coast, Ghana

Email: [d.obiri-yeboah@uccsms.edu.gh](mailto:d.obiri-yeboah@uccsms.edu.gh) OR [castella.oy@gmail.com](mailto:castella.oy@gmail.com)

Tel.: 00233 264 527 387 OR 00233 244 527 387

## **ABSTRACT**

**Background:** Kidney diseases have emerged as significant cause of morbidity and mortality in HIV subject on antiretroviral therapy (ART). In Ghana, routine follow up of HIV positive clients is by estimation of serum creatinine and urea levels. Glomerular Filtration Rate (GFR) is not routinely calculated and proteinuria is not routinely checked. This study sought to investigate the kidney profiles of adult HIV/AIDS patients being managed on ART at the Cape Coast Teaching Hospital (CCTH), Ghana.

**Methods:** A hospital-based analytical cross sectional study with a retrospective component was conducted using systematic sampling method to recruit HIV/AIDS who visited the ART clinic. A total of 440 participants of both sexes aged 18 years and above, confirmed as HIV/AIDS positive and on ART were involved in this study. Blood and urine samples were collected from all subjects and the levels of serum creatinine and urea and proteinuria were estimated and eGFR calculated using the Modification of Diet in Renal Disease (MDRD) equations. Data analyses were performed using Stata version 13 software (Stata Corp, Texas USA).

**Results:** The mean age (years) of participants was 45.5 years ( $\pm 11.6$ ) with 288 (65.4%) being on Tenofovir based ART regimen. The mean eGFR was found to progressively decrease from 112.4 ml/min/1.73 m at baseline, to 103.4 ml/min/1.73 m after 6 months on ART and to a mean of 99.4 ml/min/1.73 m at recruitment into this study. Factors which were found to be associated with having eGFR  $<60$  included age, gender and CD4 count though not statistically significant. Patients  $>45$  years had the highest odds with OR 2.0 (95%CI: 0.8-5.1), females had higher odds with OR 1.5 (95%CI: 0.5-5.2), and those with CD4 count  $>350$  had OR of 0.4 (95%CI 0.2 -1.3). A total of 30.9% of the participants had proteinuria at recruitment. TDF based ART regimen had no statistically significant effect on serum creatinine and urea levels.

**Conclusion:** Estimated GFR decreased after 6 months among patients on ART despite normal serum creatinine and urea levels. This finding suggests that clients in care at HIV/ART clinics in Ghana may benefit from routine estimation of GFR and proteinuria.

UNPUBLISHED ABSTRACTS (Submitted For Publication in a Peer – Review Journal)

**1. A 6 Year analysis of fatal gunshot injuries in the central region of Ghana**

**Patrick Kafui Akakpo, Kennedy Awlavi, Francis Agyarko-Wiredu and Leonard Derkyi-Kwarteng.**

Department of Pathology, School of Medical Sciences, University of Cape Coast, Cape Coast Teaching Hospital, Cape Coast, Ghana

Corresponding author:

Dr Patrick Kafui Akakpo

Department of Pathology, School of Medical Sciences, University of Cape Coast, Cape Coast, Ghana

Email: k.p.akakpo@uccsms.edu.gh or shortosh2002@yahoo.co.uk

Phone No: +233206301058

*Running title: Fatal Gunshot injuries in the Central Region of Ghana*

*Key Words: Gunshot, Fatal, Central Region, Ghana*

**ABSTRACT**

**Introduction:** Despite many newspaper reports of fatal gunshots in Ghana, there are no published data on gunshot fatalities in Ghana. Our objective was to determine the demographical characteristics of victims of fatal gunshots in addition to the incidence, social characteristics and forensic characteristics of these fatal gunshot in the Central Region of Ghana.

**Method:** Existing autopsy records including Coroner's inquest forms in the department of pathology of CCTH were searched from 2011 to 2017. The demographic, forensic and social characteristics of victims of fatal gunshots were reviewed and data entered into excel and analysed.

**Results:** A total of forty (40) deaths due to gunshot were recorded over the 6year period of the review with an annual incidence of 0.3 per 100,000 population. Most victims were young adult males (95%), with a male to female ratio of 19:1. The circumstances of death were mostly related to hunting (27.5%), social gatherings / public unrest (27.5%), household accidents Involving children (20%) and armed robberies (17.5%). The commonest firearm used were shotguns (85%).

**Conclusion:** Fatal gunshots are not uncommon in the Central Region of Ghana. The demographical characteristics of victims are identical to those reported in literature, with fatalities mostly occurring in young adult males. Shotguns are the commonly used type of gun in fatal gunshots. There is high number of gunshot fatalities involving children in the rural areas of the Central Region.

## 2. Cancellation Of Surgeries At Cape Coast Teaching Hospital: Causes and Effects

Quartson Elizabeth Mercy, Wiafe Mavis Asiedua, Yankey Miraim, Ahmed Shafeeq, Sokah Edward Atsu.

Department of Surgery, Cape Coast Teaching Hospital, P.O.Box CT 1363. Cape Coast, Ghana.

Corresponding Author:

Name: Quartson Elizabeth Mercy

Address: Department of Surgery

Cape Coast Teaching Hospital

Email: [bquartson@yahoo.com](mailto:bquartson@yahoo.com)

Tel: +233 243510277

### ABSTRACT

**Background/Objective:** The main purpose of the study was to investigate the factors that contribute to the cancellation of surgery at Cape Coast Teaching Hospital and its effects.

**Method:** A descriptive cross-sectional study design was used for the study. Purposive sampling method was used in sampling the study participants (50) (10 doctors, 35 nurses and 5 anaesthetists based on the estimated sample size and the selection criteria). Records of participants from January to October 2017 were reviewed within a period of 4 weeks. Data was analysed using Microsoft excel and results presented in the form of tables and charts.

**Results:** The average number of scheduled and cancelled cases within the study period were 202.4 and 10.4 respectively per month. The highest number of scheduled cases was recorded in the month of January (n=232, 11.5%). This was followed by the month of February and October with proportions of (n=222, 11.3%) and (n=216, 10.7%) respectively. The lowest number of scheduled cases were recorded in the month of September (n=165, 8.2%).

Also the average number of cancelled cases was 10.4 per month. The highest number of cancelled cases were recorded in the month of October with a proportion of (n=23, 22.1%) while the least number of cancelled cases were recorded in the months of June and August with a proportion of (n=5, 4.8%) each.

**Conclusion:** The number of surgical cases cancelled per month was independent on the number of scheduled cases. Management, Medical and Physician factors contributed largely to the cancellation of cases.

### 3. The Prevalence Of Anaemia In In-Patients At A Tertiary Centre

Prof Ivy A E Ekem

Ivy Ekem (MBChB; FWACP; FGCP)

School of Medical Sciences, University of Cape Coast, Ghana

Email: ekem\_ivy@hotmail.com

#### ABSTRACT

**Background/Objective:** Anaemia is the reduction of haemoglobin level for the age and sex of the individual. Haemoglobin is the substance found in red cells whose main function is gaseous exchange, vital for the functioning of all metabolic processes of the cells in every tissue of the human body. A reduction in haemoglobin level therefore has the potential to affect the entire functioning of all biological processes in the body. In this presentation I wish to stress on the pervasiveness of anaemia and the importance we need to attach to it to improve the health and output of the populace.

**Aim:** To draw attention to the pervasiveness of anaemia and its ‘background’ consequences

**Methodology:** A cross sectional study of the patients on admission at the Cape Coast Teaching Hospital was done to determine the prevalence of anaemia amongst them irrespective of the diagnosis. The FBC of the patients were taken and the haemoglobin levels and other indices examined. The patients were from the paediatric, medical, gynaecology and surgical wards.

**Results:** There were a total of 105 patients. More than 70% of them had anaemia. The primary diagnoses were varied. The need to enhance the premorbid health of the populace by reducing the incidence of anaemia is discussed. Ways to elucidate the contributory factors to a patient’s anaemia; and the likely effect of the low Hb on the patient’s recovery from any disease is also discussed.

**Conclusion:** Anaemia is an extremely severe public health problem both in the community and our hospital. The prevalence must be reduced with the seriousness that it deserves, as this will affect many other health indicators. The cause always be sought and corrected.

#### 4. Evaluation Of Surgical Outcome Of Cataract Operation At Cape Coasts Teaching Hospital

**Pearl Esuman-Gwira**

Ophthalmic Unit, Cape Coast Teaching Hospital, P.O.Box CT 1363, Cape Coast, Ghana.

Email: [pearlesumangwira@gmail.com](mailto:pearlesumangwira@gmail.com)

Tel: +233 200912060

#### **ABSTRACT**

**Background:** This study seeks to evaluate surgical outcome of cataract operation among 86 clients at age 40 and above at Cape Coast Teaching Hospital. Cataract is the principal cause of low vision and preventable blindness in the world. In fact, there are more cases of cataract worldwide than there are of glaucoma, macular degeneration and diabetic retinopathy according to Prevent Blindness America (PBA).

**Materials and methods:** The study was prospective cross-sectional with a sample size of 86. Data was collected on patients aged 40 years and above who had age related cataract surgery. A structured questionnaire was administered over a period of 7 months. Data was analyzed using SPSS version 20.0 with result presented in the form of tables and charts.

**Results:** It was observed from the study that, before the surgery, majority (73.8%) of the patients had poor vision, few (25.0%) had moderate vision and very few (1.2%) had borderline vision. However, after the surgery, very few (17.4%) of the patients still had poor vision, more than half (57.1%) had moderate vision and 25.0% of the patients had good vision. Finally, when the patients were asked to rate the surgery process based on their current state of vision, more than half (55.0%) of the patients rated the operation to be successful, 31.0% rated it as average and 14.0% of the patients rated the surgery as a failure

**Conclusion:** The study showed that, there was positive impact on the vision level of most of the patients after the surgery.

## 5. Perception On Prophylactic Mastectomy Among Nurses

Esther Nketia

Ear Nose and Throat Unit, Cape Coast Teaching Hospital, P.O. Box CT 1363, Cape Coast, Ghana.

Email: [e.nketia@ymail.com](mailto:e.nketia@ymail.com)

Tel: + 233 244944399; +233 204407094

### ABSTRACT

**Background:** Breast cancer is the most frequently diagnosed cancer among women in 140 of 184 countries worldwide. Globally breast cancer now represents one in four of all cancers in women. This therefore needs urgent preventive strategies to curb the disease.

**Aim:** To determine the perception of female nurses on prophylactic mastectomy.

**Methodology:** The research was conducted at the Cape Coast Teaching Hospital. A descriptive study was conducted with structured questionnaires used for data collection. A sample size of 100 female nurses was determined with convenient sampling method. A statistical package for social sciences was used to analyze the data collected and presented in the form of charts and tables.

**Results:** Out of the 100 respondents sampled for the study, 97% had knowledge on breast cancer. A total of 53% out of 100 respondents are aware of the existence of prophylactic mastectomy. 67% of the respondents indicated that, they will opt for prophylactic mastectomy should the need arise. However, 33% of the respondents said otherwise. 55% will opt for prophylactic mastectomy if adequate information is given. 5% says their religion will not allow the removal of body parts. 28% of them were concerned about stigmatization and 23% also said their partners will not agree.

**Conclusion:** Education on voluntary mastectomy should be intensified and more researches should be conducted on prophylactic mastectomy to reduce the rising incidence of breast cancer.

**6. Haematological changes among HIV positive persons on antiretroviral therapy at a tertiary hospital in Ghana.**

**<sup>1</sup>Dorcas Obiri-Yeboah, <sup>2</sup>Alice Charwudzi, <sup>3</sup>Ibrahim Kwame Baidoo, <sup>4</sup>Elizabeth Tabitha Botchway, <sup>5</sup>Stephen Ayisi Addo, <sup>6</sup>Paul Nsiah, <sup>2</sup>Ivy Ekem.**

<sup>1</sup>Dorcas Obiri-Yeboah, Department of Microbiology and Immunology, School of Medical Sciences, University of Cape Coast, Ghana. [dobiri-yeboah@ucc.edu.gh](mailto:dobiri-yeboah@ucc.edu.gh)

<sup>2</sup>Alice Charwudzi, Department of Haematology, School of Medical School Sciences, University of Cape Coast, Ghana. [achawogi@gmail.com](mailto:achawogi@gmail.com)

<sup>3</sup>Ibrahim Kwame Baidoo, Public Health Unit, Cape Coast Teaching Hospital, Cape Coast, Ghana, [ibrahimbaidoo@gmail.com](mailto:ibrahimbaidoo@gmail.com)

<sup>4</sup>Elizabeth Tabitha Botchway, Department of Internal Medicine, Cape Coast Teaching Hospital, Cape Coast, Ghana, [temea1985@yahoo.com](mailto:temea1985@yahoo.com)

<sup>5</sup>Stephen Ayisi Addo, National AIDS Control Programme, Accra, Ghana. [saddo@nacp.org.gh](mailto:saddo@nacp.org.gh)

<sup>6</sup>Paul Nsiah, Department of Chemical Pathology, School of Medical Sciences, University of Cape Coast, [p.nsiah@uccsms.edu.gh](mailto:p.nsiah@uccsms.edu.gh)

<sup>2</sup>Ivy Ekem, Department of Haematology, School of Medical School Sciences, University of Cape Coast, Cape Coast, Ghana. [ekem\\_ivy@hotmail.com](mailto:ekem_ivy@hotmail.com)

**Corresponding Author:**

Dorcas Obiri-Yeboah (MD, PhD)

Department of Microbiology and Immunology, School of Medical Sciences, University of Cape Coast, Cape Coast, Ghana

Telephone: 0264 527 387 OR 0244 527 387

Email address: [dobiri-yeboah@ucc.edu.gh](mailto:dobiri-yeboah@ucc.edu.gh) OR [castella.oy@gmail.com](mailto:castella.oy@gmail.com)

**ABSTRACT**

**Background:** Haematological abnormalities such as anaemia, leucopenia, and thrombocytopenia are common complications of HIV infection. Few researchers have studied the changes in HIV positive patients before and during ART in Ghana. This study aimed to determine the haematological profile of PLHIV at baseline and when on ART in a tertiary facility in Cape Coast, Ghana.

**Methods:** This was an analytical cross-sectional study design with a retrospective component among PLHIV assessing ART services at the Cape Coast Teaching Hospital, Ghana. Full blood count including red cell indices were performed on blood samples and haematological indices were analyzed by categorization based on WHO definitions.

**Results:** A total of 440 participants (94 males and 346 females) were included. The mean haemoglobin level (g/dl) for females at baseline, 6 months after ART and currently was 9.6 ( $\pm 1.8$ ), 10.9 ( $\pm 1.4$ ) and 11.6 ( $\pm 1.4$ ); and 10.2 ( $\pm 2.1$ ), 11.6 ( $\pm 1.7$ ) and 11.8 ( $\pm 1.6$ ) for males. At baseline, the commonest types of anaemia for both females and males was microcytic hypochromic anaemia. The mean platelet count was  $382 \times 10^9/l$  at baseline but reduced to  $298 \times 10^9/l$  after 6 months on ART. Among male participants in this study, the main factor associated with



**CCTH MAIDEN SCIENTIFIC RESEARCH CONFERENCE  
HELD ON 13TH NOVEMBER 2018 @ CCTH LECTURE HALL.**

being anaemic after 6 months on ART was the ART regimen with non-Zidovudine based regimen having reduced odds of anaemia of OR 0.3 (95%CI 0.1 – 0.9), p-value of 0.04. Among females, having plasma viral load >1000 copies per ml was found to have increased odds of being anaemic (OR 1.4, 95%CI 0.7 – 2.6), though not statistically significant (P-value of 0.32).

**Conclusion:** The prevalence of anaemia, though improved on ART, was high among PLHIV. It is essential to ensure that full blood count of PLHIV in Ghana are done regularly at all levels of service provision with appropriate referral systems in place. Iron supplementation is a strategy worth further research among PLHIV in Ghana as a potential contributor to anaemia. The change to the current TDF based preferred first line ART regimen must also be enforced to reduce the potential risks associated with AZT use. This will improve outcome for PLHIV.

## 7. Knowledge And Experience Of Human Papillomavirus And Cervical Cancer Screening In A Cohort Of HIV-Positive And HIV-Negative Ghanaian Women

<sup>1</sup>Dorcas Obiri-Yeboah, Stuart Arabella<sup>2, 6</sup>, Adu-Sarkodie Yaw<sup>3</sup>, Hayfron-Benjamin Anna<sup>4</sup>, Akorsu D. Angela<sup>5</sup>, Mayaud Philippe<sup>6</sup>.

<sup>1</sup>Department of Microbiology and Immunology, School of Medical Sciences, University of Cape Coast, Cape Coast, Ghana

<sup>2</sup>University Hospital, Lewisham, London, UK

<sup>3</sup>Department of Clinical Microbiology, School of Medical Sciences, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

<sup>4</sup>Department of Maternal and Child Health, School of Nursing, University of Cape Coast, Cape Coast, Ghana

<sup>5</sup>Institute of Development Studies, University of Cape Coast, Cape Coast, Ghana

<sup>6</sup>Department of Clinical Research, Faculty of Infectious and Tropical Diseases, London School of Hygiene and Tropical Medicine, London, UK

Corresponding Author:

Name: Dorcas Obiri-Yeboah (MB.ChB., PhD)

Address: Department of Microbiology and Immunology  
School of Medical Sciences, CoHAS  
Private Mail Bag  
University of Cape coast, Cape Coast  
Ghana

Email: [d.obiri-yeboah@uccsms.edu.gh](mailto:d.obiri-yeboah@uccsms.edu.gh) Tel.: 00233 244 527 387

### ABSTRACT

**Background/Objective:** Cervical cancer is the commonest cancer in women in Ghana, but knowledge and experience of women who have had cervical screening is under-evaluated. This study examined knowledge and understanding of HPV and cervical cancer and evaluated experiences of screening in a cohort of HIV positive and negative women.

**Method:** This was a mixed methods study using questionnaires and focus group discussions, with a knowledge score constructed from the questionnaire. HIV-positive and HIV-negative women were recruited from a larger cervical screening study in Ghana and focus group discussions were conducted six months after receiving screening. Quantitative data was analysed descriptively and triangulated with qualitative data following thematic analysis using the framework approach.

**Results:** A total of 131 women were included (HIV-positive, n=55 and HIV-negative, n=76). Variables with significant differences by HIV-status include age (p=0.04), occupation (p<0.0001), level of education (p<0.001), cytology results (p=0.02), and HPV result (p=0.001). Over 80% of participants had a knowledge score deemed adequate. There was no difference between HIV-positive and negative groups in the overall knowledge scores (p=0.12), but variation was seen in individual knowledge items. HIV-positive women were more likely to

correctly identify HPV as being sexually-transmitted ( $p=0.05$ ), and HIV negative women to correctly identify the stages in developing cervical cancer ( $p<0.0001$ ). HIV-positive women mostly described acquisition of HPV in stigmatising terms. The early asymptomatic phase of cervical cancer made it difficult for women to define “what” cancer was versus “what” HPV infection was. All women expressed that they found it difficult waiting for their screening results but that receiving information and counselling from health workers alleviated anxiety.

**Conclusion:** Knowledge of these women who had participated in a cervical screening study was good, but specific misconceptions persisted. HIV-positive women had similar levels of knowledge to HIV-negative, but different misconceptions. Women expressed generally positive views about screening, but did experience distress over waiting for results. A standardised education tool explaining cervical screening and relevance specifically of HPV-DNA results in Ghana should be developed, taking into consideration the different needs of HIV-positive women.

**8. Patterns, Indication And Outcome Of Amputation In Cape Coast Teaching Hospital; A Four-Year Retrospective Review.**

**Hagan Richmond, Kadzie Jacinta, Rahman Ganiyu, Morna Martin.**

Department of Surgery, Cape Coast Teaching Hospital, P.O.Box CT 1363, Cape Coast, Ghana.

Corresponding Author:

Name: Rahman Ganiyu

Address: School of Medical Sciences, University of Cape Coast,  
Cape Coast Teaching Hospital, Ghana.

Email: [garahman1@yahoo.com](mailto:garahman1@yahoo.com)

Tel: +233 264834574

**ABSTRACT**

**Background/Objective:** Limb amputation is reported to be a major but preventable public health problem that is associated with profound economic, social and psychological effects on the patient and family especially in developing countries where the prosthetic services are unavailable, inaccessible or unaffordable. The purpose of this study was to outline the patterns, indications and outcome of limb amputations and to compare the findings with other published data.

**Method:** A retrospective study, covering a 4-year period, involving 126 patients was carried out. Data was obtained from patient theatre record books and folders and analyzed using SPSS and MS Excel.

**Results:** Most of the patients were in the 6th and 7th decades. There were more females than males (1.2:1). Diabetic foot gangrene was the commonest indication for amputation involving 54(42.86%) patients, followed by peripheral vascular disease 43(34.13%) and trauma 12(9.52%). Below knee amputation was the commonest procedure performed (43.65%). More than half (61.1%) of the patients had no immediate complications. The commonest complication was surgical site infection (21.43%), followed by phantom pain (7.937%) and then necrotic stump (5.56%). Most of the patients who had amputations were discharged (96.8%), and none of them was discharged prosthesis. Mortality rate was found to be 3.2%.

**Conclusion:** The commonest indication for amputation was diabetic foot gangrene occurring more commonly in females in the 6th and 7th decade. Below knee amputation was the commonest type of amputation done with surgical site infection being the most common complication. If diabetic foot care education is properly done, traumatic conditions are prevented and expeditiously dealt with, and chronic diseases such as diabetes are carefully managed, there will be a significant reduction in limb loss following trauma or diabetic foot syndrome.

## CLINICAL CASE REPORTS

### 1. Tympanoplasty with Mastoidectomy – The Initial Cape Coast Experience.

Peter Appiah-Thompson<sup>1</sup>, Sesi Collins Akotey<sup>2</sup>, Cyril Mawuli Honu-Mensah<sup>2</sup>, Ryan Bjorn Meier<sup>3</sup>,  
Nicholas Van Buren<sup>3</sup> and Jeremy D. Meier<sup>3</sup>

World Journal of Pharmaceutical and Medical Research, [www.wjpmr.com](http://www.wjpmr.com)

<sup>1</sup>ENT Unit, Department of Surgery, School of Medical Sciences, College of Health and Allied Sciences, University of Cape Coast, Cape Coast, Ghana, West Africa.

<sup>2</sup>Centre for Hearing and Speech Services, University of Education, Winneba, Ghana, West Africa.

<sup>3</sup>School of Medicine, University of Utah, Utah, United States of America.

Corresponding Author:

Name: Peter Appiah-Thompson

Address: ENT Unit, Department of Surgery, School of Medical Sciences, College of Health and Allied Sciences, University of Cape Coast, Cape Coast, Ghana, West Africa.

Email: [appiateel@gmail.com](mailto:appiateel@gmail.com)

Tel: +233 557892783

## ABSTRACT

**Background/Objectives:** A high prevalence of untreated surgical disease for hearing loss exists in West Africa. The purpose of this pilot study was to review hearing outcomes after initial implementation of a surgical otology program in a teaching hospital in Ghana.

**Methods:** A retrospective case series of patients who had surgical intervention for chronic suppurative otitis media (CSOM) in February 2016 at the Cape Coast Teaching Hospital (CCTH) was done. Pre-operative and post-operative audiometric air-bone gap (ABG) testing at frequencies of 500 Hz, 1000 Hz, 2000 Hz, and 4000 Hz were compared.

**Results:** The average pure tone audiometry air-bone gap (PTA-ABG) in our study pre-operatively was 27.75 dB and 14.00 dB post-operatively, with a net gain of 13.75 dB. The difference between the pre-operative and post-operative PTA-ABG results was statistically significant ( $p < 0.05$ ).

## Conclusion:

The results from this study show that hearing thresholds can improve on performing tympanoplasty with mastoidectomy for chronic suppurative otitis media patients.

## 2. Case Report on Ovarian Burkitts

Stephen Laryea, Emmanuel Okai, Kelvin Akoto Gyamera

Department of Paediatrics, Cape Coast Teaching Hospital, P.O.Box CT 1363, Cape Coast, Ghana.

Corresponding Author:

Name: Laryea Stephen

Address: Department of Paediatrics,  
Cape Coast Teaching Hospital,  
P.O.Box CT 1363,  
Cape Coast, Ghana.

Email: [amarkwei2002@yahoo.co.uk](mailto:amarkwei2002@yahoo.co.uk)

Tel: +233 244701134

### ABSTRACT

**Background/Objective:** To present Ovaries as a rare but possible site of Burkitt's Lymphoma. Detailed clinical and histopathological analysis of a patient who presented with abdominal distention after which an oophorectomy was carried out.

**Case Report:** A 12 year old pre-pubertal school going girl with a weight of 31kg is reported to have had a progressively enlarging abdominal mass of 6 months duration. She was being managed on haematinics and multivitamins at a health centre until she was eventually referred to hospital. A left oophorectomy on account of? Ovarian Ca was done after an ultrasound picked up an abnormally enlarged left ovary with ill-defined edges. A histopathology done revealed an Ovarian Burkitt's Lymphoma after which she was referred to a tertiary facility for further management. On examination she was generally stable although chronically ill-looking. Vitals were: Temperature: 36.6C, Respiratory Rate- 24cpm, Heart Rate-88bpm, regular. CVS: S1 and S11 present and normal, no murmur. Respiratory: AE adequate bilaterally, BS vesicular. Abdomen: Surgical scar seen running from xiphisternum to suprapubic region; mildly distended with a palpable liver 4cm below right subcostal margin. CNS: Grossly Intact

Patient reported for review 2 weeks later with excruciating Rib Pain. She looked ill, pale+, anicteric, hydration satisfactory. Her vitals recorded were temperature: 36.4C, Respiratory Rate-34cpm, Heart Rate-147bpm, CVS: S1 and S11 present and normal, no murmurs, Respiratory: Air Entry adequate bilaterally, Breath Sounds vesicular. Abdomen: distended with an incisional scar running above the umbilicus to the hypogastric region; palpable masses felt in the right hypochondriac and left iliac regions. Mass in the left iliac region measures 12x12cm, firm in consistency with well-defined edges. Liver span is 21cm and 12cm below subcostal margin. Both kidneys were not palpable. Bowel sounds present and normal. She was put on Syrup morphine 5mls tds x 10days, tab paracetamol 1g 6 hourly x 5 days, tab vitamin C 1 tab daily x 30 days and, syrup lactulose 20mls bd x 5 days(father to reduce to 10mls if frequency of stools is more than 4x a day)

**CCTH MAIDEN SCIENTIFIC RESEARCH CONFERENCE  
HELD ON 13TH NOVEMBER 2018 @ CCTH LECTURE HALL.**

Patient reported a week later to start the Stage IV protocol of management. She was placed on Allopurinol 100mg daily, tab paracetamol 1g tds and Syrup Morphine 10mls qid. She has received IV cyclophosphamide 500mg in 250mls of normal Saline and Intra-Thecal Methotrexate 12.5mg in 10mls of normal Saline following prehydration. Plan is to administer Cyclophosphamide for 4 consecutive days and Intra-thecal Methotrexate weekly for 3 weeks which would constitute the 1st Cycle of chemotherapy.

**Results:** Histopathology revealed an Ovarian Burkitt's Lymphoma

**Conclusion:** Primary Ovarian Tumors rarely turn out to be Burkitt's but it should not be entirely ruled out and should always be investigated aggressively for prompt diagnosis and management.

**3. A Case Report On The Successful Medical Management Of A Left Tubal Ectopic Pregnancy After A Failed Tubal Ligation.**

**Boateng Abigail Serwaa, Agbeno Evans, AKwakyee Alex.**

Department Of Obstetrics And Gynaecology, Cape Coast Teaching Hospital, P.O.Box CT 1363, Cape Coast, Ghana.

Correspondent Author:

Boateng Abigail Serwaa

Department Of Obstetrics and Gynaecology

Cape Coast Teaching Hospital, P.O.Box CT 1363, Cape Coast, Ghana.

Email: abigail.boating @gmail.com

Tel: +233 206715754

**ABSTRACT**

**Background/Objective:** Bilateral tubal Ligation is the most common form of female sterilization among patient with caesarean section in CCTH, its failure is rare and occurrence of it is likely to cause a tubal ectopic pregnancy. Early detection can prevent its surgical management.

**Objective:** To throw light on the possible failure of female sterilization and to emphasize that early detection of ectopic pregnancy can be managed medically with success (Single Dose of Methotrexate)

**Case Report:** We report 34-year-old now P3+2 with a 3 previous caesarean section who had an ongoing left tubal ectopic pregnancy 13 months after BTL was done during a caesarean section. Satisfying the criteria of medical management of ectopic gestation, a single dose of methotrexate regimen was used to a success.

**Conclusion:** Failure of tubal ligation is rare and occurrence of it is likely to cause an ectopic pregnancy. Early recognition of pregnancy can lead to a successful medical management saving the patient surgery and its complication.



**CCTH MAIDEN SCIENTIFIC RESEARCH CONFERENCE  
HELD ON 13TH NOVEMBER 2018 @ CCTH LECTURE HALL.**

**SECTION FOUR**

**SELECTED PICTURES FROM THE CONFERENCE**





**CCTH MAIDEN SCIENTIFIC RESEARCH CONFERENCE  
HELD ON 13TH NOVEMBER 2018 @ CCTH LECTURE HALL.**





**CCTH MAIDEN SCIENTIFIC RESEARCH CONFERENCE  
HELD ON 13TH NOVEMBER 2018 @ CCTH LECTURE HALL.**



**CCTH MAIDEN SCIENTIFIC RESEARCH CONFERENCE  
HELD ON 13TH NOVEMBER 2018 @ CCTH LECTURE HALL.**





**CCTH MAIDEN SCIENTIFIC RESEARCH CONFERENCE  
HELD ON 13TH NOVEMBER 2018 @ CCTH LECTURE HALL.**





**CCTH MAIDEN SCIENTIFIC RESEARCH CONFERENCE  
HELD ON 13TH NOVEMBER 2018 @ CCTH LECTURE HALL.**

