

**ABSTRACTS / PROCEEDING: 1<sup>ST</sup> CAPE COAST TEACHING HOSPITAL  
SCIENTIFIC RESEARCH CONFERENCE**

*THEME: OPTIMISING OUTCOME OF HEALTH CARE DELIVERY: THE ROLE OF  
RESEARCH IN POLICY DECISION MAKING IN (CCTH) GHANA.*

**EVALUATION STUDY: EFFECTIVENESS OF THE E-HEALTH PROJECT  
IMPLEMENTATION AT CAPE COAST TEACHING HOSPITAL, GHANA, AND ITS  
IMPACT ON QUALITY HEALTH CARE**

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**Abstract**

**Background/Objective:** The objective of the study is to evaluate the effectiveness of the E-Health (EHR) Project Implementation (LHIMS Software) at the 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 was used and a semi-structured questionnaire was administered to 307 CCTH staff and 197 patients 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 Excel 2016 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 1 hour 36 seconds after the introduction of the E-Health system in 2018 compared to the 2 hours under the Patients-folder system (paper system) recorded in 2015. The average waiting time in the consulting room was 17 minutes 33 seconds whilst the triaging area recorded 15 minutes 4 seconds. Eighty-six percent (86%) of the patients were satisfied with the e-health system. Fifty-nine percent (59%) of staff were able to access/generate performance report/data from the LHIMS software. Eleven (11%) of the staff indicated there were inadequate computers whilst 49% complained about interrupted power supply and internet network instability. There are bottlenecks in report and electronic financial claims (E-Claims) generation.

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

## A 6-YEAR ANALYSIS OF FATAL GUNSHOT INJURIES IN THE CENTRAL REGION OF GHANA

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### Abstract

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**Background:** Despite many newspaper reports of fatal gunshot injuries in Ghana, there are no published data on gunshot fatalities. 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 gunshots in the Central Region of Ghana.

**Method:** Existing autopsy records including Coroner's inquest forms in the Department of Pathology of Cape Coast Teaching Hospital (CCTH) were searched from 2011 to 2017. The demographic, forensic and social characteristics of victims of fatal gunshot injuries were reviewed and data entered into Excel and analyzed.

The circumstances of the resulting deaths were mostly related to hunting (27.5%), social Gatherings/public unrest (27.5%), household accidents involving children (20.0%) and armed

**Results:** A total of forty (40) deaths due to gunshot injuries were recorded over the 6-year 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. 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 the literature, with fatalities mostly occurring in young adult males. Shotguns are the commonly used type of gun in fatal gunshot injuries. There is a high number of accidental gunshot fatalities involving children in the rural areas of the Central Region.

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## EVALUATION OF SURGICAL OUTCOME OF CATARACT OPERATION AT CAPE COAST TEACHING HOSPITAL

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### Abstract

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**Background/Objective:** 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 avoidable 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).

**Methods:** The study was a prospective cross-sectional one. Data was collected on patients aged 40 years and above who were to undergo age-related cataract surgery. A structured questionnaire was administered over a period of 7 months. Data was analyzed using SPSS version 20.0 with the results being presented in the form of tables and charts.

**Results:** A majority (73.8%) of the patients before the surgery had poor vision; a few (25.0%) had moderate vision and about 1.2% had borderline vision. After the surgery, 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 as being 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.

## PERCEPTION ON PROPHYLACTIC MASTECTOMY AMONG NURSES

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### Abstract

**Background:** Breast cancer is the most frequently diagnosed cancer among women in 140 of 184 countries worldwide. Globally breast cancer 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.

**Method:** 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. The Statistical Package for Social Sciences was used to analyze the data collected and they were 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% respondents are aware of the existence of prophylactic mastectomy. Six-seven percent (67%) of the respondents indicated that, they will opt for prophylactic mastectomy should the need arise. However, 33% of the respondents said otherwise. Fifty-five percent (55%) will opt for prophylactic mastectomy if adequate information was given to them. Five percent (5%) said their religion will not allow the removal of body parts. Twenty-eight percent (28%) of the respondents were concerned about stigmatization and 23% also said their partners will object to the procedure being carried out.

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

## PATTERNS, INDICATION AND OUTCOME OF LIMB AMPUTATION IN CAPE COAST TEACHING HOSPITAL; A FOUR-YEAR RETROSPECTIVE STUDY

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### 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 of life. There were more females than males (1.2:1). Diabetic foot gangrene was the commonest indication for the amputation of a limb 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 (7.94%) and then necrotic stump (5.56%). Most of the patients (96.8%) who had amputations were discharged home, and none of them were discharged with prosthesis. Mortality rate was found to be 3.20%.

**Conclusion:** The commonest indication for limb amputation was diabetic foot gangrene occurring more commonly in females in the 6th and 7th decades of life. 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 chronic diseases such as diabetes are carefully managed, there will be a significant reduction in limb loss following trauma or diabetic foot syndrome.

## A FAILED BILATERAL TUBAL LIGATION WITH A SUCCESSFUL MEDICAL MANAGEMENT OF A LEFT TUBAL PREGNANCY: A CASE REPORT

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### Abstract

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**Background/Objective:** Female sterilization is the most popular permanent contraceptive in the world. Bilateral tubal ligation (BTL) method failure is rare but can occur. Therefore, pregnancy should be excluded for every woman in the reproductive age group who presents with a missed period, irregular bleeding or pain after tubal ligation and the location confirmed sonographically since ectopic pregnancies are common among failed BTL clients and early detection of ectopic pregnancy makes it possible to explore the full range of management options.

The objective is to highlight the rare possibility of a BTL method failure and to emphasize on the medical management as a viable option for ectopic pregnancy even in a resource constrained environment.

**Case Report:** We report on a 34-year old now P<sup>3+2</sup> with 3 previous caesarean sections who had an ongoing left

tubal ectopic pregnancy 13 months after BTL was done during last caesarean section. The patient reported early because the pre-procedure counselling included the possibility of a method failure and early recognition of the ectopic pregnancy made it possible to medically manage the client successfully with a single dose methotrexate. Prompt response to the patient's complaints averted a legal suit.

**Conclusion:** BTL failure is rare but possible as was seen in this case and should be mentioned in routine counselling. Early health-seeking behaviour and pregnancy detection with patient's compliance made the medical management of the ectopic pregnancy a success. Prompt attention to patients' complaints and a good professional rapport between patients and health workers may avert possible medicolegal tussles.