

Ohinma A¹, Zheng Y², Jeerakathil T³, Klarenbach S¹, Hakkinen U⁴, Nguyen T², Chuck A², Friesen D⁵, Ruseski J⁶, Kaul P¹, Ariste R⁷, Jacobs P²

¹University of Alberta, Edmonton, AB, Canada, ²Institute of Health Economics, Edmonton, AB, Canada, ³Alberta Health Services, Edmonton, AB, Canada, ⁴National Institute for Health and Welfare, Helsinki, Finland, ⁵Alberta Medical Association, Edmonton, AB, Canada, ⁶West Virginia University, Morgantown, WV, USA, ⁷Canadian Institute for Health Information, Ottawa, ON, Canada

OBJECTIVES: The Alberta Provincial Stroke Strategy established 18 stroke centers and aimed to improve access to high quality stroke care for the province of Alberta, Canada. This study explored whether patients from lower socioeconomic status (SES) neighborhoods had lower probability of being admitted to stroke center and whether this had an impact on mortality after ischemic and ill-defined stroke. **METHODS:** We linked hospital discharge abstracts and National Ambulatory Care Report System for all patients admitted to hospitals with ICD-10 I63 and I64 in Alberta between April 2004 and March 2013. We used median neighbourhood income from 2011 census data to represent patient income. We categorized the patients as quintile 1 (lowest) to 5 (highest) by the income level. We applied a Recursive Pobot Model using differential distance to hospitals as an instrumental variable to correct potential pre-hospital selection bias. In the first equation, we examined the association between SES and admission to stroke centers, adjusting for distance to nearest hospital and other patient characteristics. The effect of stroke center on mortality was estimated in the second equation. **RESULTS:** Among 17,240 patients, the percentages being admitted to a stroke center were 61.6%, 64.6%, 67.2%, 70.6%, and 73.7% for income quintiles 1 to 5, respectively. The overall unadjusted 30-day all-cause mortality rate was 10.6% for patients first admitted to stroke centers and 13.9% for patients admitted to non-designated hospitals. Adjusting for patient characteristics and other factors, we found the patients from higher SES neighborhood are more likely to be admitted to a stroke center ($p < 0.001$). First admission to a stroke center was negatively associated with 30-day all-cause in-hospital mortality (marginal effect = -0.065, 95%CI: -0.123, -0.065, $p = 0.029$). **CONCLUSIONS:** In Alberta, SES had pronounced effects on first admission to stroke centers which was significantly associated with lower in-hospital mortality for stroke patients.

PHS145

FACTORS INFLUENCING ACCESS TO MEDICINES IN NIGERIA: VIEWS AND EXPERIENCES OF RESIDENTS OF THE FEDERAL CAPITAL TERRITORY

Umoru A, Alfa J, Adigwe OP

National Assembly, Abuja, Nigeria

OBJECTIVES: Access to medicines for Nigerians remains a critical factor influencing national healthcare. Currently, life expectancy at birth is under 60 years and is representative of other poor health indices. This indicates urgent need for improvement. This study therefore aimed at assessing public opinion regarding access to medicines, together with perceptions of the associated quality, both of the medicines, and of the service. **METHODS:** A cross-sectional survey was designed to collect the relevant data from 650 randomly selected residents of Abuja between January and April 2012. The questionnaire was developed based on the themes that emerged from information and data collected from peer reviewed journals, online sources and official documents from the Ministry of Health. Face and content validation were carried out using an expert panel. Piloting was carried out and this did not result in any major changes. Data were analysed using Microsoft Excel and ethics approval was received from the National Assembly Management. **RESULTS:** An 85% response rate was achieved with the majority of the respondents belonging to the female gender (53%). Three quarters (75%) of the respondents had confidence in the quality of medicines dispensed in government establishments, but more than half (58%) reported that prescribed medicines were not readily available. The majority of respondents (80%) reported that medicines were cheaper in pharmacies in government hospitals, compared to private hospitals, but close to half (45%) expressed discontent with the level of health information provided by pharmacists. **CONCLUSIONS:** The high level of confidence in the quality of medicines dispensed in government hospitals can help improve access to medicines, especially as the provider is perceived to be the more cost effective option. Pharmaceutical Care and CPD can improve pharmacists' ability to provide health information. Strategies that can improve medicines' availability include Essential Drugs' principle and Drug Revolving Fund.

PHS146

SATISFACTION OF CLIENTS WITH THE SERVICES OF AN OUTPATIENT PHARMACY AT A UNIVERSITY HOSPITAL IN NORTHWESTERN ETHIOPIA: A CROSS-SECTIONAL STUDY

Surur AS¹, Teni FS², Girmay G¹, Tesfa M¹, Moges E¹, Abraha M¹

¹University of Gondar, Gondar, Ethiopia, ²Addis Ababa University, Addis Ababa, Ethiopia

Abstract Objectives: Evaluation of patient/client satisfaction with pharmacy services as a crucial part of the health services through appropriate studies is important. The current study aimed at assessing the level of client satisfaction with the services of the outpatient pharmacy of Gondar University Referral Hospital (GURH) in northwestern Ethiopia. **METHODS:** An institution-based cross-sectional study was conducted involving 400 clients who had prescriptions/orders filled at the outpatient pharmacy of the hospital during the period of 5th to 25th of November 2013. The data on the level of satisfaction of clients with the services of the outpatient pharmacy in the hospital was collected using a structured interview guide adopted from an instrument translated into Amharic and validated. The data collected was entered into and analyzed using SPSS version 16. **RESULTS:** The overall mean score the respondents gave to satisfaction with the pharmaceutical services was 2.48 out of a maximum of 5.00 score. The mean scores for all the individual parameters rated were less than 3.00. Maximum mean scores were given for parameters asking about the promptness of prescription medication service (2.99), and professionalism of the pharmacy staff (2.96) with the lowest being scored for information given to clients about the storage of medication (1.25), and explanations of possible side effects (1.27). Clients who were served free of fee recorded significantly higher

level of satisfaction than those who paid. Higher levels of satisfaction were also reported among illiterates, older adults and those with no job compared to those with higher education, merchants and government employees. **CONCLUSIONS:** This study showed that the overall mean satisfaction level of clients of the outpatient pharmacy was low and it differed among different socio-demographic characteristics. Further research in to the reasons behind the low satisfaction should be done to provide appropriate solutions to improve the service.

PHS147

INCENTIVES TO HONOR MATERNAL HEALTH REFERRALS IN A SETTING WITH INEQUITABLE ACCESS TO HEALTH CARE IN THE AMANSIE WEST DISTRICT IN ASHANTI REGION

Nuamah GB¹, Agyei-Baffour P², Akohene KM¹, Boateng D¹, Dobin D³, Donkor KA⁴

¹Kwame Nkrumah University of Science and Technology, Ghana, Kumasi, Ghana, ²Kwame Nkrumah University of Sciences and Technology (KNUST), Kumasi, Ghana, ³Ghana Health Service, Manso Nkwanta, Ghana, ⁴Ghana Health Service, Accra, Ghana

OBJECTIVES: Obstetric referrals constitute an eminent component of emergency care, and key to ensuring safe delivery and reducing maternal and child mortalities. The efficiency of referral systems is however marred by the lack of accessible transportation and socio economic disparities in access to healthcare. This paper assesses incentives to honour maternal health referrals in a setting with inequitable access to healthcare. **METHODS:** This was a descriptive cross-sectional study, involving 720 randomly sampled pregnant women from five (5) sub districts in the Amansie west district in Ghana, from February to May 2015. Data were collected through structured interviewing and analyzed using STATA 11.0 for windows. A logistic regression models was fitted to determine the influence of socio-demographic characteristics and pregnancy history on obstetric referrals at 95% confident interval. **RESULTS:** About 21.7% of the women studied had ever been referred by a community health worker to the next level of care. Some of the pregnant women however refused referrals to the next level due to lack of money (58%) and lack of transport (17%). A higher household wealth quintile increased the odds of being referred as compared to those in the lowest wealth quintile. Women who perceived their disease conditions as an emergency were also more likely to honour referral (OR=2.3; 95% CI=1.3, 3.9). **CONCLUSIONS:** Clients' perception and low income remain as barriers to seeking healthcare and disincentives to honour referrals in a setting with inequitable access to healthcare. Implementing social interventions could leap-frog the attainment of maternal health targets in deprived areas.

PHS148

DRUG THERAPY OF EPILEPTIC SEIZURES IN ADULT EPILEPTIC OUTPATIENTS OF UNIVERSITY OF GONDAR TEACHING HOSPITAL, GONDAR, NORTH WEST ETHIOPIA

Birru EM

University of Gondar, Gondar, Ethiopia

OBJECTIVES: To assess antiepileptic therapy prescription patterns and treatment outcomes in adult epileptic outpatients, University of Gondar Teaching Hospital, Gondar, North West Ethiopia. **METHODS:** Institution based, retrospective cross-sectional study was conducted on the medical charts of 336 adult epileptic patients on follow-up at the outpatient of Neurology Department of University of Gondar Teaching Hospital from May 2014, April 2015. Reviewing follow-up information on medical cards was used to evaluate AED prescribing pattern and treatment outcome. Data was collected by using data collection format and analyzed using SPSS software version 16. **RESULTS:** The common type of seizure diagnosed was generalized tonic clonic seizure, 245 (72.91%). Monotherapy with AED accounted for 80.35% of the cases, whereas dual therapy and polytherapy with three AED combinations accounted for 16.37% and 3.28%, respectively. The most frequently prescribed AED was phenobarbitone (62.47%) followed by carbamazepine (17.91%). From the total epileptic cases, 277(82.4%) were having well-controlled seizure status in the last three consecutive months. **CONCLUSIONS:** Most of the patients were maintained on monotherapy and largely this was covered by the older antiepileptic, phenobarbitone as per the standard treatment guideline. And this may need the revision of the treatment regimen as well as the treatment guideline considering the efficacy, safety of the drugs as well as the patients' adherence to those prescribed medicines.

PHS149

A TRANSITIONS OF CARE COLLABORATION BETWEEN PHARMACY ACADEMIA AND A COMMUNITY HEALTH SYSTEM

Bradford C¹, Thanh D², Kwong M², Chang L², Shah BM², Sui L², Young G²

¹Sharp HealthCare, San Diego, CA, USA, ²Touro University California, Vallejo, CA, USA

OBJECTIVES: With the emergence of the Affordable Care Act and Hospital Readmission Reduction Program, health-system performance is increasingly being evaluated through readmission rates. As a result, health organizations are investigating novel ways to reduce readmissions; however, funding new programs remains a challenge. This has created opportunities for pharmacy service expansion through combined efforts of hospitals and academia. The purpose of this study is to describe the collaborative care model established by Touro University California and Sharp Healthcare, focused on expanding pharmacist roles and reducing readmissions. **METHODS:** This is a retrospective, descriptive study conducted from July 2011 to July 2015. A faculty pharmacist, PGY2 pharmacist resident, and student pharmacist were integrated into a multidisciplinary team called the Continuum of Care Network (CCN). Transitions of care (TOC) services impacted post-discharge medication adherence and readmission rates. A constructed timeline illustrates phases of program implementation, expansion, and future direction. **RESULTS:** The CCN includes 2.0 FTE's, supporting up to nine student pharmacists per rotation. TOC services were provided to over 1650 physician-referred and heart failure inpatients. From 2011-13, CCN contributed to a significant readmission rate reductions following index hospitalization for heart failure (ARR 12%; RRR = 48%, $p = 0.0005$). Additionally, CCN expansion into skilled nursing from 2013-14 shows similar reductions in mean time to readmissions (from 17.6 days to 11.0 days,