Correlation of Mid Forced Expiratory Flow Rates (FEF25-75) to the Severity of Symptoms of Spirometry-Proven Chronic Obstructive Pulmonary Disease Patients

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BACKGROUND: Chronic obstructive pulmonary disease (COPD) is a disease state characterized by irreversible airflow limitation that can result from both small airway obstruction and emphysema. Its diagnosis is through spirometry and traditionally, the severity of the disease is graded by the FEV1% predicted, while other potentially valid measures tend not to be used. However, studies claimed that FEV1 % predicted does not reliably reflect the burden of COPD on a patient's health status. Other values such as the forced expiratory flow between 25% and 75% of the FVC (FEF25-75) are also commonly reported and thought to reflect also degree of airway obstruction hence may also be used in the evaluation and management of the disease.

OBJECTIVE: To determine the correlation of mid forced expiratory flow rates (FEF25-75) to the severity of symptoms of spirometry-proven chronic obstructive pulmonary disease patients.

METHODS: This is a cross-sectional, analytical chart-review of the participants from the multi-center The Philippine COPD Profile and Survival Study (CPASS) participating center. All patients who were screened for the CPASS were included in this study. Their demographic profile, severity of symptoms using the Global Initiative for Chronic Obstructive Lung Disease (GOLD) 2017 Symptom/Risk Evaluation Model, Modified Medical Research Council Questionnaire (mMRC) and COPD Assessment Test (CAT) and FEF 25-75 were obtained from the participants' chart. Spearman's rho correlation coefficient test was applied to correlate between the respondents' FEF 25-75 and severity of symptoms. *P*-values <0.01 were considered statistically significant.

RESULTS: Analysis of data revealed that FEF 25-75 is correlated with GOLD (r= -.548, p<.01), mMRC (r = -.515, p<.01) and CAT (r=-.415, p<.01). The correlation coefficients were negative indicating that as FEF 25-75 increases, GOLD, mMRC and CAT decreases.

CONCLUSION: Mid forced expiratory flow rates (FEF25-75) has a negative correlation to the severity of symptoms of spirometry-proven COPD disease patients hence may aid in the evaluation and management of COPD patients.

Keywords: mid forced expiratory flow rates, FEF25-75 Pulmonary Disease, Chronic Obstructive

Clinical Outcome of Adult Filipino Patients with Nasopharyngeal Carcinoma treated during June 2015 - June 2018 with Chemotherapy and Radiation Therapy in a Tertiary Hospital

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Background: The research project evaluates the clinical outcome of Filipino Patients diagnosed with Nasopharyngeal Carcinoma with the following variables: Demographics, Clinical Outcomes, Pattern of failures and Follow- ups, Site of Failures.

Objective: The study aims to document the epidemiologic profile and clinical outcome of NPCA patients treated in JBLMRH with Chemotherapy and Radiation therapy.

Methods: A Quantitative Descriptive cross-sectional design was used to evaluate 100 purposive sampled based on exclusion and inclusion criteria set by the researcher. Data sampled extracted retrospectively. The study was conducted in Jose B. Lingad Memorial Regional Hospital, a 500-bed capacity public tertiary, teaching and training hospital located in City of San Fernando Pampanga. A three-year chart review among Nasopharyngeal Carcinoma patients in the Chemotherapy Center was included in the study.

Results and Conclusion: Results revealed that majority of the patients are male and belongs to age group 40-49 years old and majority of the patient were unemployed. It also has been found that site of failure most occur at regional with the percentage of 97.2% for patients who underwent radiation therapy. Also, data revealed that 47.2% died due to loss of follow-ups with data score of 57.1%. This underscored the need for strict monitoring of follow-ups and a positive correlational is recommended for future studies. Using Spearman's rho tested the correlation data between the respondents' chemotherapy days, patient's recurrence and patient's outcome. Analysis of the data revealed that chemotherapy & radiation days is not correlated with recurrence (r = .830, p < .001). While chemotherapy & radiation days shows that it was correlated with patients' outcome (r, -.511, p < .001) shows a negative correlation, indicating that as chemotherapy & radiation days decreases, the patients' outcome increases.

Keywords: Nasopharyngeal carcinoma, chemotherapy

Clinical Profile among Patients Admitted at Jose B. Lingad Memorial Regional Hospital Diagnosed With Alcoholic Liver Disease in Comparison to Non-Alcoholic Fatty Liver Disease: A 3-Year Review

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Background: Alcohol is considered to be the world's third largest risk factor for disease burden and the detrimental effect of its use results in 2.5 million deaths every year. In the Philippines, alcohol continues to be one of the most abused substances in the adult population, mainly due to the great influence of the western culture. Epidemiological studies suggest that a threshold dose of alcohol must be consumed for serious liver injury to become apparent. Alcoholic Liver Disease (ALD) is considered to be the most prevalent type of chronic liver disease worldwide. In the absence of alcohol intake liver injury may take place in the form of Non-alcoholic fatty liver disease (NAFLD) which includes fatty liver, steatohepatitis, and even cirrhosis.

Objective: To determine the Clinical Profile of patients diagnosed with Alcoholic Liver Disease in comparison to Non-Alcoholic Liver Disease in JBLMRH from 2015-2018.

Methods: A Comparative Case Control research design was used to compare 176 patients with alcoholic liver disease and 46 patients with non-alcoholic fatty liver disease and were purposively sampled based on the exclusion and inclusion criteria set. A three-year chart review data extracted retrospectively was included in the study.

Results: Results revealed that majority of the patients in the study belongs to the age group 60-69 years old for both ALD (39%) and NAFLD (32.6%). It also has been found that in terms of sex majority of patients with ALD are male with 94.5% while majority of patients with NAFLD are female with 78.3%. In terms of medications, majority of patients with ALD are on Beta-blockers (11.9%) while majority of patients with NAFLD have no maintenance medications (28.3%). Using Anova test the comparative data results revealed that a significant difference exists between the variables among patients diagnosed with alcoholic liver disease and non-alcoholic liver disease (F-1, 220) = 0.008, 244.89, 2.962, 128.75, 12.821), $p < 0.01$).

Conclusion: Patients diagnosed with ALD are predominantly male while patients with NAFLD are predominantly female. Majority of participants involved belonged to the age group 60-69 for both categories. Based on the data collected, a high percentage of participants had hypertension and diabetes mellitus either as a single entity or together. Although a high percentage of subjects were noncompliant with their medications, the highest fraction of medications for both categories recorded was for anti-hypertensives. Alcohol consumption for subjects with ALD averaged at 50-100 grams per day and all patients with NAFLD consistently reported consuming zero grams of alcohol per day.

Keywords: Alcoholic liver disease (ALD), Non-alcoholic fatty liver disease (NAFLD)
Poster Exhibit Contest – Professional Category

Correlation of Pre-bronchodilator Percent Predicted Peak Expiratory Flow Rate (PEFR) and Post-bronchodilator Forced Expiratory Volume in 1 Second/Forced Vital Capacity (FEV1/FVC) Ratio in the Diagnosis of Chronic Obstructive Pulmonary Disease

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BACKGROUND: Chronic obstructive pulmonary disease (COPD) is an irreversible state of progressive and persistent airflow limitation. A diagnosis of COPD is considered in a patient who has symptoms of chronic cough, sputum production or dyspnea, exposure to risk factors for COPD, and confirmed by a post-bronchodilator forced expiratory volume in 1 second/forced vital capacity (FEV1/FVC) ratio < 70% or 0.70.

OBJECTIVE: To determine the correlation of pre-bronchodilator percent predicted peak expiratory flow rate (PEFR) and post-bronchodilator FEV1/FVC ratio in the diagnosis of COPD

METHODS: This is a single-center, cross-sectional, analytical chart-review study conducted in Jose B. Lingad Memorial Regional Hospital. The data will be collected from the ongoing Philippine COPD Profile and Survival Study (CPASS) in the institution. The highest post-bronchodilator FEV1/FVC ratio will be correlated with the percent predicted PEFR using linear regression to achieve cut-off values for percent predicted PEFR in the diagnosis of COPD. Statistical analysis will be used to determine the specificity, sensitivity and predictive values.

RESULTS: A percent predicted PEFR value of = 60 % showed a good sensitivity (82.0%) and specificity (77.3%) in the diagnosis of COPD. There is a significant direct linear correlation among the pre-bronchodilator percent predicted PEFR (as predictor) and post-bronchodilator FEV1/FVC ratio.

CONCLUSION: Pre-bronchodilator peak expiratory flow rate using a peak flow meter can be used as a screening diagnostic tool for COPD. A pre-bronchodilator percent predicted PEFR of = 60% was the best cut-off to detect patients at risk of COPD with good overall accuracy.

Keywords: Peak Expiratory Flow Rate, FEV1/FVC Ratio, Chronic Obstructive Pulmonary Disease

Clinical Outcomes and Patient Profile of Seziure Disorders admitted in a Tertiary Hospital in Pampanga from 2015 to 2017

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BACKGROUND: Seizure is a paroxysmal event due to abnormal excessive or synchronous neuronal activity in the brain. Depending on the distribution of discharges, this abnormal brain activity can have various manifestations, ranging from dramatic convulsive activity to experiential phenomena not readily discernible by an observer. Epilepsy, on the other hand, describes a condition in which a person has recurrent seizures due to a chronic, underlying process. Jose B. Lingad Memorial Regional Hospital is a public tertiary hospital of Central Luzon which caters to most patients in the said region. There have been no local studies regarding the clinical outcomes and patient profile of patients with seizure disorders.

OBJECTIVES: To determine the clinical outcomes and patient profile of Seizure disorders admitted in Jose B. Lingad Memorial Regional Hospital from 2015 to 2017

METHODS: This is a cross-sectional retrospective study among patients admitted in Jose B. Lingad Memorial Regional Hospital under Department of Internal Medicine, diagnosed with seizure disorder with age of 19 years and above from January 2015 to December 2017. Purposive homogenous sampling method, specifically total enumeration was used for the sample size of the target population. Data for the demographic profiles of admitted patients with seizure disorder included: age ranging from 19 years and above, sex, admission duration, morbidity and mortality. Data of the causes of seizure and clinical outcomes were also gathered. A descriptive analysis on the frequency of the outcomes was done in the study.

CONCLUSION: Seizure disorders remain to be a serious neurological disorder and one of the world's most prevalent noncommunicable diseases. It is a global problem affecting all ages, races, social classes and countries. Males are predominantly affected than females. The highest percentage among age groups with seizure disorders is 51-60 years. Most patients stay in the hospital between 1 to 3 days. It was evident in the study that the most common cause of seizure disorders is cerebrovascular disease, infarct which may be related to hypertension which is the most common co-morbid condition. Majority of patients were discharged which may be understood that proper management and timely intervention is essential for this condition to be controlled. The most common immediate cause of death of patients with seizure disorders is aspiration pneumonia.

Keywords: Seizure Disorder, Clinical Outcome, Patient Profile

Emotional Intelligence and Adversity Quotient® as Predictors of Work Motivation of Nurse Academic Managers

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Rationale of the Study: Because of stress and challenges to fulfill institutional goals, nurse academic managers may perceive their work as not job satisfying and intrinsically motivating. A lack of motivation may results in apathy, poor health and well-being, and a sense of powerlessness which lead to poor job performance. Numerous studies suggested that emotional intelligence (person's ability to recognize, distinguish, understand one's and other's emotions and able to manage it), adversity quotient® (person's ability to overcome or benefit from adversity), and work motivation (drives the person to achieve their goals) plays an important role in nursing leadership and management.

Research objectives/problem statement: This study aimed to determine the relationship of nurse academic manager's emotional intelligence, adversity quotient® and work motivation, and to determine the predictive ability of emotional intelligence and adversity quotient® to work motivation.

Methods: A correlational, cross-sectional research design was used to determine the relationship of nurse academic manager's emotional intelligence, adversity quotient® and work motivation, and to determine the predictive ability of emotional intelligence and adversity quotient® to work motivation. A total of 55 nurse academic managers participated from any the twenty (20) universities/schools with a nursing program, duly selected by purposive sampling. The instrument utilized instruments of four parts, (1) Demographic; (2) Emotional Intelligence Questionnaire; (3) Adversity Response Profile®; and (4) Work Extrinsic and Intrinsic Motivation Scale. Multiple Regression was used to test the predictive ability of trait emotional intelligence and adversity quotient® towork motivation.

Results and conclusions: The findings showed that emotional intelligence had significant negative regression weights while adversity quotient® had a significant positive weight), an indication that only adversity quotient® did significantly predict work motivation. However, out of the four subscales of adversity quotient®, only factors control, $r = .361$ $p < .01$ and origin and ownership, $r = .320$ $p < .05$ were found to predict work motivation.

Specific recommendations: Nurse managers can apply knowledge gained in this study to create a climate that promote collaboration, risk-taking, effective decision making, motivation and being sensitive to ones and other's emotion, which in turn will lead to improve staff performance and improve patient care.

Keywords: Trait emotional intelligence, Adversity quotient®, Work motivation