



**PHILIPPINE PEDIATRIC SOCIETY
DAVAO SOUTHERN MINDANAO CHAPTER**



COMPENDIUM OF RESEARCH PAPERS

Year 2022 and 2023

Officers and Members 2022 – 2024

Cleofe C. Llanos, MD
President

Jonah Suzette A. Geralde, MD
Vice President

Jocelyn T. Mantilla, MD
Secretary

Charlotte Bañes, MD
Assistant Secretary

Lou Josephine Apolinario, MD
Treasurer

Jo Ann Narvaza, MD
Auditor

Sheldon P. Paragas, MD
Immediate Past President

Board Members

Heather De Vera, MD

Diana Dadia, MD

Pristine Marie Bernardo, MD

Melissa Aguirre, MD

Jeannette Nacilla-Sulit, MD

Trust Fund Board

Elizabeth Derla, MD
Perlina Quitain, MD
Sheldon Paragas, MD
Ma. Theresa Bañes, MD
Zeny A. Peli, MD
Ma. Teresa V. Proasio, MD
Gemma B. Tiu, MD
Marjorie Magtibay, MD

Area Representatives

Sergio Demontano, MD
General Santos City/SOCKSARGEN Area

Sally Celeste Figueroa, MD
Davao Del Norte/Tagum City

Aeleen Macasaet, MD
Davao Del Sur/Kidapawan/North Cotabato

TABLE OF CONTENTS

| | |
|---|--|
| Foreword | |
| Abstracts from Researches Submitted in 2022 | |
| List of Winners and Finalists | |
| Clinical Profile and Outcome of Newborns with Persistent Pulmonary Hypertension in A Tertiary Private Hospital in Davao City: A Retrospective Study <i>Hannah C. Dalaguan, MD, Yadnee Estrera, MD</i> <i>Brokenshire Medical Center</i> | |
| The Effect of Massage Therapy Before Heel Stick Extraction of Neonates Admitted in A Private Tertiary Hospital In Davao City <i>Arvin Rodriguez Gallardo, MD, Joel Teves Gallardo, MD</i> <i>San Pedro Hospital</i> | |
| Factors Influencing Vaccine Hesitancy Among Families with Less Than One Year Old in an Urban Barangay in Cotabato City <i>Al-Anbari A. Maca-Ayan, MD</i> <i>Cotabato Regional and Medical Center</i> | |
| Prevalence Of Birth Defects and Its Associated Maternal Risk Factors in A Tertiary Hospital in Davao City: A Retrospective Study <i>Lawdelyn Yu Belarmino, MD, Joel Gallardo, MD</i> <i>Brokenshire Medical Center</i> | |
| Depression, Anxiety and Stress Among Senior High School Students Under Distance Learning in Times Of COVID-19 Pandemic: A Quantitative Cross Sectional Non-Experimental Study <i>Christine J. Clerigo, MD, Ferriza Maria A. Isaguirre, MD</i> <i>Brokenshire Medical Center</i> | |
| Clinical Profile and Outcome of Newborns with Gastroschisis Managed in A Tertiary Hospital Southern Philippines Medical Center From 2018-2020 <i>Amerhasan L. Laut, MD, Melanie Adolfo, MD</i> <i>Southern Philippines Medical Center</i> | |
| A Review on Immunization Compliance of Children Ages 0-1 Year Old Before And During The Covid-19 Pandemic In Barangay Old San Isidro Health Center In Davao City <i>Alyssa Arielle G. Eugenio, MD, Mervat M. Pasigan, MD</i> <i>San Pedro Hospital</i> | |
| A Correlational Study of Baseline TSH, FT4 Levels and Thyroid Scintigraphy Scan Findings Among Neonates Diagnosed With Congenital Hypothyroidism <i>Anne Joy C. Amba, MD, Eleonor C. Du-Amparado, MD</i> <i>Davao Doctors Hospital</i> | |
| Retrospective Study on The Association Between Serum Calcium Levels and Severity Of Dengue Among Patients Admitted In A Tertiary Hospital In Davao City From 2018-2020 <i>Emma Louise C. Fernandez, MD, Mervat M. Pasigan, MD</i> <i>San Pedro Hospital</i> | |
| Risk Factors for Healthcare Associated Infection Among Pediatric Patients Admitted in Pediatric Intensive Care Unit of A Public Tertiary Hospital: A Retrospective Study | |

| | |
|--|--|
| <p><i>Pocholo Rodrigo R. Agustin, MD</i> <i>Cotabato Regional and Medical Center</i></p> | |
| <p>Seizure Disorder Among Children with Neurodevelopmental Disability <i>Linette P. Busante, MD</i> <i>Davao Doctors Hospital</i></p> | |
| <p>Quality Of Life of Pediatric Hemophilia Patients Ages 8 - 16 Years Old in Davao City <i>Heilla Glynn P. Huele, MD, Jeannie B. Ong, MD</i> <i>Brokenshire Medical Center</i></p> | |
| <p>Clinical Symptoms, Laboratory and Antibiotic Susceptibility Profile of Neonates Diagnosed with Neonatal Sepsis in A Tertiary Hospital in Davao City <i>Elizelle G. Azuro-Solis, MD, Demosthenes R. Albay, MD</i> <i>Brokenshire Medical Center</i></p> | |
| <p>Profile Of Pediatric Patients with Severe Acute Malnutrition in Southern Philippines Medical Center Davao City <i>Elaera Faith S. Medrano, MD, Ameleen B. Bangayan, MD</i> <i>Southern Philippines Medical Center</i></p> | |
| <p>Knowledge, Attitude and Practices of Parents or Guardians Towards COVID-19 Vaccination Of Their Children Ages 5-11 Years Old In Davao City <i>Bianca Marie D. Isaguirre, MD</i> <i>Davao Medical School Foundation Hospital</i></p> | |
| <p>Abstracts from Researches Submitted in 2023</p> | |
| <p>List of Winners and Finalists</p> | |
| <p>Maternal Knowledge, Perception and Practice Towards Exclusive Breastfeeding During COVID-19 Pandemic <i>Alyanna Katrizia Y. Kasilag, MD</i> <i>Brokenshire Medical Center</i></p> | |
| <p>A Meta-Analysis on the Use of Music in Reducing Perioperative Anxiety Among Children Undergoing Surgery <i>Ruby Jane K. Ong, MD</i> <i>Davao Medical School Foundation</i></p> | |
| <p>Prevalence and Risk Factors of Depression Among Senior High School Students in a Private School in Davao City During COVID-19 Pandemic Using the Patient Health Questionnaire 9 <i>Kate Syvel G. Rafols-Cruz, MD</i> <i>Davao Doctors Hospital</i></p> | |
| <p>The Association of RT-PCR Cycle Threshold Value with Timing of Sample Collection and Presenting Manifestation of COVID 19 among Pediatric Patients Admitted in a Tertiary Hospital in Davao City <i>Cane S. Escabarte, MD</i> <i>Davao Doctors Hospital</i></p> | |
| <p>A 10-year Retrospective Analysis of Profiles and Treatment Outcomes in Pediatric Immune Thrombocytopenia at a Tertiary Hospital in Davao City <i>Dionah S. Muego, MD</i> <i>Southern Philippines Medical Center</i></p> | |

| | |
|---|--|
| <p>Caregiver Hesitancy Toward Childhood COVID-19 Vaccination Among 5-17yo patients seen at a Tertiary Hospital Pedia OPD: A Cross Sectional Study <i>Shien Mariz L. Gono, MD</i> <i>Southern Philippines Medical Center</i></p> | |
| <p>A 5-year Review of the Incidence, Risk Factors and Outcome of Preterm Births in a Tertiary Hospital in Cotabato City, Multiethnic Region <i>Sittie Monisa M. Bubong, MD</i> <i>Cotabato Regional Medical Center</i></p> | |
| <p>Profile of Pediatric COVID-19 Patients Admitted in a Tertiary Hospital from March 2020 - February 2021 <i>Rica Marie B. Andico, MD</i> <i>Southern Philippines Medical Center</i></p> | |

FOREWORD

The period from 2022 to 2024 has been a dynamic and transformative phase in the realm of research, marked by a surge in innovative thinking and a commitment to addressing some of the most pressing issues of our time. The Philippine Pediatric Society – Davao Southern Mindanao Chapter is composed of nine (9) PPS HAB training institutions: (1) Brokenshire Medical Center; (2) Cotabato Regional and Medical Center; (3) Davao Doctors Hospital; (4) Davao Medical School Foundation; (5) Davao Regional Medical Center; (6) San Pedro Hospital; (7) Southern Philippines Medical Center; and two newly accredited hospitals (8) Metro Davao Medical and Research Center; and St. Elizabeth Hospital. All training institutions, having a strong thrust in research, believe that research is pivotal in pushing humanity forward as it provides answers to critical questions in our day-to-day lives and clinical practice.

To highlight the pediatric residents as researchers and research advocates, the Chapter conducted Annual Interhospital Research Contests which showcased resident-driven original papers in the field of Pediatrics. This compendium is a curated collection of research paper abstracts that exemplify the dedication and hard work of our Pediatric Residents and their consultant co-authors in bridging gaps in knowledge in the field. In presenting this research compendium, we celebrate the intellectual rigor and creative inquiry that have defined the years 2022 to 2024. This collection of papers is a testament to the power of research to drive progress and foster innovation, even in the face of adversity. The contributions included here span a wide range of disciplines, reflecting the collaborative spirit and the interdisciplinary focus that have become hallmarks of contemporary scholarship. These works not only address critical issues of our time but also lay the groundwork for future research, offering a foundation upon which subsequent studies can build. It is our hope that this compendium will serve as an inspiration and a valuable resource for those who seek to further our understanding of the world through research.

YEAR 2022

| TITLE | AUTHORS INSTITUTION |
|---|--|
| Clinical Profile and Outcome of Newborns with Persistent Pulmonary Hypertension in A Tertiary Private Hospital in Davao City: A Retrospective Study | Hannah C. Dalaguan, MD Yadnee Estrera, MD Brokenshire Medical Center <i>First Place</i> |
| The Effect of Massage Therapy Before Heel Stick Extraction of Neonates Admitted in A Private Tertiary Hospital In Davao City | Arvin Rodriguez Gallardo, MD Joel Teves Gallardo, MD San Pedro Hospital <i>Second Place</i> |
| Factors Influencing Vaccine Hesitancy Among Families with Less Than One Year Old in an Urban Barangay in Cotabato City | Al-Anbari A. Maca-Ayan, MD Cotabato Regional and Medical Center <i>Third Place</i> |
| Prevalence Of Birth Defects and Its Associated Maternal Risk Factors in A Tertiary Hospital in Davao City: A Retrospective Study | Lawdelyn Yu Belarmino, MD Joel Gallardo, MD Brokenshire Medical Center |
| Depression, Anxiety and Stress Among Senior High School Students Under Distance Learning in Times Of COVID-19 Pandemic: A Quantitative Cross Sectional Non-Experimental Study | Christine J. Clerigo, MD Ferriza Maria A. Isaguirre, MD Brokenshire Medical Center |
| Clinical Profile and Outcome of Newborns with Gastroschisis Managed in A Tertiary Hospital Southern Philippines Medical Center From 2018-2020 | Amerhasan L. Laut, MD Melanie Adolfo, MD Southern Philippines Medical Center |
| A Review on Immunization Compliance of Children Ages 0-1 Year Old Before And During The Covid-19 Pandemic In Barangay Old San Isidro Health Center In Davao City | Alyssa Arielle G. Eugenio, MD Mervat M. Pasigan, MD San Pedro Hospital |
| A Correlational Study of Baseline TSH, FT4 Levels and Thyroid Scintigraphy Scan Findings Among Neonates Diagnosed With Congenital Hypothyroidism | Anne Joy C. Amba, MD Eleonor C. Du-Amparado, MD Davao Doctors Hospital |
| Retrospective Study on The Association Between Serum Calcium Levels and Severity Of Dengue Among Patients Admitted In A Tertiary Hospital In Davao City From 2018-2020 | Emma Louise C. Fernandez, MD Mervat M. Pasigan, MD San Pedro Hospital |
| Risk Factors for Healthcare Associated Infection Among Pediatric Patients Admitted in Pediatric Intensive Care Unit of A Public Tertiary Hospital: A Retrospective Study | Pocholo Rodrigo R. Agustin, MD Cotabato Regional and Medical Center |
| Seizure Disorder Among Children with Neurodevelopmental Disability | Linette P. Busante, MD Davao Doctors Hospital |
| Quality Of Life of Pediatric Hemophilia Patients Ages 8 - 16 Years Old in Davao City | Heilla Glynne P. Huele, MD Jeannie B. Ong, MD |

| | |
|---|---|
| | Brokenshire Medical Center |
| Clinical Symptoms, Laboratory and Antibiotic Susceptibility Profile of Neonates Diagnosed with Neonatal Sepsis in A Tertiary Hospital in Davao City | Elizelle G. Azuro-Solis, MD Demosthenes R. Albay, MD Brokenshire Medical Center |
| Profile Of Pediatric Patients with Severe Acute Malnutrition in Southern Philippines Medical Center Davao City | Elaera Faith S. Medrano, MD Ameleen B. Bangayan, MD Southern Philippines Medical Center |
| Knowledge, Attitude and Practices of Parents or Guardians Towards COVID-19 Vaccination Of Their Children Ages 5-11 Years Old In Davao City | Bianca Marie D. Isaguirre, MD Davao Medical School Foundation Hospital |

CLINICAL PROFILE OF NEWBORNS WITH PERSISTENT PULMONARY HYPERTENSION IN A TERTIARY PRIVATE HOSPITAL IN DAVAO CITY: A RETROSPECTIVE STUDY

Author: Hannah C. Dalaguan, MD

Co-author: Yadnee V. Estrera MD, FPPS, DPAPP

Brokenshire Medical Center

- Background:** Despite advances in the management of neonates with Persistent Pulmonary Hypertension, higher cases of mortality seems to be challenging.
- Objective:** The study aimed to determine the neonatal and maternal risk factors associated with the clinical outcome among newborns with Persistent Pulmonary Hypertension.
- Design:** This is a retrospective study design conducted in a private tertiary hospital in Davao City. Data reviewed from 2010-2020.
- Setting.** The study was conducted in a private tertiary hospital in Davao City.
- Participants:** All delivered newborns delivered in a tertiary private hospital in the year 2010 to 2020 with diagnosis of persistent pulmonary hypertension.
- Main Outcome:** Out of the 94 cases reviewed, there were 45 (47.87%) who were not able to survive and 49 (52.135) were recorded alive. Apgar score both at 1 min and 5 minutes after birth were found to be factors associated with PPHN outcome ($t=-4.054$; $p<.001$; $t=-4.188$; $p<.001$). Higher percentage of neonates diagnosed with PPHN and have perinatal asphyxia died ($X^2=10.838$; $p<.001$), consistent with the trend resulted to those neonates diagnosed with congenital anomaly ($X^2=4.229$; $p=0.040$). Sex, birthweight and mode of delivery were not seen to be significant factors ($X^2=0.548$; $p=0.459$; ($X^2=0.548$; $p=0.459$; $X^2=0.088$; $p=0.767$). Although higher percentage of neonates with sepsis and diagnosed with pneumonia died, these variables were not seen to be significantly associated with PPHN outcome ($X^2=0.296$; $p=0.586$; $X^2=0.344$; $p=0.558$). Meconium aspiration, maternal age, maternal infection, gestational hypertension and diabetes were also not seen to be associated with PPHN outcome ($X^2=0.020$; $p=0.887$; $X^2=0.729$; $p=0.393$; $X^2=0.000$; $p=0.979$; $X^2=2.357$; $p=0.125$; $X^2=0.373$; $p=0.541$).
- Conclusion:** Newborns diagnosed with congenital anomaly and perinatal asphyxia, have less chance of survival.

Keywords: PPHN, Perinatal Asphyxia, Congenital Anomaly, APGAR Score

THE EFFECT OF MASSAGE THERAPY BEFORE HEEL STICK EXTRACTION ON NEONATES ADMITTED IN A PRIVATE TERTIARY HOSPITAL IN DAVAO CITY

Objective: To determine if massage therapy done prior to heel stick extraction for expanded newborn screening is effective in reducing the amount of pain in the neonate based on the neonatal pain scale parameters in a tertiary hospital in Davao City.

Design: Prospective randomized controlled trial; closed envelope method.

Setting: San Pedro Hospital Inc. of Davao City.

Patients/Participants: This study included 56 term neonates delivered in San Pedro Hospital Inc. of Davao City; an APGAR score of more than or equal to 7 at 5 minutes after birth, with more than 24 hours of life; no painful interventions (e.g., venipuncture, CBG monitoring) other than the routine Vitamin K; Hepatitis B and BCG vaccinations given after birth.

Interventions: The intervention done was a foot massage involving stroking and gentle kneading on the outer aspect of the leg, movement from the toes down to the mid-thigh on the ipsilateral leg, done for 2 minutes prior to performing the heel stick procedure.

Main Outcome Measure(s): Data were analyzed using descriptive statistics such as mean and standard deviations for the demographic profile. Independent T-test was used for continuous variables and chi-square test for categorical variables.

Results: The Neonate Infant Pain Scale score was lower for the massage group during the heelstick procedure (0.57, P 0.68) and 1 minute after the procedure (2.08, P .000).

Conclusions: Massage therapy has a positive and favorable effect in reducing the amount of pain in neonates prior to heel stick extraction for expanded newborn screening using the neonatal pain scale in a tertiary hospital in Davao City.

Keywords: pain, score, newborn, massage, heelstick

FACTORS INFLUENCING VACCINE HESITANCY AMONG FAMILIES WITH LESS THAN ONE YEAR OLD IN AN URBAN COMMUNITY IN COTABATO CITY

Background: Vaccination saves millions of lives every year and is continuously a successful strategy in primary health care. However, the vaccination coverage for the past three decades has been unstable and fluctuating. Vaccine hesitancy is a global challenge as it hampers efforts to eliminate diseases. However, there is a paucity of studies on vaccine hesitancy in the Philippines and evidence on its factors are scarce. This study aims to determine factors influencing hesitancy in order to formulate strategies on how to best minimize hesitancy and increase vaccine coverage.

Objective: To determine the factors influencing vaccine hesitancy in an urban community

Design: Analytical Cross-Sectional Survey

Subjects: Residents Poblacion 8, Cotabato City who are at least 18 years old, primary caregivers of children in the family, and have at least 1 child aged less than 1 year old

Methodology: A survey was conducted in the barangay with the least vaccine turnout using a modified questionnaire based on the WHO-SAGE Working Group on vaccine hesitancy. Purposive and random sampling were used.

Statistical analysis: Frequencies, percentages, chi-square test, logistic regression

Results: A total of 121 respondents participated in the study, with vaccine hesitancy rate of 64%. Majority were female muslims, aged 26 to 40 years, did not finish college, unemployed, with a family income less than Php5000 and more than 5 family members. Low educational level, unemployment, and low income were associated with hesitancy as well as numerous factors such as media, sickness and death due to vaccination, culture, head of the family, distance and waiting time, pandemic-related issues, past experiences, influence of family, friends, and neighbors, efficacy, side effects, perceived harm, fear of needles and inexperienced vaccinators, and perceived cost of immunization.

Conclusion: Vaccine hesitancy is multifactorial. The decision towards hesitancy is a result of a complex interplay of different factors, which improving vaccine coverage challenging.

Keywords: *vaccine, hesitancy, children, immunization, Cotabato City*

PREVALENCE OF BIRTH DEFECTS AND ITS ASSOCIATED MATERNAL RISK FACTORS IN A TERTIARY HOSPITAL IN DAVAO CITY: A RETROSPECTIVE STUDY

Author: Lawdelyn Y. Belarmino , MD

Co-author: Joel Gallardo, MD, FPPS, FPSNB

Objective: To determine prevalence of birth defects and its associated maternal risk factors in a tertiary hospital in Davao City using retrospective approach.

Design: Quantitative retrospective research design

Setting: Private Tertiary Hospital in Davao City.

Participants: A total of 114 neonates delivered with birth defects who meet the inclusion criteria and 285 neonates without birth defects were included in this study.

Main Outcome: The prevalence rate of birth defects in this study is 1.05%. Ballard score, maternal age (> 30 years old) and presence of comorbidities were the factors significantly associated with it. ($\chi^2=38.386$; $p=.000$; $\chi^2=16.426$; $p=.000$; $\chi^2=7.634$; $p=.006$). Binary logistic regression result shows that Neonates delivered either early term or late preterm has 1.910 times higher odds of having birth defects compared with those delivered full term. On the other hand, maternal risk factors such as age greater than 30 and presence of comorbidities has 1.75 times and 2.369 times, respectively.

Conclusion: Maternal age higher than 30 years, maternal comorbidities and ballard score was seen to significantly associated in the development of birth defects in newborns. The prevalence rate of birth defects is 1.05%.

Keywords: Birth Defects, Ballard Score, Maternal Age, Comorbidities , Prevalence

CLINICAL PROFILE AND OUTCOME OF NEWBORNS WITH GASTROSCHISIS MANAGED IN A TERTIARY HOSPITAL IN DAVAO CITY FROM 2018-2020

Laut, Amerhasan L. MD, Adolfo, Melanie B. MD.
Southern Philippines Medical Center

Objective: The aim of this study is to determine the profile and clinical outcome of newborns with Gastroschisis managed in a tertiary hospital in Davao City from 2018-2020.

Design: A retrospective chart review study of those with final diagnosis of Gastroschisis was employed.

Setting: The study was conducted in a public tertiary hospital in Davao City, Philippines.

Study Participants: The study involves chart retrieval at the Medical Record Section of a tertiary hospital in Davao City; those with final diagnosis of Gastroschisis admitted from January 1, 2018 to December 31, 2020 are included regardless of birth place. Total of 35 out of 42 cases of Gastroschisis were qualified following the inclusion criteria.

Main Outcome Measure: The primary outcome of this study is the profile of neonates admitted at a public tertiary hospital in Davao City with gastroschisis from 2018 to 2020 which include the following: demographic characteristics and maternal risk factors.

Results: The mean maternal age of the sample population is at 21 years old. Only 12% (n=4) had prenatal diagnosis of Gastroschisis of which 3 out of 4 survived, and majority was delivered via NSVD. A significant number (81%) of patients had a low birthweight and a few (34%) of them were premature. Majority are born via Normal Spontaneous Delivery. Clinical variables observed include longer mean hours to immediate fascial closure at 6.4 ± 5.3 hours, longer mean number of days post-operative ventilatory period 6.28 ± 6.66 compared to other literatures. No correlation was observed on both natremia and albuminemia with the number of days in ventilation using t-test (p-value <0.05). Moreover, of the 31 patients who were able to undergo surgical procedure, only 7 (20%) survived. Mortality rate is 80%, majority is secondary to neonatal sepsis.

Conclusion: Late recognition and referral of neonates with gastroschisis lead to delay in giving optimum management. There is an emergent need to develop early recognition of gastroschisis to improve the treatment outcome.

Key words: *Gastroschisis, Neonate, abdominal defect*

A REVIEW ON IMMUNIZATION COMPLIANCE OF CHILDREN AGES 0-1 YEAR OLD BEFORE AND DURING THE COVID-19 PANDEMIC IN BARANGAY OLD SAN ISIDRO HEALTH CENTER IN DAVAO CITY

Objective: This study aims to compare the immunization compliance of children 0-1 year old from pre-pandemic (March 2019-Feb 2020) and during the COVID-19 pandemic (March 2020-Feb 2021)

Design: Quantitative research design was utilized. Descriptive retrospective chart review (from March 2019 to March 2021) was done. A survey on reasons for missed vaccinations was also done using structured interview.

Setting: This study was conducted in Old San Isidro Satellite Health Center in Brgy, Buhangin, Davao City.

Patients/Participants: Participants were children less than or are 1 year old who received routine vaccinations in Old San Isidro Satellite Health Center.

Main outcome measure: The primary outcome measure was the immunization coverage of children ages 0-1 year old of Old San Isidro Satellite Health Center from the pre-pandemic period (March 2019 – February 2020) to during the pandemic (March 2020 – February 2021).

Results: There was no significant difference in the immunization counts in any of the vaccines before and during the pandemic. There was also no significant association between the differences in the frequency of participants before and during the pandemic in terms of immunization coverage. Before the pandemic, the major reasons for vaccine failure were the inconvenient vaccination time, the mother was too busy, and the child was ill. During the pandemic, the leading reason for vaccination failure was due to the COVID-19 pandemic lockdown. The analysis revealed that the differences in the distribution of reasons in terms of obstacles was significantly associated with the pandemic

Conclusion: The COVID-19 pandemic has not significantly disrupted vaccination coverage in this study. It is imperative that local government programs be in place, especially in the time of pandemic, to ensure adequate vaccination programs among children and prevent occurrence of vaccine-preventable diseases.

Keywords: Immunization, COVID-19, pediatrics, Davao

A CORRELATIONAL STUDY OF BASELINE TSH, FT4 LEVELS AND THYROID SCINTIGRAPHY SCAN FINDINGS AMONG NEONATES DIAGNOSED WITH CONGENITAL HYPOTHYROIDISM

Anne Joy C. Amba, MD, Eleanor C. Du-Amparado, MD
Davao Doctors Hospital

Background: Congenital Hypothyroidism (CH) comprises a diverse group of thyroid hormone abnormalities and is one of the most important causes of intellectual disability. CH may be classified as permanent or transient depending on the etiology. The study aims to aid clinicians in differentiating permanent and transient type of CH to provide patients a more personalized treatment plan.

Objective: To determine the correlation between baseline serum TSH and FT4 levels with thyroid Scintigraphy findings among neonates with Congenital Hypothyroidism.

Design: Retrospective cross sectional design.

Setting: Private Clinic at Tertiary Hospital in Davao City.

Participants: All neonates with confirmed Congenital Hypothyroidism who underwent scintigraphy scan at age 0-12 month old.

Main Outcome Measure: TSH and FT4 levels were expressed in mean and standard deviation. Frequency and percent were used for TS scan findings. The correlation between the TS scan findings and TSH and FT4 levels used Chi-square Test for Independence.

Results: Of the 119 neonates, most were born term, with normal birth weight, and diagnosed within the first month of life. Prolonged jaundice is the most common clinical feature (40.3%). There is a significant relationship between maternal history of thyroid disease and thyroid scintigraphy scan findings (p-value <0.001). Neonates with signs and symptoms have higher mean baseline TSH levels (jaundice p-value 0.015; macroglossia p-value 0.028; umbilical hernia, wide open fontanelles, dry skin, feeding difficulty and myxedema p-value <0.001) and lower FT4 levels (macroglossia, wide open fontanelles and feeding difficulty p-value <0.001). No significant relationship exists between signs and symptoms and TS scan findings. Newborn screening TSH levels are significantly higher among neonates with a dysplastic gland (p-value <0.001). Neonates with higher NBS TSH result also has significantly higher baseline TSH levels and lower FT4 levels (p-value <0.001). Mean baseline TSH levels were higher and FT4 levels were lower among the dysplastic group, however, only the differences in TSH levels were statistically significant (p-value <0.001).

Conclusions: Neonates with dysplastic gland on scan have higher baseline TSH levels and although not statistically significant, have lower FT4 levels.

Keywords: *Congenital Hypothyroidism, Thyroid Scintigraphy, TSH, FT4*

RETROSPECTIVE STUDY ON THE ASSOCIATION BETWEEN SERUM CALCIUM LEVELS AND SEVERITY OF DENGUE FEVER IN PATIENTS ADMITTED IN A TERTIARY HOSPITAL IN DAVAO CITY FROM 2018-2020

Author: Emma Louise C. Fernandez

Institution: San Pedro Hospital of Davao City, Inc.

Background and Objectives:

Dengue fever is a disease caused by the dengue virus and remains to be a threat to humans as dengue cases continue to rise. Using serum calcium levels as an early predictor in determining disease severity can help in managing and preventing complications of dengue, thus lessening morbidity from the disease and improving its course. This study aims to determine the association between hypocalcemia and severity of dengue fever.

Methods: This was a retrospective cohort study and was conducted in a private tertiary hospital. Purposive sampling technique was done to determine the participants of the study. A total of 221 charts of pediatric patients who fulfilled the diagnostic criteria for Dengue Fever of different severity and who had serum calcium determination, were reviewed. Descriptive analysis using frequencies, mean and standard deviation was used for the descriptive part of the study. Chi square test was employed in determining the association between dengue severity and hypocalcemia.

Results and Discussion: Hypocalcemia was significantly associated with increasing disease severity in dengue infection. With an odds ratio of 2.26, those with hypocalcemia during the course of illness are more likely to develop severe dengue infection as compared to those who have normal serum calcium levels. The multivariate analysis for prediction of disease severity among patients with dengue infection, calcium level is not as sensitive as clinical signs and symptoms.

Conclusion: Results of study showed a significant association between the severity of dengue disease and calcium level among pediatric patients. Calcium level is not as sensitive as clinical signs and symptoms in predicting dengue disease severity.

Keywords: *Serum calcium, Hypocalcemia, Dengue severity.*

RISK FACTORS FOR HEALTHCARE ASSOCIATED INFECTION AMONG PEDIATRIC PATIENTS ADMITTED IN PEDIATRIC INTENSIVE CARE UNIT OF A PUBLIC TERTIARY HOSPITAL: A RETROSPECTIVE STUDY

Pocholo Rodrigo R. Agustin, MD

Cotabato Regional and Medical Center

Background: Previously referred to as “nosocomial” or “hospital-acquired”, HCAs are defined as any infection that is neither present nor incubating at the time of admission to a healthcare facility, and that become clinically evident at least after 48 hours or more after admission or within 10 days after discharge from a healthcare facility. This may subsequently result in prolonged length of hospital stay, increased medical costs, and increased morbidity, and mortality.

Objective: This study aimed to identify risk factors for HCAs (Gram-negative Bacilli Bacteremia) in pediatric patients admitted in PICU from January 2016 to December 2020.

Design: Retrospective study

Subjects: Pediatric patients, aging 1 month to 18 years of age, who have stayed for greater than or equal to 48 hours in PICU, and were diagnosed with HCAI during their stay, as per CDC criteria, were enrolled in the study.

Methodology: A questionnaire was designed and the following were noted: demographic, clinical and laboratory profiles and outcome.

Statistical Analysis: Data were analysed using the Statistical Packages for Social Sciences (SPSS) software. Analysis of data were expressed as frequency, proportion and percentage.

Results: Among the risk factors for HCAs considered in this study, elevated heart rate (OR: 1.17, [95% CI: 0.45-3.01]) onset of symptoms beyond 48 hours (OR:1.64, [95% CI: 0.60-4.47]), malnutrition status (OR: 1.44, [95% CI: 0.58-3.58]), and neurologic complications (OR: 3.60, [95% CI: 1.39-9.37]) showed higher odds of exposure.

However, the odds ratios for mentioned risk factors suggested weak association and CI for the neurologic complications includes 1, thus did not reach statistical significance.

Conclusions: Risk factors, including elevated heart rate, onset of symptoms beyond 48 hours, nutrition status, and neurologic complications, although not strongly associated with HCAs have to be taken consideration in the overall infection control of the hospital, especially on continued provision of intensive care to pediatric patients.

Keywords: healthcare-associated infections, risk factors, PICU, retrospective study, PICU

SEIZURE DISORDER AMONG CHILDREN WITH NEURODEVELOPMENTAL DISABILITY

Linette P. Busante, M.D
Davao Doctors Hospital

Background: Neurodevelopmental disorders are a group of heterogeneous conditions characterized by a delay or disturbance in the acquisition of skills in different developmental domains. The co-occurrence of seizure in this population has received attention due to its significant negative impact on health and quality of life. Hence, the conduct of this study.

Objective: To determine the prevalence of seizure disorder among patients with neurodevelopmental disability.

Design: A 5-year period, retrospective cross-sectional study.

Setting: Conducted in an outpatient setting of two (2) subspecialty sections; Neurodevelopmental and Behavioral Pediatrics and Pediatric Neurology in Davao City.

Participants: Patients aging 1-18 years old, diagnosed with Neurodevelopmental disability.

Main outcome measures: Clinical and demographic profiles were analyzed using descriptive statistics. Logistic Regression and univariate odds ratio were used to determine the risk factors associated with seizures. All statistical tests used a 0.05 level of significance.

Results: Overall, 131 subjects met the inclusion criteria. Most children with Neurodevelopmental Disability were noted to be males (56%), aging 3-5 years old (36%). 93% of the population lives with both parents who are degree holders and are employed. Most subjects belong to a family of four (38%) with middle age parents whose bonds were all nonconsanguineous. Clinical profile showed 66 (50%) out of the 131 patients developed seizure and presented as generalized type (55%). Specifically, 47% of patients with ASD developed seizure, followed by GDD (33%), CP (9%), ID (85)% and ADHD (3%). The identified risk factors were history of traumatic delivery, age of gestation, parental age and family history of seizure. However, these predictor variables do not influence the occurrence of seizure.

Conclusion: Half of the population of patients with neurodevelopmental disability was noted with seizure co-occurrence. However, no predictor variables had a significant effect. A larger sample size is recommended to strengthen statistical differences between the occurrence of seizure in patients with neurodevelopmental disability.

Keywords: *Neurodevelopmental disability, Seizure Disorder, Co-occurrence, Prevalence, Davao City*

CLINICAL SYMPTOMS, LABORATORY AND ANTIBIOTIC SUSCEPTIBILITY PROFILE OF NEONATES DIAGNOSED WITH NEONATAL SEPSIS IN A TERTIARY HOSPITAL IN DAVAO CITY

Elizelle G. Azuro-Solis, MD, Demosthenes R. Albay, MD Brokenshire Medical Center

Background: Despite the advances of medicine, infection in the neonatal intensive care unit (NICU) remain one of the daily challenges in managing newborns.

Objective: To identify clinical features, laboratory, and antibiotic susceptibility profile of neonates diagnosed with neonatal sepsis (NS) in a tertiary hospital in Davao City.

Design: This study utilized a descriptive-analytical design.

Setting: The study was conducted at tertiary level health facility in Davao City.

Participants: Out of the 1097 cases, 19 patients were included in the study. Sixteen (84.21%) were diagnosed to have early onset neonatal sepsis (EONS) and three (84.21%) with late onset neonatal sepsis (LONS).

Methodology: Hospital charts of patients with diagnosis of NS from year 2010 to 2020 were reviewed following the inclusion criteria of the study.

Result: The incidence rate of neonatal sepsis in this study is 1.73% (19/1097). Maternal and neonatal variables were not seen to be significantly associated with diagnosis of EONS or LONS. Results show that neonates with fever (66.67% vs. 6.25%) and jaundice (100% vs. 11.11) have high likelihood of having culture-proven LONS compared to those with culture-negative LONS, findings that were seen in the study of Li et al (2019) and Borna et al (2005), respectively. The most common isolate was coagulase-negative staphylococci (CoNS), a similar finding to several research.

Conclusion: This study concludes that the maternal intrapartum, newborn variables and laboratory features included in the study were not seen to influence the likelihood of having a culture-proven NS. However, neonatal fever and jaundice were seen be significant. CoNS is the most common isolate and is completely resistant to the first line antibiotic Ampicillin. However, 100% sensitive to Gentamicin, Ampicillinsulbactam, Cefuroxime, Ceftriaxone, Vancomycin, Phenicols and Moxifloxacin and Linezolid.

Keywords: Early Onset Sepsis, Late Onset Sepsis, Fever, Jaundice

PROFILE OF PEDIATRIC PATIENTS WITH SEVERE ACUTE MALNUTRITION IN A TERTIARY HOSPITAL IN DAVAO CITY

Medrano, Elaera Faith, MD, Bangayan, Ameleen, MD, Tupas, Genevieve, MD
Southern Philippines Medical Center

Objective: To describe the demographic and clinical profile of patients with severe acute malnutrition (SAM) in a tertiary hospital in Davao City from December 2017 to December 2019.

Design: A retrospective descriptive study design was utilized through review of medical charts.

Setting: The study was conducted in a tertiary hospital in Davao City.

Patients/Participants: A total of 123 patients were included in the study. Data were analyzed with Excel and R Software using frequency and percentages for categorical variables, while, mean, standard deviation and median were used for continuous variables. Proportion tests with one sample and normal approximation were used for three or more categorical variables.

Main Outcome Measures: The primary outcome measures included the demographic and clinical profile of SAM patients. Prevalence rate and relationships among variables were the secondary outcomes.

Results: The prevalence rate of SAM among pediatric patients in a tertiary hospital in Davao City is 0.94% (n=132). SAM was more evident among females (n=65, 52.8%), aged 13-24 months old (n=45, 36.6%), among those with unmarried parents (n=69, 56.1%) with one or none of the parents are employed and belonged to a small family (n=54, 43.9%). Diarrhea (n=30, 24.4%) was the most common presenting symptom and respiratory tract infection (49.6%) was the most common comorbidity. Among those with known illness, SAM is more prevalent in patients who have had previous hospital confinement than those who were managed as outpatient (30.2% vs 11.4%). Significant relationships were established between SAM and the demographic and clinical profile of patients, however, it was observed that SAM occurs regardless of gender.

Conclusion: SAM was more common among females, 13 to 24 months of age, with unmarried parents. Diarrhea was the most common symptom while respiratory tract infection was the most common comorbidity. The findings of this study support that SAM is both a socio-demographic and a clinical problem. Improved community prevention strategies and health education should focus on seeking early treatment and appropriate nutritional management.

Keywords: SAM, malnutrition, edema, diarrhea, community

KNOWLEDGE, ATTITUDES, AND PRACTICES AMONG PARENTS OR GUARDIANS TOWARDS COVID-19 VACCINATION OF THEIR CHILDREN AGES 5-11 YEARS OLD IN DAVAO CITY

Objective: To determine the knowledge, attitude, and practices of parents or legal guardians towards COVID-19 vaccination of children ages 5-11 years old in Davao City.

Design: Prospective, cross-sectional research design.

Setting: Davao City, Philippines.

Participants: Purposive sampling was done in the selection and 218 respondents gave their consent. Respondents were asked to answer a validated online questionnaire. All questionnaires were filled out completely.

Main Outcome Measure: Level of knowledge, attitudes, and practices towards COVID-19 vaccination of their 5-11-year-old children and its association.

Results: Ninety-four percent of the respondents had a good level of knowledge and 6% with poor knowledge. Marital status was the only factor with a significant correlation. Eighty-three percent had positive attitudes while 17% had negative attitudes towards vaccination. No sociodemographic profiles had a significant association with attitude. Seventy percent exhibited good practices and 30% had poor practices. Female respondents, higher level of education, and vaccinated respondents with booster had a positive correlation with having good practices.

Conclusions: This study was able to provide an understanding of how knowledgeable parents and guardians from Davao City are about the COVID-19 vaccination for their children, their beliefs and attitudes towards it, and determined their practices with the vaccination. In this study, having a good level of knowledge as well as having a good attitude was associated with having good practices towards vaccination.

Keywords: COVID-19 vaccine, knowledge, attitudes, practices

YEAR 2023

| TITLE | AUTHOR INSTITUTION |
|--|---|
| Maternal Knowledge, Perception and Practice Towards Exclusive Breastfeeding During COVID-19 Pandemic | Alyanna Katrizia Y. Kasilag, MD Brokenshire Medical Center First Place |
| A Meta-Analysis on the Use of Music in Reducing Perioperative Anxiety Among Children Undergoing Surgery | Ruby Jane K. Ong, MD Davao Medical School Foundation Second Place |
| Prevalence and Risk Factors of Depression Among Senior High School Students in a Private School in Davao City During COVID-19 Pandemic Using the Patient Health Questionnaire 9 | Kate Syvel G. Rafols-Cruz, MD Davao Doctors Hospital Third Place |
| The Association of RT-PCR Cycle Threshold Value with Timing of Sample Collection and Presenting Manifestation of COVID 19 among Pediatric Patients Admitted in a Tertiary Hospital in Davao City | Cane S. Escabarte Davao Doctors Hospital |
| A 10-year Retrospective Analysis of Profiles and Treatment Outcomes in Pediatric Immune Thrombocytopenia at a Tertiary Hospital in Davao City | Dionah S. Muego Southern Philippines Medical Center |
| Caregiver Hesitancy Toward Childhood COVID-19 Vaccination Among 5-17yo patients seen at a Tertiary Hospital Pedia OPD: A Cross Sectional Study | Shien Mariz L. Gono Southern Philippines Medical Center |
| A 5-year Review of the Incidence, Risk Factors and Outcome of Preterm Births in a Tertiary Hospital in Cotabato City, Multiethnic Region | Sittie Monisa M. Bubong Cotabato Regional Medical Center |
| Profile of Pediatric COVID-19 Patients Admitted in a Tertiary Hospital from March 2020 - February 2021 | Rica Marie B. Andico Southern Philippines Medical Center |

MATERNAL KNOWLEDGE, PERCEPTION AND PRACTICE TOWARDS EXCLUSIVE BREASTFEEDING DURING THE COVID-19 PANDEMIC

Author: Dr. Alyanna Katrizia Y. Kasilag

Co-author: Dr. Nely V. Dechaves

Background: Exclusive Breastfeeding (EBF) rate in the Phillipines falls from the target set by the World Health Organization (WHO), even before the onset of the Covid19 pandemic. This global health quandary has posed a greater challenge in promoting and implementing EBF protocols while adhering to the social restrictions needed to address the erratic surge in cases related to this novel corona virus.

Objective: To describe the demographic profile, assess the knowledge and perception of mothers on their practice of exclusive breast feeding.

Method: A web-based study via Google form was conducted in a private tertiary hospital in Davao City. Study design is cross sectional non-experimental.

Participants: 207 mothers were recruited in the study who delivered between March 2020 until May 2021.

Outcome: Among the 207 mothers who participated, only 22 (10.63%) practiced EBF. The average perception of mothers on breastfeeding is 5.22 (Sd=1.5) out of 6 correct items and can be considered as relatively high. Demographic profiles found to be significantly associated with compliance to EBF practice are employed mothers and those who delivered via spontaneous vaginal delivery. Mothers who practiced EBF show higher knowledge and perception on breastfeeding and COVID19.

Conclusion: Knowledge and Perception of mothers on EBF and Covid19 virus influenced their practice to exclusively breastfeed. Those who practice breastfeeding exclusively have higher level of knowledge and perception.

Keywords: Knowledge, Perception, Exclusive Breastfeeding, Covid19

USE OF MUSIC IN REDUCING PREOPERATIVE ANXIETY AMONG CHILDREN UNDERGOING SURGERY: A META-ANALYSIS

Objective: To investigate the use of music in reducing preoperative anxiety among children undergoing surgery by synthesizing all available published evidence.

Design: Systematic review and meta-analysis

Setting: Hospital

Patients/Participants: Only randomized control trials (RCT) with a parallel-group, cross-over, or cluster design that looked into the effectiveness of music in reducing preoperative anxiety among pediatric surgical patients with usual care or standard care as control were included. Studies with participants diagnosed with anxiety or other psychiatric disorders, developmental delays, severe chronic disease, or hearing problems, trauma patients, those undergoing emergency surgeries and cancer patients were excluded. 7 RCTs were identified to be included in the systematic review with 5 studies included in the meta-analysis.

Interventions: Music intervention included live or recorded music interventions (instrumental music, music with song, or music delivered through any form of technology).

Main Outcome Measure(s): The outcomes of the studies included were anxiety scores (Modified Yale Preoperative Anxiety Scale and Modified Yale Preoperative Anxiety Scale-Short Form) and physiologic parameters of anxiety (heart rate, blood pressure, and mean arterial pressure).

Results: The pooled mean difference showed significantly lower pre-operative anxiety scores in children who had music intervention (MD=-0.46, 95%CI=-0.77 to -0.14, p-value=0.004). Pre-operative systolic blood pressure was also significantly lower in children who had music intervention (MD=-5.05, 95%CI=-7.20 to -2.91, p-value<0.00001). There was no significant difference in pre-operative heart rate (MD=-4.35, 95%CI=-9.21 to 0.51, p-value=0.08), diastolic blood pressure (MD=0.83, 95%CI=-4.92 to 6.59, p-value=0.78), and mean arterial pressure (MD=-1.15, 95%CI=-7.44 to 5.1, p-value=0.72) in children who had music intervention and control.

Conclusions: This study demonstrated the potential benefit in using music to reduce pre-operative anxiety in children based on the statistically significant pooled mean differences of both pre-operative anxiety scores and systolic blood pressure after synthesizing all available published evidence.

Keywords: Preoperative anxiety, music, pediatric, surgery

PREVALENCE AND RISK FACTORS OF DEPRESSION AMONG SENIOR HIGH SCHOOL STUDENTS IN A PRIVATE SCHOOL IN DAVAO CITY DURING THE COVID-19 PANDEMIC USING THE PATIENT HEALTH QUESTIONNAIRE-9

Kate Syvel G. Rafols, Davao Doctors Hospital, Davao City, Philippines

Background: In adolescence, depression is the most significant mental health problem causing remarkable illness and disability. The more the adolescents are exposed to risk factors, the greater the impact on their mental health. In this age group, there is a higher rate of underdiagnosis and undertreatment than in adults. Non-recognition and failure to address this may impair both the physical and mental health not only during adolescence, but may even extend into adulthood.

Objective: To determine the prevalence of depression among adolescents in a private school in Davao City during the pandemic. To determine the risk factors causing depression in the study population.

Design: Descriptive correlational cross-sectional design.

Participants: 202 senior high school students aged 16-18 years in a private institution in Davao City.

Methodology: The profiles of those whose scores who tested positive in the PHQ-9 were analyzed for correlation.

Statistical Analysis: Descriptive statistics such as mean and standard deviation were used to summarize continuous data while frequency and percentage were used to present categorical data. Univariate Odds ratio and Chi-square tests were used to determine the risk factors associated with depression among high school students.

Results: Of the 202 total participants, there was a prevalence of 162 (80%) who were at risk of having depression. The significant risk factors for having depression were not setting high goals for oneself, parents who were no longer together, not living with their parents, previously diagnosed with depression, and a history of acquiring COVID-19.

Conclusion: There was a high prevalence of probably having depression among the study population. The educational, social, and medical profiles of the participants showed significant risk factors for having depression.

Keywords: adolescence, depression, PHQ-9, C-SSRS

THE ASSOCIATION OF RT-PCR CYCLE THRESHOLD VALUE WITH TIMING OF SAMPLE COLLECTION AND PRESENTING MANIFESTATIONS OF COVID-19 AMONG PEDIATRIC PATIENTS ADMITTED IN A TERTIARY HOSPITAL IN DAVAO CITY

Background: Cycle threshold (Ct) value has gained clinical attention in the understanding and management of COVID-19 as it provides an indirect method of quantifying the viral RNA in a specimen. Investigating its utility in disease transmission will aid in discovering transmission dynamics and clinical decision-making.

Objective: To determine the association between the RT-PCR Ct value with the timing of sample collection and presenting manifestations of COVID-19 among pediatric patients.

Design: Retrospective cross-sectional design.

Setting: Tertiary Hospital in Davao City.

Participants: All pediatric patients with a positive SARS-CoV-2 RT-PCR result admitted in a tertiary hospital in Davao City. Children with comorbidities were excluded.

Main Outcome Measure: Frequency and percentage were used to present and analyze clinical and demographic profiles. Ct values were expressed in mean and standard deviation. Independent t-test and Analysis of variance were used to compare the variables. Pearson r was used to analyze the correlation between the timing of sample collection and Ct values, and number of manifestations and Ct values.

Results: Overall, the most common presenting manifestations of the subjects were fever and cough. Majority of the subjects were classified as mild, and were hospitalized beyond seven days. There was a significant difference in the Ct values in relation to timing of sample collection (p value 0.039). A decreasing trend in the mean Ct values was observed on the first three days of illness, with a sudden rise on the fourth day. Timing of sample collection is positively correlated with Ct value. The lowest mean Ct value was noted among subjects with respiratory manifestations, however, there was no significant difference in the mean Ct values of the three groups of symptoms. An inverse correlation between the number of presenting manifestations and Ct value was also noted.

Conclusions: Children with confirmed COVID-19 usually present with fever and cough. Most are classified as mild and are hospitalized beyond seven days. Ct value is positively correlated with the timing of sample collection, and is significantly low during the first three days of illness. The lowest mean Ct value is seen among children with respiratory symptoms, but there is no significant difference in the mean Ct values of the different presenting manifestation. Ct value is inversely correlated with the number of presenting manifestations.

Key words: COVID-19, Cycle threshold value, correlation

A 10-YEAR RETROSPECTIVE ANALYSIS OF PROFILES AND TREATMENT OUTCOMES IN PEDIATRIC IMMUNE THROMBOCYTOPENIA AT A TERTIARY HOSPITAL IN DAVAO CITY

A 10-year-study retrospective was conducted among 159 pediatric ITP patients at Southern Philippines Medical Center (SPMC) from January 1, 2012 to December 31, 2021 to determine if the demographic and clinical profiles correlate to the outcome of ITP. Results showed that most patients belonged to 0-5 age group at 61%, majority were females (54%). Out of 159 cases, majority had Acute ITP (84 %), 5% had Persistent ITP while 11 % had Chronic ITP. Most cases had severe thrombocytopenia upon admission (86%). The most common predisposing factor preceding ITP was previous infection (51%). None had prior intake of medications. The most common manifestations include ecchymosis (26%), petechial rashes (25%), and epistaxis (10%). For the type of management, majority of the participants received steroids with Prednisone at 1-2 mg/kg/day. Demographics such age and BMI and clinically, the type of management given had significant association to the outcome of patients with ITP. The younger age groups (0 to 5 and 2 to 12) had a higher chance to resolution, but as the age group becomes older, the higher the prevalence of Chronic ITP. Resolution was higher among patients with a low BMI (<18.5) but a higher chance of chronicity was noted when the child's BMI was normal. Furthermore, most of the patients with prior infection have resolved outcome but there is also a higher probability of becoming Chronic among those with no predisposing factors. Regarding treatment, patients receiving steroids as a standalone therapy were more likely to achieve resolution. However, this group also had a higher chance of progressing to Chronic ITP compared to patients receiving only supportive management or combination therapy.

CAREGIVER HESITANCY TOWARD CHILDHOOD COVID-19 VACCINATION AMONG 5 TO 17-YEAR-OLD PATIENTS SEEN AT TERTIARY HOSPITAL PEDIA- OPD: A CROSS-SECTIONAL STUDY

Objective: To assess caregiver hesitancy towards Childhood COVID-19 vaccination for children aged 5-17

Design: Prospective cross-sectional survey

Setting: Pediatric Outpatient Department

Participants: 203 caregivers

Intervention: None

Main Outcome Measures: The study aims to determine demographic profile of caregivers, classify mean level of caregiver hesitancy, and determine relationship between demographic factors and caregiver hesitancy attitudes towards Childhood COVID-19 vaccination.

Results: Among 203 respondents, 81.28% were females, with the majority (34.98%) aged 30-39. Although 77% were non-healthcare professionals, 87% held vaccination decision authority. The prevalence of COVID-19 vaccine hesitancy was 41.38%. Regression analysis revealed that caregiver refusal of other types of child vaccinations, presence of children with high-risk conditions, and number of received COVID-19 vaccinations were significant factors influencing hesitancy. Attitudes towards COVID-19 and its vaccine, along with subjective norms and perceived behavioral control, were strong determinants of vaccine hesitancy, highlighting the pivotal role of individual perspectives and beliefs. Demographic factors alone showed minimal correlation on hesitancy.

Conclusion: The findings show moderate caregiver hesitancy. Multiple regression showed no gender difference in hesitancy. Age, education, living location, trypanophobia, and healthcare background did not significantly affect vaccine hesitation. Hesitancy was correlated to previous vaccination refusal, whereas COVID immunizations showed confidence in vaccination. Families facing higher risk for COVID-19 complications due to congenital diseases displayed lower hesitancy, emphasizing the importance of risk assessment. Statistics show that informing caregivers about vaccine safety, risk, and benefits reduces immunization hesitancy. Too many vaccination centers and convenience reduce urgency and encourage complacency. The attitude toward timely immunization lowers hesitancy, yet urgency requires balance. These findings can help reduce vaccine hesitancy through focused measures and communication.

Recommendation: Future research should consider expanding sample size and regional coverage for a more comprehensive perspective. Qualitative methods can offer deeper insights into cultural and economic influences.

Keywords:COVID-19, Caregiver Vaccine Hesitancy, Childhood Covid-19 Vaccine, Tertiary Hospital Pedia OPD

A 5 YEAR REVIEW OF THE INCIDENCE, RISK FACTORS AND OUTCOME OF

PRETERM BIRTHS ADMITTED IN A TERTIARY HOSPITAL IN COTABATO CITY, A MULTIETHNIC REGION

Background: The leading cause of death in children under 5 years in the first month of life is preterm birth (PB) and its complications. This is also one of the leading causes of morbidity and mortality in Cotabato Regional and Medical Center (CRMC) from 2018 to 2022.

Objective: To determine the incidence, risk factors and outcome of PB in CRMC.

Design: Analytical, Cross-Sectional, Retrospective review of charts.

Subjects: PB with ballard score of less than 37 weeks.

Methodology: A collection data tool was used to collect both maternal and neonatal profiles.

Statistical Analysis: Incidence, percentage, chi-square test, logistic regression
Results: PB was divided into extreme (12.3%), very (21.9%), moderate (24.4%) and late PB (41.4%). Mortality rate was 54.8% and 43.9% of them had longer hospital stay, with mortality inversely proportional to age of gestation. Among those who survived, shorter and longer hospital stay were associated to late PB and moderate to very PB, respectively. Under multivariate analysis, maternal and perinatal factors such as history of preterm delivery, no prenatal visit, assisted mode of delivery and no use of antenatal steroids were significantly associated with extreme PB. Use of maternal steroid was more associated with moderate PB than to early (very to extreme) PB. Ethnicity specifically Iranun and Visayas (Bisaya, Cebuano and Ilonggo), ELBW, VLBW, very and extreme PB, presence of comorbidity, RDS, DIC, perinatal asphyxia and invasive ventilatory support were significant risk factors of mortality in PB under multivariate analysis.

Conclusion: Prematurity is one of the major causes of morbidity and mortality at CRMC. Ethnicity, birth weight, age of gestation, presence of comorbidity and complications, and invasive ventilatory support were significant risk factors of mortality in PB.

PROFILE OF PEDIATRIC COVID-19 PATIENTS ADMITTED IN A

TERTIARY HOSPITAL FROM MARCH 2020 – FEBRUARY 2021

Objective: To describe demographic and clinical profile of pediatric COVID - 19 patients admitted in a tertiary hospital from March 1, 2020 – February 28, 2021.

Design: Retrospective descriptive study

Setting: Tertiary hospital

Participants: 167 randomly selected charts of confirmed COVID-19 pediatric patients admitted in a tertiary hospital

Main Outcome Measures: Number of hospitalization days and disposition of patients.

Results: Among 6,249 confirmed COVID-19 cases, 668 (10.69%) were pediatric patients. A random sample of 167 cases was included in the study. Majority of cases belonged to the 0-4 years age group (36.5%); 53.9% were males and 58.7% had normal nutritional status. Most patients resided in Davao City, particularly in Talomo, Poblacion and Agdao Districts. Household transmission played a significant role (50.9%) in disease spread. Comorbidities were present in 17.4% of patients, with oncologic, cardiovascular, and hematologic conditions being the most common. Notably, 49.7% were asymptomatic. For symptomatic patients, fever, cough, and diarrhea prevailed. Laboratory profiles were leukocytosis, with lymphocytic predominance, thrombocytosis, elevated CRP, and radiologic evidence of pneumonia. The average hospital stay was 10 days. 59.3% were discharged, 35.3% were transferred to Temporary Treatment and Monitoring Facilities and 5.4% succumbed to death, mostly those with comorbidities.

Conclusion: This study provided valuable insights into the profile of pediatric COVID-19 patients admitted in a tertiary hospital. The findings highlight the vulnerability of younger age groups, the significant role of household transmission, and the diverse nutritional statuses among affected children. Comorbidities may increase the risk of COVID-19 in pediatric patients. In general, children infected with COVID-19 were asymptomatic while some presented with mild symptoms like fever, cough and diarrhea. It is important to do comprehensive testing and surveillance in this population. The laboratory profiles and outcomes varied, underscoring the need for appropriate medical care and monitoring to ensure better outcomes.

Keywords: COVID-19; pediatric patients; demographic, clinical, and laboratory profile