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NURSING



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Potential Synergistic Activity of Banana (*Musa sapientum*) and Basil (*Ocimum basilicum*) Ethanolic Leaf Extracts Against *Pseudomonas aeruginosa*

Estrada, D. E. S., Estrebilla, F. S., Evidente, B. J., Fanlo, L. G., Fernandez, K. R. T., Ferrer, R., P. B., Firmacion, A. D. S., Flores, C. D. B., Flores, G. Z., Jr., Fortich, J., Gallardo, R. L. T. N., Gandeza, F. J., Garcia, F. G. O., Garcia, L. A., Gotera, C. L. M., and Derecho, C. M. P., MD, RN, FPOGS

COLLEGE OF MEDICINE

Antibiotic resistance has been one of the public health community's challenges. This problem has been attributed to the pharmaceutical industry's misuse and limited development and production of new antibiotics. This study evaluated the synergistic antimicrobial activity of Banana (*Musa sapientum*) and Basil (*Ocimum basilicum*) ethanolic leaf extracts for controlling the growth of the nosocomial pathogen *Pseudomonas aeruginosa*. The crude extracts were obtained through maceration, using ethanol as the solvent. The plants were air-dried for 24 hours, washed, and ground, before placed in an oven to dry at 60°C for another 24 hours. Afterward, the crude extracts were subjected to rotary evaporation. The study utilized an in vitro experimental design using the Disk Diffusion method in a controlled environment and was performed at the Davao Medical School Foundation, Inc. microbiology laboratory. No animals or humans were involved; thus, sampling is not applicable. Two trials were conducted to obtain the data of this study. The first trial did not demonstrate any minimum inhibitory concentration (MIC) or zone of inhibition (ZOI) due to possible faulty sample preparation, which prompted another test set. The second trial used a new set of procedures, including maceration and rotary evaporation of the same plant samples from previous studies. It yielded another set of results with no MIC or ZOI against the *P. aeruginosa*. Both trials failed to demonstrate a minimum inhibitory concentration. Utilization of the pure extract for the disk diffusion method was used, but no zones of inhibition towards *P. aeruginosa* were shown. The results of this study suggested no significant differences in both the minimum inhibitory concentration and zone of inhibitions of *M. sapientum* and *O. basilicum* since both plant extracts yielded none.

Keywords: *antibiotic resistance, synergism, Pseudomonas aeruginosa, banana, basil, minimum inhibitory concentration, zone of inhibition, disk diffusion*

In Vitro Inhibitory Properties of Cacao (*Theobroma cacao* L.) Bean Shells Ethanolic Extracts against Alpha-amylase, Alpha-glucosidase, and Glycation

Macapeges, A. R. A., Labella, J. R. B., Lademora, K. D., Lariosa, J. R. S., Laurente, M. J., Liguig, C. I., Lim, A. W., Linconada, H. B., Lindero, T. J., Lopez, A. G. O., Lozada, N. N., Lucas, J. T. L., Lumanlan, J. C. B., Maca-Agir, H. E., and Pizarro, R. R. M., MD

COLLEGE OF MEDICINE

There is a constant production of high-quality cacao in Davao, the cacao capital of the Philippines. Its use as alternative medicine is encouraged to promote waste management and maximize the local farming of cacao. This study aimed to investigate the effects of Cacao Bean Shells (CBS) ethanolic extracts on the enzymes and products essential to the pathophysiology of *Diabetes mellitus*, such as alpha-amylase, alpha-glucosidase, and advanced glycation end-products (AGEs) in vitro. CBS was partially fermented (24h), and rotary evaporation was used for extraction. The CBS concentrations used in α -amylase inhibition assay were 31.25 $\mu\text{g/mL}$, 62.5 $\mu\text{g/mL}$, 93.75 $\mu\text{g/mL}$, and 125 $\mu\text{g/mL}$, while in α -glucosidase and antiglycation inhibition assays were 125 $\mu\text{g/mL}$, 250 $\mu\text{g/mL}$, 500 $\mu\text{g/mL}$, and 1000 $\mu\text{g/mL}$. Enzyme inhibition was analyzed in triplicates using spectrophotometry. The positive control for α -amylase and α -glucosidase assays is acarbose, while for antiglycation assay is aminoguanidine. Significant differences among CBS ethanolic extracts' mean percent inhibitions were evaluated. In the α -amylase inhibition assay, at 31.25 $\mu\text{g/mL}$, α -amylase and acarbose had a mean percent (%) inhibition of 104.55% and 15.15%, respectively. In α -glucosidase inhibition assay, the mean percent inhibition of 125 $\mu\text{g/mL}$ (7.22%) was significantly higher than 250 $\mu\text{g/mL}$, and 500 $\mu\text{g/mL}$. Aminoguanidine had a mean percent inhibition of 56.31% in the antiglycation assay, and 125 $\mu\text{g/mL}$ CBS was significantly higher compared to the other concentrations. Statistical results revealed that treatments with the lowest CBS concentrations yielded the highest mean percent inhibitions in each assay. Only α -amylase showed higher mean percent inhibition compared to its positive control.

Keywords: *Cacao Bean Shells, α -amylase, α -glucosidase, advanced glycation end-products, enzyme inhibition, antiglycation, assay, diabetes mellitus*

Evaluation of the Antifungal Effect of Calamansi (*Citrofortunella microcarpa*) 85% Ethanolic and 90% Methanolic Peel Extracts on *Candida tropicalis*

Abraham, A-N. S., Abraham, A-R. N., Abraham, G. A. S., Alcos, E. M. E., Ali, J. S. D., Anino, K. C. F., Anotde, C. P., Arcayera, J. M., Arumpac, A. A., Balite, J. H., Baltazar, J., Bantas, Z. Y., Batao, E. M., Bation, X. A., Bayoneta, C. J. G., and Buhay, M. N. M., MD

COLLEGE OF MEDICINE

In the Philippines, Calamansi (*Citrofortunella microcarpa*) is an abundant indigenous citrus fruit with various therapeutic applications. However, with the increase of antimicrobial resistance globally, there is a need to discover new effective and low toxicity alternatives. This study aimed to evaluate the antifungal activity of calamansi peel extract against *Candida tropicalis*. The peels were extracted using 85% ethanol and 90% methanol and compared by their total phenolic content (TPC) before being subjected to a zone of inhibition (ZOI) and minimum inhibitory concentration (MIC) measurement. Among the extract fractions tested, the methanolic fraction was found to have the highest total phenolics of 2.635 mg GAE/g. Based on disk diffusion data using 1 mg/mL extract concentration, the ethanolic fraction yielded a more significant increase in mean ZOI per batch than methanolic fraction despite having a lesser TPC. In contrast, positive control, amphotericin B, had the highest mean ZOI per batch among the three. Using the interpretative breakpoints for amphotericin B, *C. tropicalis* was deemed susceptible (S) to the positive control, intermediate susceptible (IS) to ethanolic fraction, and resistant (R) to a methanolic fraction. Ultimately, a significant difference was shown in the mean ZOI when comparing treatment groups for all batches. Based on this result, *C. tropicalis* showed sensitivity to both alcoholic extract fractions. However, of the two, ethanolic fractions demonstrated a more significant increase in mean ZOI and, thus, greater antifungal capacity, making it a viable alternative to overused antibiotics having known toxic effects. MIC determination yielded varying results due to sudden fluctuations in absorbance values that persisted across ethanolic and methanolic samples. It is recommended that specific identification and quantification of the bioactive phenolic acids responsible for such antifungal activity are made using HPLC for future studies.

Keywords: *calamansi, Citrofortunella microcarpa, Candida tropicalis, antifungal, Philippines*

Potential Effects of Avocado Oil in Improving Learning of Fruit Flies (*Drosophila melanogaster*) through Aversive Phototaxis Suppression

Renoblas, C. D. G., Pastolero, C. M. S., Pedroso, H. K. F., Perandos, V. D. P., Perez, G. B., Perez, J. A. P., Perez, N. A. L., Pernites, Y. F. L., Porras, C. J. A., Pulmones, J. J., Putol, P. G., Quiero, T. R., Ragonton, K. D., Reyes, S. B., and Tagle, M. C., MD, PhD, MAN, RPh, RN, DFAFP, FPSECP

COLLEGE OF MEDICINE

The study was conducted to assess the potential effects of avocado oil in improving the learning and memory of fruit fly (*Drosophila melanogaster*) through an aversive phototaxis suppression assay. Fruit flies from the wild were caught and bred by the researchers, and a total of 36 juvenile flies were used in the study as model organisms. The study used a t-maze to evaluate the flies using the phototaxis test and determine positively phototactic flies eligible for the assay. These flies were treated with a specific diet for seven (7) days. The control group was given the standard cornmeal diet, while the three experimental groups were given the same diet supplemented with different doses of avocado oil; high (6mg/mL), medium (4mg/mL), and low (2mg/mL). In addition, the *Persea americana* seed oil was extracted through the Soxhlet extraction method and incorporated into the diet. However, upon diet treatment, the fruit flies succumbed to death all three trials, which rendered the researchers unable to proceed to the following step-aversive phototaxis suppression assay. With this, the study was redirected to determine the cause of the sudden deaths of the flies. The researchers noticed the trend at which the fruit flies died wherein the high dose group succumbed to die faster than the other groups. The researchers suggest the study results be a potential cause of toxicity from the avocado oil supplementation and other factors such as the consistency of the diet.

Keywords: *Drosophila melanogaster*, *Persea americana*, fruit fly, phototaxis test, aversive phototaxis suppression assay, standard cornmeal diet, avocado oil doses, learning and memory

In Vitro Assessment of the Anthelmintic Property of Papaya (*Carica papaya*) Leaf and Stem Ethanolic Extracts Against *Ascaris lumbricoides* Ova

Layno, J. K. C., Jalique, S. M. P., Khu, J., Kim, S., Labrador, K. C. B., Lacia, M. F., Leaño, D. G., Lee, A. R. R., Leh, M. A. A., Liberato, R. L. A., Lipaygo, M. J., Lloveras, M. A., Lozada, K. K. E., Lumbres, D. K. C., and Platero, M., MD

COLLEGE OF MEDICINE

Soil-transmitted helminth (STH) infections affect 1.5 billion of the world's population, and *Ascaris lumbricoides* cause more than 50%. These infections are endemic in tropical areas and developing countries such as the Philippines. Current efforts are focused on the periodic mass administration of synthetic anthelmintic drugs, which raise concerns about anthelmintic resistance in humans. Several studies have investigated different plants as a cost-effective alternative treatment for STHs infections to address this problem. This study determined the in vitro anthelmintic effect of *Carica papaya* leaf (PLE) and stem (PSE) ethanolic extracts against *Ascaris lumbricoides* by measuring the mean embryonation rate (MER) and mean mortality rate (MMR) of the ova per 50µl ova suspension exposed to the experimental treatment group for 24, 48 and 72 hours. Three trials were performed for all treatment groups. Each of the 99 wells of a multi-well plate used consisted of 50 µl of ova suspension and 100 µl of the experimental treatment groups (1%, 2.5%, 5% PSE and 1%, 2.5%, 5% PLE) and control groups (1%, 2.5%, and 5% albendazole and 0.9% NSS). Embryonation rates and mortality rates of each group were assessed after 24, 48, and 72 hours by counting the total number of ova, embryonated, and dead ovum. The experimental treatments showed a decrease in MER to 41.34% and an increase in MMR up to 24.81% after 72 hours. The data gathered was analyzed to compare the embryonation rate and mortality rate across time and among the experimental and control groups' concentrations. Confounding factors and limitations were considered as to what attributed to the results. Further studies are recommended.

Keywords: *Soil-Transmitted Helminthiasis, Papaya, Anthelmintic, Mean Embryonation Rate, Multi-Well Assay, In Vitro*

Hepatoprotective Property of the Ethanollic Leaf Extract of Snake Plant (*Dracaena trifasciata* (Prain) Mabb.) on Acetaminophen-Induced Hepatotoxicity in Wistar Rats (*Rattus norvegicus*)

Ahat, A. Jr. G., Abantes, A. M., Abao, P. G. T. H., Abdulmalik, M. G., Abunales, S. A. C., Almario, K. A. J. E., Almasa, P. J. O., Alojacin, G. S., Alve, K. T. B., Amilhasan, A. M. F., Amsali, F. S. K., Ang, G. Y. B., Apura, J. A., T., Aquino, D. M. R., Aquino, F. B. I. O., and Arrosas, V., MD.

COLLEGE OF MEDICINE

Acetaminophen (APAP) is one of the most utilized analgesic and antipyretic drugs. Despite its clinical importance, it is one of the most common causes of drug-induced liver disease and acute liver failure in humans. Unintentional overdose leads to toxicity and depletes hepatic glutathione stores. This study aimed to determine the ability of ethanollic extract of *Dracaena trifasciata* to protect against APAP-induced hepatotoxicity in *Rattus norvegicus* (Wistar rats). Dosage of 2g/kg body weight of acetaminophen was administered orally. Ethanollic extract of 200 mg/kg body weight was administered to acetaminophen treated rats. Qualitative phytochemical screening revealed the presence of flavonoids and saponins. Liver damage was assessed by measuring serum alkaline phosphatase (ALP), alkaline transferase (ALT), total bilirubin, and protein. On the other hand, liver tissues were studied for microscopic histopathological changes. Compared to the test control, the treatment dose-dependently produced significantly (p -value < 0.05) elevated serum Alkaline phosphatase and alanine transferase. The serum total bilirubin and total protein were lower though not significantly. Hepatic histopathological studies revealed that acetaminophen caused centrilobular necrosis. This study indicated that treatment with the plant extracts does not protect against acetaminophen-induced hepatotoxicity.

Keywords: *Dracaena trifasciata*, hepatoprotection, acetaminophen toxicity, alkaline phosphatase, alanine transferase

In Vitro Study on the Angiotensin Converting Enzyme Inhibitory Activity of the Ginger (*Zingiber officinale*) Rhizome Lyophilized Ethanolic Extract

Ubaldo, C. B., Saragena, K. J., Sensano, M. A. R., Serrano, M. C. A., Sifuentes, C., Silvestre, K. J., Soldevilla, M. E., Sotelo, M. A., Soria, G., Tag, R. J., Tajan, K. P., Tajantajan, K., Tenorio, G. C., Tereso, E. M., and Sermon, G. O., MD, FPAFP

COLLEGE OF MEDICINE

One of the most pressing issues concerning people today is the rise in the incidence of hypertension due to a sedentary lifestyle. Ginger rhizome has gained popularity due to its potential medicinal properties to lower blood pressure. Meanwhile, Angiotensin Converting Enzyme (ACE) inhibitors work by interfering with the body's renin-angiotensin-aldosterone system, regulating the body's blood pressure. With these, the researchers came up with an idea for a study that might lead to a new treatment for hypertension. The study aimed to determine the ACE inhibitory activity of the Ginger (*Zingiber officinale*) rhizome. In phytochemical screening, the researchers used the Folin-Ciocalteu reagent method to determine total phenolic content. In contrast, the Colorimetric method was employed to measure the lyophilized ethanolic extract's percentage of ACE inhibitory activity. The total phenolic content analysis exhibited that each gram of plant extract contained 1597.80mg Gallic Acid Equivalent (GAE). Data analysis revealed that Ginger (*Zingiber officinale*) dose concentrations and Positive Control (Captopril) significantly differed in inhibitory activity. Furthermore, it exhibited that the high dose concentration (783mg/mL) with 73.808% inhibition is comparable with Captopril with 76.924% inhibition against ACE. Therefore, Ginger (*Zingiber officinale*) rhizome lyophilized ethanolic extract has significant inhibitory activity against Angiotensin-converting enzymes.

Keywords: *Zingiber officinale*, ACE, inhibition, Phenol, Captopril, RAAS, Lyophilization, Gallic Acid Equivalent (GAE), phytochemical screening

Combined Ethanolic Extract of *Psidium guajava* (Guava) and *Syzygium cumini* (Duhat) as Potential Glucose Lowering and Antiglycation Agent; An In Vitro Study

Lozano, J. J., Llanos, C. C., Lozada, N. M. S., Lubguban, P. L., Maceda, G. S. T., Maglana, D. M. D., Mamintod, S. J. A., Manansala, T. E. L., Mandalihan, F. M. M., Mandawe, J. J. P., Marasigan, A. K. F., Marohom, S. S., Mejos, N. A. C., Menor, Y. R. A., and De Guzman, M. B., MD, FPAFP

COLLEGE OF MEDICINE

Diabetes mellitus (DM) is a global chronic metabolic disorder that is a leading cause of morbidity and mortality worldwide. The inhibition of α -amylase and α -glucosidase are essential targets in regulating postprandial increase of blood glucose in diabetic patients. Inhibiting glycation is also beneficial as an effective strategy to prevent the generation of advanced glycation end products bio-markers implicated in the worsening of degenerative diseases such as diabetes. The Philippines is one of the mega biodiverse countries. Thus, it would be prudent to exploit plants that could be useful in managing DM. This study aimed to cover the α -amylase, α -glucosidase, and antiglycation activity of the combined 80% ethanolic extracts of the leaves of *Psidium guajava* and *Syzygium cumini* plants. Inhibitory tests were performed in vitro with the mixtures prepared in fractions 1:1, 1/4:3/4, and 3/4:1/4 of *P. guajava* and *S. cumini* extracts. In the α -amylase assay, only the 125 μ g/mL and 93.75 μ g/mL concentrations of the 1/4:3/4 mixture showed significant results, with the 93.75 μ g/mL concentration showing the highest inhibition of 142.42%. The results also did not show a dose-dependent increase in inhibitory activity. For the α -glucosidase assay, only the 125 μ g/mL concentration of the 1/4:3/4 mixture showed a significant percentage of inhibition of 14.67%. The antiglycation assay showed that the 1000 μ g/mL of the 1:1 mixture had inhibitory effects closer to aminoguanidine. The three tests showed significant results on certain mixtures and concentrations; however, some unsatisfactory values were seen. This study can provide a basis for developing new combination drugs for diabetic therapy with these results.

Keywords: *α -amylase inhibition, α -glucosidase inhibition, Antiglycation, Glucose Lowering, Combined extract, Diabetes, Glucose Lowering, *Psidium guajava*, *Syzygium cumini**

Effect of Lato (*Caulerpa lentillifera*) Crude Extract on APTT and PT of Human Blood Plasma In Vitro

Noor, R. A. B., Oandasan, C. J. G., Magno, A. T. C., Mahadali, J. H., Maloloy-on, M. N. O., Mamingao, C. J. R., Manalili, D. R. R., Maningo, S. J. F., Masongsong, M. M. A., Modin, M. J. K., Necesito, L. E. F., Nicor, N. M. V., Niez, E. J. M. P., Ong Chua, N. V., and Sermon, G. O., MD, FPAFP

COLLEGE OF MEDICINE

As cardiovascular diseases continue to persist as being the primary cause of mortality worldwide, there is a need for an affordable alternative anticoagulant source for the general public. This study generally aimed to determine the anticoagulant activity of *Caulerpa lentillifera* crude extract on human blood, specifically on the activated partial thromboplastin time and prothrombin time. This study used an in vitro and ex vivo experimental randomized control trial. It was conducted in Lab ng Bayan Diagnostic Laboratory and Davao Medical School Foundation, Inc., which included six (6) second-year male participants from DMSF who fulfilled the inclusion criteria and signed the informed consent. A convenience sampling design was employed in this study, and the volunteers were screened for basic hematology screening. The qualified volunteers were randomly grouped into the experimental, positive control (heparin), and negative control (NSS). The clotting time was recorded on a table and was analyzed using Microsoft Excel. A total of 5 mL of whole blood was extracted from each participant and was then centrifuged to obtain blood plasma. The results showed a “No coagulation” result for the APTT and PT of heparin-treated and *C. lentillifera*-treated plasma samples at 70 microliter concentrations. In addition, results indicated that the extract successfully blocked the coagulation cascade, and no pre-analytical, analytical, and post-analytic interferences were encountered as they were appropriately addressed. In conclusion, the study may support other data on the anticoagulant activity of *C. lentillifera* and may open new and cheaper alternatives for anticoagulant medications in the future.

Keywords: *Caulerpa lentillifera*, anticoagulant activity, activated partial thromboplastin time, prothrombin time, blood plasma

Antiglycation Activity of Guyabano (*Annona muricata*) Ethanolic Leaf Extract Using In Vitro BSA-Glucose Assay

Labarite, K. M., Gregorio, M. J. D., Guerra, R. M. M., Hasan, D. M. J. A., Ilog, A. R. S., Israel, J. M. B., Jamero, M. D. D., Jamil, R. P., Jubahib, Z. K. P., Juliano, A. J. C., Lagon, N. K. D. M., Landero, P. L. P., Lapeña, K. R., Lim, J. Jr. E., and Sevilla-Adaya, H. K., MD.

COLLEGE OF MEDICINE

Diabetes affects 422 million people worldwide. The majority are people living in low and middle-income countries, attributed to 1.6 million deaths every year. Therefore, scientists have been studying plant-based products as alternatives in treating diabetes. Also, protein glycation and the formation of advanced glycation end products (AGEs) play an essential role in the pathogenesis of diabetic complications. This study aimed to determine the antiglycation activity of *Annona muricata* (Guyabano) ethanolic leaf extract and its bioactive compounds through in vitro BSA glucose assay. The aqueous extract had the highest mean percent inhibition of 31.74%, butanol with 25.22%, hexane with 24.48%, and lastly, ethyl acetate with 19.89%. These values were compared with the percent inhibition of the positive control, aminoguanidine, with a percent inhibition value of 41.68%. The aqueous extract with the highest percent inhibition among the treatments was subjected to High-Performance Liquid Chromatography (HPLC) and Fourier Transformation Infrared Spectroscopy (FTIR). However, the bioactive compounds were not isolated and identified yet. Furthermore, previous studies have reported the presence of several bioactive compounds from *A. muricata* such as chlorogenic and caffeic acids, procyanidins B2 and C1, (epi)catechin, quercetin, quercetin-hexosides, and kaempferol. These compounds were identified to contribute to the antiglycation activity of *A. muricata*.

Keywords: *diabetes, antiglycation, soursop, bioactive compounds, BSA glucose assay*

In Vitro HMG-CoA Reductase Inhibitory Activity of Avocado (*Persea americana*) Seeds Ethanolic Extract

Ravelo, C. M., Pavon, C. V., Peneza, S., Pilay, T. S., Pimentel, D. J., Presores, C. J., Pusta, N. K. L., Quesada, A. B., Ramos III, I., Resma, E. K., Reyes, K. B., Sadsad, A. F., Sapine, D. H., and Rubiso, R. E., MD.

COLLEGE OF MEDICINE

One of the most prevalent indicators of susceptibility to cardiovascular diseases worldwide is hypercholesterolemia. Hence, the inhibitory effects of HMG-CoA reductase of Avocado (*Persea americana*) seed extract were studied in this paper to determine its lipid-lowering ability. Different concentrations of avocado seed extract were obtained and compared to a commercial drug, Atorvastatin, in terms of inhibitory activity using an HMG-CoA reductase enzyme kit. Phenol was measured from the seeds of the avocado, and the inhibitory activity of the extract was measured through absorbance. Phenol content of the extract was determined using Folin-Ciocalteu reagent (FCR) and was computed using Gallic Acid Equivalents (GAE). Results showed there is 1485.39mgGAE/g of plant extract. Low, medium and high concentrations used for the bioassay were based on the EC50 of avocado seed (220 micrograms/ml) 15 where EC50, EC75, and EC90 are the low, medium, and high concentrations, respectively. The results showed no significant difference between the inhibitory effects of Atorvastatin compared to the three (3) different concentrations of avocado seed extract. Furthermore, it showed no significant difference in the HMG-CoA reductase inhibitory activity of extract from avocado to that of Atorvastatin. Thus, similar to Atorvastatin, the different Avocado seed extracts effectively inhibited the HMG-CoA enzyme. Results in this study can contribute to the knowledge and data that can potentially pave the way to developing lipid-lowering drugs.

Keywords: *Atorvastatin, Avocado, Cholesterol, HMG-CoA reductase, Phenol*

Antibacterial Activity of Furocoumarins in *Petroselinum crispum* (Parsley) Leaf Against *Streptococcus pneumoniae*

Agalin, Y., Abellera, H. G. F., Abpi, M. M., Abrasaldo, M. K., Acebes, J., Agudo, E. L. M., Ajibon, V., Akmad, R. R., Alcera, E. J., Amja, S., Angkang, S., Angsa, F. S., Aparece, J. T., Aribal, R. II, and Abundo, I. C. S., MD.

COLLEGE OF MEDICINE

Petroselinum crispum is a popular commercially grown plant in the Philippines. It is used as a culinary condiment and as a medicinal herb. Based on the demand for natural products to control microorganisms and the re-evaluation of potential medicinal plants for preventing diseases, the study aimed to investigate the antibacterial activity of the ethanolic extract of the leaves of *P. crispum* against the respiratory pathogen *Streptococcus pneumoniae*. The antibacterial activity was assessed by Kirby-Bauer disk diffusion test on Mueller-Hinton agar supplemented with 5% sheep blood. The *P. crispum* ethanolic extract showed no antibacterial activity against *Streptococcus pneumoniae*. Furthermore, the result indicated that the ethanolic extract of the leaves of *P. crispum* at a volume of 20µl did not show any zone of inhibition against the tested microorganism and therefore had no antibacterial activity against *Streptococcus pneumoniae*. However, more studies need to be done on this plant to investigate its antibacterial properties further.

Keywords: *Petroselinum crispum*, parsley, Antibacterial activity, *Streptococcus pneumoniae*

Hepatoprotective Effect of Naringin from Pomelo (*Citrus grandis*) Peel Extract Against Acetaminophen-Induced Toxicity in Rats

Gorrero, J., Gonzales, N., Guinzon, D. A-H., Hammisani, S., Hassan, S., Hernandez, N. K., Ibloguen, R. J., Igari, A., Insular, K. K., Jabon, K. J., Jacinto, D. A., Juliano, B. A., Juruena, G. M. A., Kanakan, F., and Pastrana, J., MD.

COLLEGE OF MEDICINE

Drug-induced hepatotoxicity remains a global issue. Pomelo can be used as an effective and low-cost alternative in preventing or delaying the onset of the disease. Therefore, this study was designed to investigate the hepatoprotective properties of naringin from pomelo extract against acetaminophen-induced hepatotoxicity in rats. This experimental study utilized the purposive sampling design. Twenty-four (24) rats were allotted to four (4) treatment groups. Naringin was extracted from pomelo peel and was given orally. The extract preparation was done at the Davao Medical School Foundation, Inc. (DMSFI) Research Center, while the experiment was done at Animal House of DMSFI Research Center. The group treated with Silymarin and acetaminophen showed total bilirubin ($\mu\text{mol/L}$), ALT (U/L), and ALP (U/L) levels of 10.20 ± 3.37 , 211.20 ± 42.10 , and 415.00 ± 40.80 , respectively. The group treated with naringin and acetaminophen showed total bilirubin ($\mu\text{mol/L}$), ALT (U/L), and ALP (U/L) levels of 16.83 ± 2.34 , 305.00 ± 41.10 , and 392.17 ± 42.20 , respectively. The study showed no significant difference between the group treated with acetaminophen and naringin and the negative control and acetaminophen groups. The researchers found that naringin harbored no hepatoprotective property against acetaminophen-induced toxicity in rats. This study concludes that naringin did not show significant hepatoprotective property and significant difference in hepatoprotective property compared to Silymarin.

Keywords: *Pomelo (Citrus grandis), Naringin, Acetaminophen, Hepatotoxicity, Wistar rats*

Potential of Snake Plant (*Dracaena trifasciata* 'Laurentii') in Reducing Common Indoor Air Pollutants

Que, E. A., Pama, K. S. L., Osorio, J. M. P., Padilla, I. B. A., Pardilla, M. D., Paring, D. R. R. G. II, Pastera, D. M., Perang, K. J. M. C., Pesucan, M. G. M., Quiñanola, R. K. M., Rabanzo, R. J. C., Raz, J. J. R., Requita, J. G., Revilla, C. K. C., and Tagle, M. C., MD, PhD, MAN, RPh, RN, DFAFP, FPSECP

COLLEGE OF MEDICINE

Due to the COVID 19 pandemic, people remain in self-quarantine, resulting in indoor air pollution. *Dracaena trifasciata* 'Laurentii' was used in this study to see if it was beneficial in reducing typical indoor air pollutants: PM2.5, PM10, formaldehyde, and TVOC in a bedroom setting. Furthermore, this study aimed to determine the effect of this plant on air temperature and relative humidity. The study was laid out following a pre-experimental one-shot case study research design near a highly urbanized area. One room was allocated for the experimental setup. Three phases of the experiment were observed and established for 23 days. Phase I was the pre-introduction phase, during which parameters were monitored without the plant, Phase II was the active phase, during which the plant was introduced, and Phase III was the termination phase, during which the plant was removed. Baseline data was obtained from Phase I. An RS Pro RS-9680 battery-operated Air Quality Meter was used to measure the air quality parameters. Results revealed that indoor PM2.5 and PM10 levels were lower in the presence of *D. trifasciata*, but without reaching statistical significance. The results did not clearly show the effect on indoor TVOC and HCHO. Furthermore, the mean measurement of TVOC and PM2.5 decreased. The result implies that *Dracaena trifasciata* 'Laurentii' in the indoor environment gradually decreases in typical indoor air pollutants, mainly particle matter, under real-world conditions. This research helps to improve air quality for human health.

Keywords: *Indoor air quality, Dracaena trifasciata 'Laurentii', Snake plant, Formaldehyde, Particulate matter*

Potential Blood Glucose Lowering of Balbas Pusa (*Orthosiphon aristatus*) Leaf Ethanolic Extract in Streptozotocin-Induced Hyperglycemic Hamsters

Cruz, K. N., Dayao, L., Dayap, S., De Los Reyes, J. C., De Los Reyes, E. S., De Ramos, E. S., Del Rosario, F., Denoga, B. P. L., Diamante, J. J., Dimakuta, M. B., Doromal, G. A. J., Edu, D. J., Embalsado, J. J. P., Española, J. J. B., Estember, J. J., and Del Rosario, M. K., MD

COLLEGE OF MEDICINE

Diabetes mellitus is a metabolic disease characterized by chronic hyperglycemia due to insulin resistance and beta-cell dysfunction. Anti-diabetic drugs have been widely utilized to control hyperglycemia, but many prefer plant-derived medicines available locally. Hence, the study aims to determine the potential of Balbas pusa (*Orthosiphon aristatus*) leaf extract in controlling hyperglycemia in Streptozotocin-induced hyperglycemic hamsters; specifically, the approximate effective dose (AED), ED50, and ED90. Forty (40) healthy hamsters were induced with 60mg/kg Streptozotocin, maintained a high-fat diet, and were observed for 14 days during treatment. Blood glucose levels were measured using a glucometer (GlucoDr). AED and ED50 were computed using formulas and probit analysis for ED90. Eight hamsters received a starting dose of 10mg/kg extract, and the AED is between 39.81-158.49mg/kg; ED50 median effective dose is 182.23 mg/kg. For ED90, respective doses for each group ($n = 4$) were converted to logarithmic doses and were plotted against the percentages of subjects that showed a positive response, and the median effective dose is 460.46 mg/kg. Statistical analyses revealed significant differences in the post-treatment blood glucose levels in all treatments. These accounted that Balbas pusa extracts significantly decreased glucose levels compared to the negative control. Furthermore, Acarbose had substantially lowered the glucose levels than the extract. On day 14, a significant decline was more remarkable than other monitoring times. Therefore, Balbas pusa leaf extract has the potential to control hyperglycemia.

Keywords: *Balbas pusa, glucose level, Probit analysis*

Crude Fiber Determination and Fat Sequestering Activity of Fiber Rich Banana Peel (*Musa sapientum*)

Villegas, A., Tibumbo, B. O. U., Tigullo, A. T. O., Togonon, R. A., Uy, J. B., Velasco, C. M. A., Verceles, L. G. S., Victoria, L. H. G., Villarin, P. S. B., Villasor, K. C., Villagonzalo, W. A., Vistal, J. J. E., Wong, M. A. G., Yanong, C. R. J., and Quianzon-Manuel, M. F. L., MD, DFM

COLLEGE OF MEDICINE

The advent of misinforming diet trends and having cardiovascular diseases as the leading global cause of deaths that claim 18 million lives a year has sparked an interest in the study of utilizing powdered banana peel capsules as a potential fat sequestrant. It aims to present hypercholesterolemic individuals, pharmaceuticals, and individuals aspiring to lose weight a possible supplement, if not alternative to, currently expensive medications that aim to normalize lipid profile values. Crude fiber determination revealed that the unripe peel of the latundan cultivar of the *Musa sapientum* had the highest crude fiber content at 12.1% (followed by cardava, then lakatan at 10.48% and 8.05%, respectively). However, results revealed no significant difference in the crude fiber content of banana peels among the three varieties. Fat sequestering activities of latundan powder and powdered psyllium fiber (positive control) were analyzed to determine whether latundan powder offered greater activity. The results revealed no significant difference in both latundan and psyllium fiber activity. A small portion of the latundan capsules from three trials had also undergone dissolution analysis using Fourier-transform infrared spectroscopy (FTIR) instrument with an attenuated total reflectance (ATR) accessory. The results revealed inconsistent vibrations with similar distinctive peaks but varying intensities; thus, assessing the functional groups present on the variant with the highest crude fiber is inconclusive. The inconclusive results of the different tests conducted in this study may be attributable to the few samples obtained, thus yielding statistically insignificant values for the control and test samples. The proponents recommended a more significant number of banana samples for more replicates and the use of a more appropriate fat that is more compatible with the methods used.

Keywords: *banana peel, crude fiber, diet, Fat sequestering activities*

In Vitro Study of Antibacterial properties of *Macaranga tanarius* Methanolic Leaf Extract against *Pseudomonas aeruginosa* and *Staphylococcus aureus*

Rodriguez, R. A. G., Rodriguez, R. F. G., Sagarino, K. G. Z., Salivio, H. V. N., Samillano, J. III Q., Sandig, M. C. A., Serrano, R., Sorongon, A. J. V., Subibi, A. G., Tagaro, A. J. R., Tarroza, G. P., Tenorio, J. R. O., Ting, G. S. M., Tipan, Z. M. J. M., and Pizarro, R. R. M., MD.

COLLEGE OF MEDICINE

Numerous plants are known to have an abundance of natural bioactive compounds. However, little is known about the antibacterial property of *Macaranga tanarius*, which is a native plant in the Philippines. Like other species under *Macaranga*, the plant is rich in flavonoids and stilbenes, which are responsible for most of the plant's activity. *Staphylococcus aureus* and *Pseudomonas aeruginosa* cause various nosocomial infections and increasing cases of drug resistance in Southeast Asia, including the Philippines. The extract of *Macaranga tanarius* leaves was found to have the ability to modify the bacteria's cell membrane permeability and cell wall rigidity, and ability to bind and inhibit microbial enzymes, and coagulate cell contents. To evaluate the plant's antibacterial activity, 24mg/ml of its extract was serially diluted in 2-folds to yield final concentrations of 24mg/ml, 12mg/ml, 6mg/ml, 3mg/ml, and 1.5mg/ml. The minimum inhibitory concentration was determined and tested through Kirby-Bauer Disk Diffusion against a positive control. Results showed no significant difference between zones of inhibition of the extract and positive controls. The results of this study provided evidence of the effectivity of the antibacterial properties *Macaranga tanarius* have against *S. aureus* and *P. aeruginosa*.

Keywords: *antibacterial, Macaranga tanarius, Staphylococcus aureus, Pseudomonas aeruginosa*

Anxiolytic Activity Determination of *Citrofortunella macrocarpa* (Calamansi) Peel Ethanolic Extract in Swiss Albino Mice

Orig, I. E. J., Nartatez, T. E., Natano, L. A. D., Noncio, K. M. L. C., Nuljaid, A-R. I., Obenza, J. Q. R., Obice, V. A. III B., Omambac, L. J. L., Ontonga, J. D., Ortiga, D. J. A., Pableo, D. J. A., Palec, L. T. L., Paragas, A. M., Paraunda, J. T., and Remedios, J., MD

COLLEGE OF MEDICINE

Anxiety is a prevalent disorder globally found in every society in the world. In this study, the researchers aimed to seek the anxiolytic effects of the ethanolic extract of the peel of *Citrofortunella microcarpa* (Calamansi). This aimed to establish the use of a common Filipino citrus fruit to reduce anxiety disorders and its other medical purposes. To show the anxiolytic properties of Calamansi, a randomized controlled trial utilizing *Citrofortunella microcarpa* (Calamansi) peel ethanolic extract among Swiss albino mice was done. The approximate effective dose (AED), median effective dose (ED50), and ED99 of the extract were determined. The anxiolytic effects of diazepam (positive control), normal saline solution (negative control), and the ED50 and ED99 of the extract were compared using the Light-Dark Suok Test (LDST). Ethical considerations were imposed following the R.A. 8485 (The Animal Welfare Act of 1998). The test subjects were administered orally with the controls and extracts and were subjected to bioassay analysis by LDST. Behavioral indices were recorded and graded for each test subject. Results revealed that the ED50 and ED99 concentrations of the test extract were as effective as diazepam in reducing the anxiety of mouse samples. The anxiolytic effects of the ED50, ED99, and diazepam differed significantly from the normal saline solution. A higher exploration, activity, and diet index was noted in mice administered with the extract and diazepam than those given the negative control. This discovery can lead to novel ways and means to reduce the prevalence of anxiety in society. This study can also help future research involving mouse models of anxiety.

Keywords: *neurology, anxiety, calamansi, mice, Light-Dark Suok Test, Davao City*

HMG-CoA Reductase Inhibiting Activity of *Allium ampeloprasum* (Sibujing) Extract an In Vitro Study

Romina, R. R., Reyes, R. R., Rojo, B. K. A., Rosario, V. N. M., Rubino, R. Jr., Sabas, M. A., Salcedo, G. M., Salvador, P. R., Serenado, A. J., Sevilla, J. C., Sumail, N. A., Tan, J. N., Tanggol, A. N., Tawantawan, M. Y., Tenajeros, J. A., and Talon, F. C., MD

COLLEGE OF MEDICINE

The enzyme 3-hydroxy-3-methyl-glutaryl-coenzyme A (HMG-CoA) reductase is the key enzyme of the mevalonate pathway. This study was designed to investigate the inhibitory activity of *Allium ampeloprasum* (wild leek) plant extract in the conversion of HMG-CoA to mevalonate. Laboratory procedures were done at San Pedro College (SPC), the Philippine Institute of Traditional and Alternative Health Care (PITAHC), and Davao Medical School Foundation, Inc. (DMSFI) Research Center. An experimental design was employed in this study. The different fractions collected were assayed for their 3-hydroxy-3-methyl-glutaryl-coenzyme A receptor (HMGR) inhibiting activity and read at an absorbance of 340 nm for 10 minutes. *A. ampeloprasum* was found to have HMGR inhibitory activity (in vitro), emphasized by the n-butanol fraction (PF), which showed the highest inhibitory activity at 44%, significantly different compared with the inhibitory activities of the n-hexane (NPF), ethyl acetate (SPF), and aqueous (AF) fractions, as well as that of the positive control, Simvastatin, and the negative control, distilled water (dH₂O). Fourier Transform Infrared Spectroscopy (FTIR) analysis of PF reported the presence of carbonyl, aromatic, and alkyl functional groups. Reversed-Phase High Power Liquid Chromatography (RP-HPLC) identified possible compounds in this fraction that have been reported to possess anti-hypercholesterolemic effects. This study may potentially contribute to the already existing preparations that target HMGR and pave the way to formulating one as efficient, easily attainable, and with relatively lesser side effects.

Keywords: *HMG-CoA reductase, Allium ampeloprasum, FT-IR, RP-HPLC, dyslipidemia*

In-Vitro Antifungal Activity of Mango Tree (*Mangifera indica*) bark extract against *Candida tropicalis*

Gadia, G. L. E., Galaraga, R. M. S., Gallardo, M. R., Galo, G. C., Gana, J. R. S., Garcia, E. A. F., Gloriani, J. F. G., Gomez, D. G., Gorospe, L. K. S., Gravador, T. A. U., Heramil, M. G. R., Herrera, J. R. J., Irene, R. M. H., Isaguirre, R. J. A., Jabay, M. A. S., and Pizarro, R. R. M., MD

COLLEGE OF MEDICINE

The mango stem bark contains high phenolic compounds, particularly gallic acid. This compound was found to inhibit fungal activity. Thus, an isolated bark extract was tested against *Candida tropicalis*. Air-dried and powdered mango bark was sourced from Davao City, Philippines, and was extracted using ethyl acetate. The extract was prepared, fractionated, and assessed for its gallic acid content using phytochemical analysis. This analysis revealed that the extract contains gallic acid based on comparing peak and retention times with a gallic acid standard using HPLC. The fractionated extract was used to assess the antifungal activity against *C. tropicalis* using a modification of the Kirby-Bauer disk diffusion method. Fluconazole exhibited the highest antifungal activity with a ZOI of 16.66 mm, which means the *C. tropicalis* was susceptible to the drug. Plates containing 0.3, 0.6, and 1.25 mg/mL of mango bark extracts have ZOIs of 7.33mm, 7mm, and 6.67 mm, respectively, which showed inhibitory activity exerted against the *C. tropicalis*. This is due to the gallic acid contained in the extract is the determining factor of the antifungal activity of the extract. Further studies are recommended to improve the study due to numerous limiting factors.

Keywords: *Antifungal, Gallic Acid, ZOI, Bark, Davao City*

Antimycobacterial Property of Fatty Acids from the Oil Extract of *Centella asiatica* Leaves against *Mycobacterium smegmatis*

Atabilanco, C. J. A., Aragon, J. L., Arumpac, A. A. P., Astronomo, I. J., Asuncion, A. J., Auman, A., Badillo, R., Balubugan, K. M. A., Banzali, K. R., Barrientos, J. L. C., Basco, R. D., Belarso, C., Bergado, Y. L., Bernan, P. S. M., Bonsubre, T. G., and Ongkingco-Lumanlan, C., MD

COLLEGE OF MEDICINE

This study evaluates the antimycobacterial property of fatty acid components extracted from *Centella asiatica* leaves on *Mycobacterium smegmatis*. Strains of tuberculosis that are resistant to all effective anti-tuberculosis drugs have emerged. Hence, there is a necessity to search for a new anti-tuberculosis treatment. *C. asiatica*, known in the Philippines as Gotu Kola, is well known for its traditional uses and medicinal properties to treat many diseases. Triterpene and its derivatives are the primary components of this plant. In addition, they contain many fatty acids that comprise 36% of the plant, including palmitic, linoleic acid, and linolenic acid, which can form complex compounds with cell membranes through hydrogen bonds, then destroy the permeability of bacterial cell walls. An experimental type of study design was used in this study. Since extraction is an essential step for separating bioactive compounds from the plant leaves, the powdered *C. asiatica* leaves were extracted with n-hexane in a Soxhlet apparatus to obtain the corresponding fractions and investigate the potential of the potential extracts for clinical applications. *M. smegmatis* is sensitive to 40% oil extract of *C. asiatica* using the Kirby-Bauer method with a zone of inhibition in each of the three trials of Gotu Kola oil extract, positive control (novobiocin), and negative control (distilled water) showed consistent levels which are 16.5 mm, 28 mm, and 0 mm, respectively and quantitatively determined its minimum concentration to inhibit bacterial growth ranging from 7.8 µg/ml to 15.5 µg/ml with a mean MIC of 10.36 µg/ml. This study revealed that the oil extract *C. asiatica* leaves showed significant inhibitory activity against *M. smegmatis*. The results, therefore, established good support for the use of *C. asiatica* in traditional medicine.

Keywords: *Centella asiatica*, oil extract, antimycobacterial property, *Mycobacterium smegmatis*, Zone of inhibition, Minimum Inhibitory Concentration

Antiglycation and Glucose Lowering Potential of Eggplant (*Solanum melongena*) Ethanolic Extracts: An In-Vitro Study

Concepcion, G. B., Chagas, J. A. O., Clarito, H. M. M., Collantes, M. J. O., Coquilla, S. D. P., Coronel, M. R. F., Dablo, T. A. F., Dagalea, J. G., De los Cientos, F. I. T., Dela Cruz, J. E. L., Delposo, K. R. B., Demegilio, E. K. S., Deocades, A. M. C., Delra, C. A., and De Guzman, M. B., MD, FPAFP

COLLEGE OF MEDICINE

Diabetes is classified as a chronic metabolic disorder characterized by prolonged hyperglycemia resulting in various complications in the body. It continues to be one of the leading causes of mortality in the Philippines. Investigations of the glucose-lowering potential of plant extracts have emerged, and *Solanum melongena*—an eggplant found in tropical countries showed promising results. This study aimed to determine the antiglycation and glucose-lowering potential of *S. melongena* ethanolic extract, using it as a potential antidiabetic and antiglycation agent by testing its inhibitory properties against alpha-glucosidase, alpha-amylase, and antiglycation assay. The study utilized an in-vitro experimental design, and the entire procedure was conducted at the Davao Medical School Foundation, Inc. Research Center. Two (2) kilograms of *S. melongena* fruits were prepared at different concentrations based on the positive control of each assay. Mean percent (%) inhibition, IC₅₀, and *p*-values of each assay were determined. Among the three, alpha-amylase showed a dose-dependent inhibitory activity with an IC₅₀ of 116.49 µg/mL. However, there is insufficient evidence to prove there is a significant difference in the effectiveness of the concentrations. Further studies were recommended to establish more apparent evidence on the inhibitory activities of alpha-glucosidase and antiglycation assay, which both revealed discrepancies with their results. Thus, IC₅₀ values were not adequately established. Overall, the findings of this study may suggest that the glucose-lowering activity of *S. melongena* is facilitated mainly via the antagonism of alpha-amylase. However, further studies would be required to establish this.

Keywords: *glucose lowering, Solanum melongena, alpha-glucosidase, alpha-amylase, antiglycation, percent inhibition, IC₅₀*

Potential Antidiabetic and Antiglycation Activity of *Cymbopogon citratus* Ethanolic Extract In Vitro

Dimaunahan, L. C. C., Dodong, S. T., Dorado, H. M. I., Duay, A. P. L., Dumpao, L. A., Edeza, A. S. C., Elizagaque, H. F. G., Embalsado, M. I. M., Emphasis, L. B. G., Esguerra, A. C. N. D., Esteban, G. J. G., Esteves, J. P. D., Flores, A. M. A., Fuentes, M. A., Fuentes, R. M., and Pastrana, J., MD

COLLEGE OF MEDICINE

Diabetes mellitus (DM), characterized by hyperglycemia, has a growing prevalence in the Philippines. To control, reduce blood glucose levels, and combat DM complications, a study utilizing an in vitro experimental research design on *Cymbopogon citratus* ethanolic extract (CCEE) was assessed to validate the potential of *C. citratus* as an effective antidiabetic and antiglycation agent using alpha-glucosidase, alpha-amylase, and glycation inhibitory assays. *C. citratus* plant was purchased from a local supplier in Davao City. Davao Medical School Foundation, Inc. (DMSFI) conducted the extraction and experimentation properly. CCEE was prepared through the maceration of *C. citratus* leaves and stems in 90% ethanol, and the resulting extract was lyophilized and prepared at different treatment concentrations. The alpha-amylase inhibition assay showed that concentrations of 125, 93.75, 62.5, and 31.25 µg/mL, exhibited -39.39%, 95.45%, 81.82%, and 59.09% inhibitory activity, respectively. The IC₅₀ of CCEE (27.37 µg/mL) appeared to be less than the IC₅₀ of Acarbose (50.53 µg/mL), the positive control. For the alpha-glucosidase, no IC₅₀ were computed for both Acarbose and CCEE since results revealed negative percentage inhibition (38.00%, -30.73%, -28.84%, -20.59%, and 8.94%) for the varying concentrations (250, 125, 93.75, 62.5, and 31.25 µg/mL, respectively). For the antiglycation assay using the BSA-glucose model, concentrations of 1000, 500, 250, and 125 µg/ml yielded negative percentage inhibitions of -128.71%, -73.27%, -37.19%, -14.40%, respectively, as compared to Aminoguanidine with 56.46% inhibition. The findings of this study express that *C. citratus* show alpha-amylase inhibition potential and no clear alpha-glucosidase and glycation inhibitory activity.

Keywords: *Cymbopogon citratus*, Alpha-amylase, Alpha-glucosidase, Antiglycation, diabetes

Larvicidal, Fecundity, and Fertility Inhibitory Activities of *Ipomoea aquatica* (Water Spinach) Stem Hydroethanolic Extract and Fractions Against *Aedes aegypti*

Cabigon, C. D. C., Callejo, P. S., Casimiro, M. A. E., Catulong, B. Z., Brevia, M. C., Cadiz, I. V. R., Capul, A. D., Casison, C. G., Cabahug, F. S. D., Belen, M. A. P., Bernardo, K. K. P., Bernardino, J. B., Castañeda, J. A., Castillo, E. E. L., Cantalejo, V. P., Jaca-Corporal, G., MD., and Tupas, Genevieve D., MD, FPPS, MMCE, FPSCEP

COLLEGE OF MEDICINE

Dengue virus infection, transmitted through *Ae. aegypti* has remained endemic in the Philippines. Eradicating this disease-carrying mosquito using larvicides has been an advantage. However, the negative impacts of the long-term use of synthetic insecticides led to the exploration of plant-based larvicides. In this study, fractionation of the hydroethanolic extract of *I. aquatica* stem was done, followed by characterization using TPC and GC-MS. The extracts were subjected further to larvicidal, fecundity, and fertility inhibitory activity testing against *Ae. aegypti*. Characterization revealed EAF has the highest TPC followed by CE, AF, and BF. GC-MS analysis revealed 16 significant peaks for CE, five major peaks for EAF and BF, and six significant peaks for AF. EAF differentially has 2-coumaric acid, and AF has para-(pentamethyldisilanyl)-benzaldehyde, where both are suggestive of being the main bioactive compounds. A dose-dependent response was observed in the larvicidal activities, with LC₅₀ revealing a highly effective fraction from EAF (8.91 ± 0.76 ppm), weakly effective extract from CE (472.60 ± 27.53 ppm), and an ineffective fraction from AF (984.13 ± 51.18 ppm) after 24h treatment. Improved LC₅₀ values were obtained after 48h treatment. A drastic fecundity inhibitory activity was obtained after the sub-lethal treatment with EAF, having an egg reduction rate of 82.80%, while CE and AF were at 72.27% and 45.73%, respectively. A decrement in the % hatchability of the eggs treated with CE ($33.67 \pm 0.09\%$), AF (30.38 ± 0.34), and EAF ($39.26 \pm 0.07\%$) was also significant in comparison with the negative control ($91.35 \pm 1.53\%$). Combining the larvicidal, fecundity, and fertility inhibitory activities obtained from EAF of the hydroethanolic extract of *I. aquatica* makes this extract a powerful agent against *Ae. aegypti*.

Keywords: *I. aquatica*, *Ae. aegypti*, larvicidal, fecundity, fertility, 2-coumaric acid

Anti-Inflammatory and Anti-Hemolytic Activity of Thyme (*Thymus vulgaris*) Leaf Ethanolic Extract on Wistar Rats

Maskarino, A. A. G., Macarimbang, J. T., Maglao, M. C. R., Magoncia, N. O. A., Manero, J. L., Mariano, J. E. T., Mariano, M. I. J., Mendoza, R. J. M. G., Mercado, C. H., Mirafior, K. E. S., Miyake, Y. A. Y., Morales, V. A. P., Morente, Z. D., Naromal, J. I. Z., and Quianzon-Manuel, M. F. L., MD, DFM

COLLEGE OF MEDICINE

The body's inflammatory and hemolytic responses contribute to the development of diseases. Thus, new drugs that can inhibit this cascade are being explored. Thyme (*Thymus vulgaris*) is considered to have medicinal properties such as antiseptic, antimicrobial, and antioxidant. This study aimed to examine the anti-inflammatory and anti-hemolytic effect of *T. vulgaris*, and determine the relationship between these two factors in terms of carrageenan-induced paw edema and red cell hemolysis, respectively. Phytochemical properties of *T. vulgaris* extract showed four out of the five metabolites, namely, flavonoids, saponins, tannins, and phenol. Only alkaloids were not detected. A total of twenty-five out of thirty (30) Wistar rats were used. Twenty-four of which were utilized for carrageenan-induced subplantar edema. On the 1st, 2nd, 3rd, and 4th hour after carrageenan injection, paw edema was measured to determine the potential anti-inflammatory properties of the plant. After determining the mean paw thickness of each group, results indicated that 50 mg/kg of plant extract demonstrated the highest potency of 69.98 and inhibition of 26.25%. In red cell hemolysis, one rat was subjected to a retro-orbital method for blood extraction. Percent hemolysis was indirectly measured with spectrophotometry by obtaining the mean absorbance after incubation. There was a slight decrease in absorbance with mean values: 1 mg/mL (3.89); 0.5 mg/mL (3.88); 0.25 mg/mL (3.84) compared to the maximum control (4.64). The changes showed insignificant effects on hemolysis. In regards to the anti-hemolytic activity of the extract, there was no positive correlation between the results of the study. The overall result of the study showed that the relationship between anti-inflammation and anti-hemolysis is directly proportional given that appropriate doses of the drug will be administered. Due to the lack of studies regarding the anti-inflammatory and anti-hemolytic activities of *T. vulgaris*, this study serves and contributes as a baseline for future research.

Keywords: *Hemolysis, Edema, Anti-inflammatory, Anti-hemolytic, Absorbance*

The Antimicrobial Activity of Cocoa (*Theobroma cacao*) Pod Husk and Bean Shell Mixed Methanolic Extract Against *Salmonella enterica*, In Vitro

Zaragoza, M. L. G. C., Uko, L. W. P., Uy Tina, A. E. M., Viacrucis, V. W. C., Villafior, F. M., Villagonzalo, C. N. M., Villagonzalo, N. F. R., Villocino, M. M., Vipinosa, N. C. C., Wahab, B. N-S. K., Warain, J. M. R., Yangyang, K. L., Ybalio, D. J. O., Zaballero, D., and Tagle, M. C., MD, PhD, MAN, RPh, RN, DFAFP, FPSECP

COLLEGE OF MEDICINE

The cocoa pod husk (CPH) and cocoa bean shell (CBS) are waste products in which antimicrobial activity is not yet established in the medical industry. Polyphenols, such as flavonoids and phenolic acids, were being utilized from the CPH and CBS, which can inhibit the growth of pathogenic bacteria from food. Hence, this study aimed to determine the antimicrobial properties of CPH and CBS mixed methanolic extract against *Salmonella enterica*. Extraction procedures, MIC determination, and susceptibility tests were done based on a study. Concentrations of 75 μ L, 50 μ L, and 25 μ L were used, with the latter showing the least turbid observation indicating a slight inhibition compared to the other extracts. However, the well diffusion susceptibility test results showed that CPH and CBS mixed methanolic extract has no inhibitory effects against *Salmonella enterica* with no zones of inhibition observed, thereby concluding a negative outcome.

Keywords: *antimicrobial, cocoa pod huck, cocoa bean shell, flavonoids, phenolic acids*

Potential In Vitro and In Vivo Antibacterial Activity of Waling-Waling (*Vanda sanderiana*) Leaves Ethanolic Extract Formulated Ointment Against *Staphylococcus aureus*

Barrios, R. M., Basa, L. M., Bautista, K. B., Bazar, S. A., Bernabe, E. J., Bernales, W. K., Biruar, A-R., Bondad, K. A., Buniel, R. V., Burgos, S., Cabig, A. M., Cagaoan, A. M., Calledo, K., Camelotes, Y. Y., and Jaca-Corporal, G., MD.

COLLEGE OF MEDICINE

Vanda sanderiana species has not been used in a pharmacological aspect despite its availability and association with various *Vanda* species that have antibacterial properties, which could then be used against bacterial pathogens whose treatment is complicated by the emergence of drug-resistant strains such as *Staphylococcus aureus*. *V. sanderiana* leaves were used to prepare plant extracts and were then subjected to preliminary qualitative phytochemical screening and Fourier-Transform Infrared Spectroscopy. The Zone of Inhibition (ZOI) and Minimum Inhibitory Concentration (MIC) against *S. aureus* were determined through an in vitro study, and acute dermal testing was done. Terpenoids, alkaloids, tannins, flavonoids, and carbohydrates were present in the extract, possessing antimicrobial activity. GCMS identified the presence of 1-(4-Hydroxy-3-methylphenyl) ethanone and 1-(3,5-Dimethoxyphenyl) ethenone, which have excellent antimicrobial properties. At high concentrations, no microorganism growth was observed. MIC on *S. aureus* was considered at a 6,250 µg/mL concentration. The difference in the mean rank of ZOI was statistically significant (p -value = 0.003). Results indicated that Mupirocin was more effective compared to Waling-waling extract. However, the Waling-waling extract is a potential antibacterial agent since it was more effective than the negative control. The starting dose for acute dermal toxicity is 2000 mg/kg. This study recommends additional testing on the constituents of Waling-waling to be run against more standards for further quantification in Gas Chromatography-Mass Spectrometry. This study also supports other studies on the potential use of 1-(3,5-Dimethoxyphenyl) ethanone and 1-(4-Hydroxy-3-methylphenyl) ethanone from Waling-waling extract.

Keywords: *Vanda sanderiana*, *Staphylococcus aureus*, Waling-waling, Antimicrobial

Antimicrobial Activity of Isolated Components of Durian (*Durio zibethinus* Murr) Wood Bark Ethanolic Extract Against Methicillin-Sensitive *Staphylococcus Aureus* (MSSA)

Baes, J. A. O., Arnejo, K. M. R., Ariquez, J. M. C., Artieda, M. A. B., Asa, R. I., Asio, J. R. C., Assung, S. A., Avaceña, M. A., Bagasbas, J. J. A., Bandolon, P. I P., Bangasin, M. N. B., Basilio, A. M. C., Belbider, D. C. D., Bernal, K. C. L., and Talampas-Abundo, M., MD

COLLEGE OF MEDICINE

Durio zibethinus is an exotic fruit endemic to tropical countries such as the Philippines. Numerous studies have proven that it exhibits antimicrobial activities against *Propionibacterium acnes*, *Escherichia coli*, *Salmonella typhosa*, *Staphylococcus aureus*, *Enterococcus faecalis*, *Pseudomonas aeruginosa*, and *Klebsiella pneumonia*. This study focuses on the antimicrobial activity of *D. zibethinus* Murr. wood bark isolated components against Methicillin-sensitive *S. aureus*. The components were isolated using Quercetin and Gallic acid as reference standards through HPLC analysis. The isolated components did not exhibit any antimicrobial activity against Methicillin-sensitive *S. aureus*, exemplified by the absence of a zone of inhibitions using the agar well diffusion method. This is in contrast to other studies which showed antimicrobial activity against *S. aureus*. However, a significant improvement in ZOI with Isolate 1 from Gallic acid standard was demonstrated when combined with Penicillin G. There were numerous contributory factors recognized by the researchers that may have resulted in the negative findings in the study—storage, time interval between component isolation and antimicrobial assay, plant extract concentration, HPLC reference standards, and the solvent used for plant extraction. Furthermore, it can be concluded that the isolated components used in the study were not responsible for the antimicrobial activity of *D. zibethinus*. For this reason, other components of the wood bark extract can be isolated and tested for antimicrobial activity.

Keywords: *Durio zibethinus*, *Durian wood bark*, *Durian antimicrobial*, *Staphylococcus aureus*

In Vitro Xanthine Oxidase Inhibitory Activity of Aqueous and Ethanolic Alugbati (*Basella alba*) Leaf Extracts

Unson, E. R. O., Toh, C. I. L., Tomawis, F. J. S., Toribio, L. L. R., Torres, K. N. S., Torro, M. A. B., Tugay, D. E., Urbina, D. E. C., Usodan, M. R. A., Uy, F. A. M., Villarba, A. M. N., Walid, A. D., Wasil, R. L. C., Zita, H. L. C., and Lao-Polestico, R. R., MD, FPAFP

COLLEGE OF MEDICINE

This study evaluates the in vitro xanthine oxidase inhibiting the activity of the aqueous and ethanolic leaf extracts of alugbati (*Basella alba*). The enzyme xanthine oxidase facilitates the conversion of xanthine, a purine metabolite, to uric acid, which in excess causes hyperuricemia and, in turn, gouty arthritis. Epidemiological studies suggest that hyperuricemia and gouty arthritis causes an increasing disease burden worldwide. Hyperuricemia and gout are commonly treated with xanthine oxidase inhibitor drugs such as allopurinol, colchicine, and febuxostat. However, these drugs have been reported to cause serious side effects. Hence, there is a need to search for alternative treatments against hyperuricemia and gout without adverse side effects. Plant polyphenols such as flavonoids, phenols, and saponins have proven potency in inhibiting xanthine oxidase. Since alugbati leaves have these phytochemicals, it is imperative to test its in vitro inhibiting potency against xanthine oxidase. Therefore, an experimental type of design was used in this study. The low (25%), medium (50%), high (85%) concentrations of the aqueous and ethanolic leaf extracts of *B. alba* were subjected to xanthine oxidase inhibition assay and was measured spectrophotometrically through kinetic measurement of uric acid absorbance at 290 nm. The percent inhibition and IC₅₀ values were then calculated. The experiment results showed the 85% ethanolic extract having the same effect as allopurinol (positive control) in limiting the formation of uric acid in the mean final absorbance. However, none of the samples have the same percent inhibition as allopurinol. These results suggest the inefficacy of *B. alba* aqueous and ethanolic leaf extracts in inhibiting xanthine oxidase.

Keywords: *Basella alba*, hyperuricemia, gout, xanthine oxidase, aqueous extract, ethanolic extract

Potential Antibacterial Effect of Malunggay (*Moringa oleifera*) Extract Against *Listeria monocytogenes* and *Escherichia coli*

Ojeda, I. P. M., Mohammadsali, A-k. J., Mudanza, J. J., Nacar, O. P. G., Namion, D. M. H., Nequinto, A. D. R., Ngo, N. D., Ogawa, M. J., Omelda, J. I. M., Ortizo, H. L. C., Pacheco, E. V., Palado, J. A. F., Palma, R. S. S., Pama, J. R. D., and Talampas-Abundo, M., MD

COLLEGE OF MEDICINE

Gastroenteritis is a bacterial disease acquired predominantly through contaminated food and water ingestion. The ailment can be severe, particularly in *Listeria monocytogenes* and *Escherichia coli*. Prevention may be realized by using plants like *Moringa oleifera* (locally known as Malunggay), with its abundant flavonols, such as quercetin, known for their potent antibacterial activity. The study intended to determine the potential antibacterial effect of *M. oleifera* extract against *L. monocytogenes* and *E. coli*. The study used *M. oleifera* plants from Mati, Davao Oriental. Extraction, physical and chemical tests, antibacterial assay, and microplate reading were performed at Davao Medical School Foundation, Inc. Rotary evaporation and microbiological testing were done at DOST XI, Davao City, and the University of Immaculate Conception, Davao City, respectively. The research utilized an experimental design wherein the antibacterial effect of the flavonol extract from the plant's leaves and bark in various concentrations was tested against *L. monocytogenes* and *E. coli* biomasses, using optical density measurements from microtiter plate assays. Positive control made use of co-trimoxazole and ampicillin, and distilled water was used for negative control. The results demonstrated a significant difference in optical densities of the bacterial biomasses before and after treatment with the extract and with antibacterial activity comparable to that of ampicillin and co-trimoxazole, specifically at treatment concentrations of 1.56mg, 3.125mg, 6.25mg, 12.5mg, and 25mg/mL. The researchers conclude that *M. oleifera* extract is a potential antibacterial agent against *L. monocytogenes* and *E. coli* and may be significant in preventing gastroenteritis.

Keywords: *Moringa*, *Malunggay*, *Gastroenteritis*, *Flavonols*, *L. monocytogenes*, *E. coli*

Serum Uric Acid Lowering Activity of Crude Ethanol Extract of *Annona squamosa* Fruit on Pyrazinamide Induced Hyperuricemic Wistar Rats

Garces, G. J. L., Elleombe, J. R., Encarnacion, D. D., Espino, S. M. S., Estuart, C. M. T., Etulle, N. M. Q., Evangelio, P. G. T., Francisco, I. L. R., Fuencocillo, K. F. T., Gabutero, J. M. M., Ganiera, P. M. C., Goh, R. A., Gonzaga, J. S., Gonzales, A. N. A., and Lim, C. J. M., MD

COLLEGE OF MEDICINE

A purine-rich diet can cause hyperuricemia, a condition characterized by elevated uric acid levels that can lead to joint inflammation or gout. *Annona squamosa* contains flavonoids and alkaloids that inhibit xanthine oxidase, lowering uric acid production. A non-randomized controlled experiment with 30 Wistar rats divided into four groups was used to determine whether *A. squamosa* fruit extract has significant blood uric acid lowering properties compared to allopurinol. Phytochemical screening reports the presence of flavonoids. Fourier-Transform Infrared Spectroscopy (FTIR) analysis reported the presence of hydroxyl group flavone, quercetin, myricetin, and morin. With High-Performance liquid chromatography (HPLC), the *A. squamosa* extract did not show the desired wavelength for the detection of quercetin. Pyrazinamide was used to induce hyperuricemia. Allopurinol, 10 mg/kg (control), as well as low (50 mg/kg), medium (100 mg/kg), and high (200 mg/kg) doses of *A. squamosa* extract, were administered. Baseline blood uric acid levels were measured and then repeated after three days of treatment. Statistical analysis was used on each concentration of *Atis* plant extract to see if serum uric acid levels had been reduced three days after treatment. Result suggests a decrease in the levels of the three treatment groups. Also, results revealed no significant difference in uric acid reduction between the control and treatment groups.

Keywords: *Xanthine oxidase, Flavonoids, Alkaloids, Annona squamosa, FTIR, HPLC*

Comparative Study on the HMG-CoA Reductase Activity of Saluyot Leaf (*Corchorus olitorius*) and Achiote Seed (*Bixa orellana*) Extracts In Vitro

Codilla, J. C. B., Buat, J. H. T., Buhay, L. N. M., Butil, C. M. J. G., Callejo, J. M. R., Capangpangan, P. I. S., Capuno, A. M. A., Carim, S. K. G., Carillo, D. M. A., Castañeda, E. A. J., Claud, A. Z. A., Clavel, Z. J. F., Concepcion, C. J. T., Cornell, A. D. O., and Jaca-Corporal, G., MD, DPBA

COLLEGE OF MEDICINE

Lipid disorders and consequent arteriosclerosis lead to an increased risk of cardiovascular events. Synthetic HMG-CoA reductase inhibitors such as statins are implicated with side effects, thus searching for inhibitors from plant sources. In vivo studies of various plants have exhibited hypocholesterolemia. This study evaluated the HMG-CoA reductase inhibitory activity of *Corchorus olitorius* and *Bixa orellana* via spectrophotometric assay. The plants' percent (%) inhibition was then compared with atorvastatin. From the results, this study cannot conclude that there is at least one pair of mean percent inhibition that has a significant difference.

Keywords: *Saluyot leaf, achiote seed, reductase activity, percent inhibition, atorvastatin*

Perceived Academic Stress among Medical Students in Davao Medical School Foundation

Labasano, C. C. C., Labite, A., Lacorda, J. M. R., Lacuna, S. Y. C., Lamprea, L. D. M., Lao, K. S. M., Larong, A., Lauzon, K. M., Leano, I. K. C., Libatique, J. P. L., Lim, C. A. Q., Lu, L. G. M., Luy, J. R. P., Macaya, R. M. C., Magtulis, R. L. S., Maing, F. A., Mallilay, K. P. A., Maquindang, J. V. B., and Miyake, C., MD

COLLEGE OF MEDICINE

Medical schools are believed to have a rigid, competitive, and strict curriculum, and numerous studies have concluded that medical students are prone to very high levels of stress. Over the last decade, numerous studies have been conducted to prove this. Therefore, the researchers aimed to determine the Perceived Academic Stress among medical students in Davao Medical School Foundation across year levels. The adapted Perceived Academic Stress Scale from a study was used to measure the variable. The survey gathered 357 respondents from the first year to the fourth year. Results showed that there is indeed a significant difference in the perceived academic stress scores across year levels. Furthermore, it shows that the first and second years have significantly higher perceived academic stress than the other year levels.

Keywords: *academic stress, medicine course, medical students, Davao City*

Health-Related Quality of Life Changes of Patients who Underwent Renal Transplantation

Dullano, S. D., Dela Tiña, J. A., Cabrera, Z. W. L., Calamba, S. J. D., Dilangalen, D. C., Cael, V. G. A., Diokno, I. S. T., Disoma, N. S., Dalisay, A. D. T., Delgra, R. M., Diocolano, B. H. S., Dairo, C. M. B., Castillo, L. M., Dalinan, A. H., Decipulo, E. J., Castillo, F. D. A., and Diaz, I. R.

COLLEGE OF MEDICINE

End-Stage Renal Disease (ESRD) has become a public health concern with an increasing number of more than 35,000 Filipino patients maintained on hemodialysis before kidney transplantation. Although the need for kidney transplantations (KT) in the country has been increasing, catering to the needs of all Filipino ESRD patients is far from ideal. This study aimed to determine the Health-Related Quality of Life (HRQoL) changes of patients who underwent KT using a modified version of the Short Form-36 Health Survey (SF-36). A total of 46 Filipino post-KT patients were included. Results showed a significant improvement in the overall and all components of health-related quality of life, namely: 1) Physical Functioning, Role: Physical, Bodily Pain, General Health, and Vitality; and 2) Social Functioning, Role: Emotional, and Mental Health (each had a p -value < 0.0001). Furthermore, among all the socio-clinical demographic profiles, the only occupation had a significant association with the role-physical component (p -value = 0.0206), while age, sex, highest educational attainment, years diagnosed with ESRD, years undergoing dialysis, and other illnesses had none. The findings of this study prove the importance of KT in the medical management of ESRD patients – giving them another chance of fulfilling life. However, misconceptions and other factors must be resolved to maximize the benefits of the treatment thoroughly and cater to its rising demand.

Keywords: *health-related quality of life, kidney transplantation, end-stage renal disease, SF-36*

Prevalence of Menstrual Irregularities and their Associated Factors in National Medicine Department (NMD) Students of Davao Medical School Foundation, Inc. (DMSFI) during the Coronavirus 2019 Pandemic

Abbil, J. C., Abris, E. M. S., Acosta, V. M. O., Aguilar, J. K. T., Aguiton, D. C. E., Alarde, N. G. F. C., Alay, C. N. L., Arenas, J. D., Asoque, J. M., Bacon, T. A. M. G., Balayo, K. B. C., Balayo, K. B. C., Baraguir, A-R. J. M., Barberan, K. A., Barcena, M. K. L., Barrientos, J. M. A., Berguia, J. T., and Ayco, M. J. D., MD, FPAFP, FPSHPM

COLLEGE OF MEDICINE

The global pandemic has been affecting women's menstrual health, especially the medical students who are continuously exposed to different stressors. This study explored the prevalence of menstrual irregularities among the National Medicine Department (NMD) female medical students of Davao Medical School Foundation enrolled in S.Y. 2020-2021. A total of 248 participants were involved in this study, with ages ranging from 18 to 26 years old. A cross-sectional research design was utilized in this study, and a survey was conducted among the participants. Data collection was conducted online through telegram, electronic mail, and google forms. The body mass index, physical exercise, junk food consumption, average sleep hours were identified, as well as their menstrual blood loss and their perception of stress. Results showed the following factors affecting menstrual irregularities, 59.18% of participants with menstrual irregularity had moderate stress levels and 38.78% had a high-stress level, 10.20% were underweight, 22.45% overweight, and 6.12% obese female, 55.1% of participants with menstrual irregularity only do the exercise once a week to none at all, 95.9% of participants has an average of fewer than eight hours of sleep. 44.9% of which were those who got an average of six to seven hours of sleep. Similarly, 44.9% get only four to five hours of sleep per night, 6.12% slept an average of two to three hours per night. The presence of menstrual irregularity was not associated with stress levels and BMI, or there is insufficient data to prove the association. It was observed that the amount of sleeping hours and exercise frequency per week has an inverse correlation to the presence of menstrual irregularity. Given the data collection and interpretation, there is no significant relationship between the independent variables against menstrual irregularity.

Keywords: *menstruation irregularity, medicine students, sleeping hours, exercise*

Association of Physical Activity and Prolonged Sitting with Musculoskeletal Discomfort of Medical Students During the COVID-19 Pandemic

Medodias, P. M., Modin, M. J., Montales, G. J., Mosquete, F. L. C., Navalta, B., Nul, J., Ono-on, V. A., Pablo, J., Palayon, K. M., Pamplona, A. V., Panambo, T. H., Penera, A. III, Penoliar, K., Pillerin, D. M. V., Pinter, G. B., Platil, A. C., Ponciano, L. J., Priego, S., Racoma, V. R., and Raquid, C. J. M., MD

COLLEGE OF MEDICINE

COVID-19 pandemic caused medical schools to shift to online classes. This setup has led medical students to pursue a sedentary lifestyle characterized by prolonged sitting and decreased physical activity—this study aimed at determining the association of sitting duration and physical activity with musculoskeletal discomfort. A cross-sectional survey was conducted among DMSFI first-year medical (NMD) students using a sociodemographic and health history questionnaire, International Physical Activity Questionnaire Short Form (IPAQ-SF), and Nordic Musculoskeletal Questionnaire (NMQ). Results show that 73% of the students have low physical activity levels and sit twice a day for about 7.82 hours. The most common experienced musculoskeletal discomfort involves the neck (79.7%) and lower back (77.7%) regions. However, no significant association was found among the variables.

Keywords: *COVID-19, medicine course, physical activity, musculoskeletal discomfort*

Aging Profile of the Older People (OP) in Davao City

Idong, A. G. B., Emboscado, M. L. A., Erese, K. A. L., Espedido, J. P. P., Feril, R. D. C., Flores, M. A., Garcia, K. N. T., Gonzales, G. M. D., Guillano, N. A., Halili, J. L. D., Hilario, A. L. M., Hora, C. D. D., Ibrahim, B. N. M., Jalad, K. H., Jimenez, R. P., Kahulugan, M. G., Kaur, Y., and Derecho, C. M. P., MD, RN, FPOGS

COLLEGE OF MEDICINE

With the rapid growth of the population of older people in the Philippines, the study aimed to determine the social, health, economic and demographic changes among Davao City using a descriptive cross-sectional study. A clinico-sociodemographic survey and OPQOL-35 questionnaire from Mapi Research Trust was used to assess the aging profile of older people through online video call interview and their guardians. The participants ($n = 30$), the youngest person was 60, and the oldest was 95 years old. The majority of participants came from the 60 to 64 and 65 to 69 age brackets and maintain an active lifestyle. Many of this demographic have two to three children, not older than 50 years old, that still reside with them, and few have parents at an average of 90 ± 5 years old that also live with them. Most of the participants stated that they have two to three siblings above 60 years old. Several of them have a pension as their source of income and have real estate as their assets and liabilities. After retirement, most of them have no work and a senior citizen ID as a government benefit. Hypertension is the most common medical illness and blurred vision for disabilities. The OPs' QoL found out that the best QoL is in Home and Neighborhood and poor in health. The results concluded that multiple factors affect the aging process and certainly need to create more opportunities for them to maintain their sense of purpose and have a smooth transition in their later life.

Keywords: *aging, older people, clinico-sociodemographic, quality of life*

COVID-19 Transmission and Potential Meteorological Factors: Selected Philippine Regions

Abduho, A. T., Abdurajak, A. W-T. Y., Abila, L. E. T., Abpi, B. A. A. A., Abubakar, F. N. I., Acoba, J. F. T., Agao-Agao, L. A. T., Alfad, F. L., Aliling, P. D. C., Amasol, R. A. B., Amilhamja, A. J., Arao, Y. M. C. Y., Armada, D. M. S., Asim, A. S., Bagul, A. A., Baligia, M. R. Y., Barrometro, C. S., Basalo, I. J. G., Basilio, A. M., Beltran, J. A. A., and Derecho, C. M. P., MD, RN, FPOGS

COLLEGE OF MEDICINE

With the global pandemic, COVID-19 has affected thousands of individuals. The demand to extrapolate the virus' behavior from different meteorological factors such as temperature, wind speed and humidity play a significant role in the transmission. Certain studies claim that high temperature decreases the transmission of COVID-19. The Philippines' climate is tropical maritime and characterized by high temperature and humidity. This study uses the Correlational Study Design. The study aimed to determine the COVID-19 transmission in regions in the Philippines and its potential meteorological factors. The data showed that the highest number of COVID-19 cases was in NCR, followed by Region IV-A, Region VII, Region XI, Region V, Region IV-B, and BARMM. Furthermore, the results showed that the increase in temperature of the majority of the regions increased the transmission of COVID-19 cases. In addition, the decrease in humidity increased in the positive COVID-19 cases. Lastly, the data revealed no correlation between wind speed and the COVID-19 cases. The study concludes that temperature has a positive correlation, humidity has a negative correlation, and wind speed with the number of COVID-19 cases has no significant correlation.

Keywords: *COVID-19, meteorological factors, Philippines*

Type II Diabetes Risk Assessment in First Year NMD Students of Davao Medical School Foundation

Bautista, C. R. M., Abdul-Aziz, R. M., Aguirre, N. E. L., Anima, C. C. M., Ang, A. P. G., Bacaron, J. M. A., Badang, P. C. C., Bagayas, R. C. S., Bandonon, A. L., Bañez, J. M. G., Barcelona, P. J., Baruiz, A. M., and Llanes-Bisnar, L., MD, FPSP, AFPCP

COLLEGE OF MEDICINE

One person dies of diabetes every six seconds and its prevalence in the Philippines increases. While common in older adults, Type II Diabetes Mellitus (T2DM) diagnosis is steadily increasing among adolescents and young adults worldwide. As population-based screening for young-onset T2DM is currently not recommended, a gap in case-to-data exists in many parts of the world, including the Philippines. This descriptive cross-sectional study uses the Finnish Diabetes Risk Score (FINDRISC), a non-laboratory screening tool with validated use among the Asian population, including Filipinos, to estimate the risk of T2DM among the first-year NMD students DMSF. The results were analyzed using Bivariate Analysis where among the 251 respondents (mean age 23.4), 175 (69.7%) had a FINDRISC score of less than seven (7), indicating a low risk of developing T2DM, 59 (23.6%) scored 7-11 with slightly elevated risk, 13 (5.2%) scored 12-14 in moderate risk, and four (1.5%) had a score of 15-20 indicating a high risk for developing T2DM within ten years (mean score of six). The study concludes that there is a risk of developing T2DM among the First Year NMD Students of Davao Medical School Foundation enrolled for A.Y. 2020 -2021 when assessed using the Finnish Diabetes Risk Score (FINDRISC) questionnaire.

Keywords: *diabetes, risk assessment, medical students, Davao City*

Correlation of Stress and Cardiovascular Disease Risk Factor among the Davao Private Duty Nurses During the COVID-19 Pandemic

Abarquez, C. L. J., Abdurahman, A. P., Abique, A. B., Advincula, B. H. C. N., Aguacito, D. M., Ahalul, S. T., Alingcomot, L. M. S., Alonzo, A. J. T., Amihan, M. E. I. C., Añabeza, J. L., Andong, B. Y. D., Aranas, A. D. B., Aristosa, E. B. F., Arnao, K. A., Baguindali, A. G., Balamad, M. K. M., Balmatero, K. I., Basan, G. F. O., and Ayco, M. J. D., MD, FPAFP, FPSHPM

COLLEGE OF MEDICINE

With stress, certain hormones trigger certain physiological cascades and cause alterations in homeostasis. Sustained sympathetic activity and continued effects of the stressors eventually lead to comorbidities such as obesity and cardiovascular diseases. The current COVID-19 pandemic significantly altered the normal function of society and mostly affected healthcare workers, especially nurses. The objective of this study was to determine the relationship between the stress score of the private duty nurses (PDNs) in Davao City during the COVID-19 pandemic to the cardiovascular disease risk factors (LDL, HDL cholesterol, total cholesterol, blood pressure, BMI, age, sex, and race). The validated Pandemic-Related PSS of COVID-19 and the ASCVD Risk Estimator Plus by the American College of Cardiology were used. The sample size was 52 respondents (female = 42; male = 10). Upon computation, the results showed insignificant low positive relationships between the stress scores and the respondents' age, systolic blood pressure, diastolic blood pressure, lifetime, and optimal ASCVD risk scores. The *p*-values of all the factors were above 0.05, these correlations are not statistically significant. The results may be due to the mental and physical adaptations of the PDNs throughout the pandemic. Furthermore, there would be a high probability of determining a good relationship between the variables if the sample size would increase significantly. But due to restrictions and limitations, the researchers could not do so. Nevertheless, this study could deliver data utilized by those who would want to tread the same waters.

Keywords: *correlation, stress, cardiovascular disease, nurses, COVID-19*

Effects of Malunggay (*Moringa oleifera*) Capsule on Fasting Blood Sugar Levels among Prediabetic Adult Volunteers in Davao City

Kabalu, A. N. D., Hernando, J. J. V., Hinampas, A. J. D., Ilagan, S. B. P., Ismi, A. A., Joal, R. D., Jumawan, N. O. A., Junsay, J. P. N., Karamihan, K. A. D., Labor, N. G. P., Lallen, D. A., Lim, S. J. V., Lo, K. R. S., Lucas, E. IV A., Lucero, G. A. B., Mainopaz, W. III M., Makakena, A-F. B., Manda, J. D. E., Mapatac, T. C., Maraki, R. E. A., Maramion, J. F. R., and Abrina-Rubiato, S., MD, FPAFP, MPH

COLLEGE OF MEDICINE

The increasing number of individuals with prediabetes developing diabetes has been progressing at an alarming rate worldwide. This event has driven the interest in utilizing Malunggay (*Moringa oleifera*) as an adjunct treatment for prediabetes. In this study, *M. oleifera* was used to determine its effects on fasting blood sugar (FBS) levels among prediabetic adult volunteers ages 20-70 years old and with a normal Body Mass Index (BMI) (18.5-24.9 kg/m²). Out of the 70 participants tested for pre-intervention FBS, the study found only 40 prediabetics. Four (4) of them have withdrawn from the study before receiving the intervention, leading to a final total of 36 participants. The study used the experimental method, snowball sampling, and single-blind approach. The experimental group (18 participants) received Malunggay capsules, while the control group (18 participants) received placebo capsules. The participants took two capsules pre-breakfast and two capsules pre-dinner for two weeks. The study then measured the post-intervention FBS levels of the participants after the intervention. Paired sample *t*-test results revealed a significant difference between the pre-intervention and post-intervention FBS levels (p -value = 0.0001; highly significant), implying a significant decrease in the FBS of participants from both groups. However, Independent sample *t*-test results showed an insignificant difference in the post-intervention FBS between the two groups (p -value = 0.298). The findings of this study may contribute to the possible treatments and medication, and other anti-hyperglycemic agents available in the market.

Keywords: *Moringa oleifera*, prediabetes, anti-hyperglycemic, FBS level, adjunct

Knowledge, Attitudes, and Practices on Intake of Dietary Supplements among Respondents Taking Angiotensin II Receptor Blockers in Pigcawayan, North Cotabato

Escleto, K. S., Dayon, K. D. H., Dela Cruz, A. M. D., Dela Serna, B. J. P., Deligero, P. G. C., Difunturom, F. G. J., Dimaandal, K. A. B., Dy, A. G. A., Ebus, A. M., Empiel, R. M. V., Espiritu, A. M., Fabian, J. O. D., Felonia, L. R. G., Fernandez, K. F. M., Flores, G. C. Z., Galay, A. I. J., Galope, S. R. V., Garcia, A. J. S., Gardose, H. M. J., Gonzales, T. G. S., Gringco, M. B., and Emphasis, H. J. O., MD

COLLEGE OF MEDICINE

The rise in dietary supplements has been continuous in the past decades and is seeing no decline. These are, in some instances, used concomitantly with prescribed medications. A descriptive cross-sectional study was used to determine the knowledge, attitudes, and practices of respondents in Pigcawayan, North Cotabato, who are using dietary supplements along with their prescribed medication, specifically Angiotensin II Receptor Blockers. The investigators crafted the questionnaire, which had undergone validation and reliability testing through a pilot study. Non-probability snowball sampling was used, and the study was conducted for five days at the three participating pharmacies in Pigcawayan, North Cotabato. The data gathered were then encoded into Microsoft excel and analyzed using SPSS (Statistical Package for the Social Sciences). A few key findings of the study are attributed to respondents' attitudes, wherein 99% prioritized the use of ARBs over dietary supplements, in contrast to previous studies that revealed that respondents prioritized dietary supplements instead of prescribed medicines. Another contrasting finding was how often respondents disclosed their use of nutritional supplements to doctors, at 68% and 24%, respectively. These distinct findings may be due to the difference in the study setting. Most of the literature is from foreign countries, and only a few were conducted in the urban areas in the Philippines, all of which, in contrast to the study's rural setting. The study concludes that most respondents prioritize their ARBs due to the awareness that these prescription medications are essential in treating hypertension.

Keywords: *Dietary Supplements, Angiotensin II Receptor Blockers (ARBs), Hypertension, Philippines*

Occupational Stress in Relation to Perception of Local Government Response to the COVID-19 Pandemic among Healthcare Workers in Digos City: A Correlational Study

Mondia, B. N. M. S., Marasigan, H. K. M., Mariwa, S. A., Masukat, H. Jr. A., Maynacao, S. C., Mettammel, M. A. R., Montano, R. A. N., Natividad, E. M. C., Nuenay, D. F. M., Ocliaso, M. T., Omay, A. C., Paalan, G. B., Paden, V. A. L., Pama, J. P. F., Pande, D. C. T., Paña, L. A., Penaso, S. G., Peno, J. B., Pinili, F. V., and Salumbides, M. C., MD

COLLEGE OF MEDICINE

The COVID-19 outbreak has impacted the mental health of many healthcare workers (HCWs) handling COVID-19 patients such that they are burdened psychologically and physically, affecting their overall wellness. The local government responded to the pandemic to contain the infection and help provide for the needs of HWCs affected socially and economically. In this regard, the researchers conducted a correlational study between the HWCs' occupational stress and their perception of government response to the COVID-19 pandemic. Specifically, the respondents are the doctors and nurses directly caring for COVID-19 admitted patients in Davao del Sur Provincial Hospital in Digos City. The study used the Health Care Workers' Stress Related to Caring for Patients with Highly Infectious Disease Scale to generate the perceived stress score (PSS). The COVID-SCORE 10 questionnaire was used to measure the satisfaction of perception on the local government's response and generated COVID-SCOREs. Perceived Stress Score (PSS) and COVID-SCOREs were correlated to determine the relationship. The study showed that among 19 participants, 11 were above 32 years old, and 8 were below 32 years old. However, there were more nurses (14) than doctors (5). Age and sex have no significant effect on the stress level of Health Care Workers. However, occupation was a significant factor in the stress of health care workers. Doctors' PSS mean score is 39.80 (moderate stress), while nurses' PSS mean score is 28.36 (low stress). The average perceived stress score (PSS) of HCWs was 31.37 (moderate stress), and the average COVID-SCOREs was 78.19 (satisfaction towards government response). Our study showed no significant correlation between HWCs' occupational stress and perceived local government response among in Digos City.

Keywords: *mental health, occupational stress, COVID-19, healthcare workers*

Effect of Mindfulness on the Levels of Burnout on First and Second Year Medical Students of Davao Medical School Foundation, Inc.

Panimdim, G. G., Pascual, C. J. C., Pascual, E. P., Pascual, S. M. E., Pilapil, M. R. C., Posas, Y. Y. S., Pranza, M. J. M., Quisido, D. P. S., Ramirez, D. R. S., Riña, M. G. E., Salazar, A. R. Y., Salera, K. D. D., Secuya, G. F., Silud, K. I. L., Suarez, P. M. A., Sulit, C. R. M., and Lao-Polestico, R. R., MD, FPAFP

COLLEGE OF MEDICINE

The burnout epidemic becomes increasingly more alarming each year among medical students. On top of a heavy academic workload, students must endure lack of sleep as well as personal stressors that contribute to the burnout phenomenon. Using the Maslach Burnout Inventory, an experimental study was conducted to assess the level of burnout among the first- and second-year students at Davao Medical School Foundation Inc. Included in the study was a mindfulness intervention program that aimed to reduce the symptoms of burnout among the participants included in the study. However, using a *t*-test showed no significant decrease in the symptoms of burnout among the participants. Other factors contributed to the outcome of the intervention, such as the participants' internet connections, the conduciveness of the participants' location for the program, and the participants' availability with the intervention schedule. These factors can be all attributed to the time constraints of this study. Should this study be further continued, the researchers recommend an extended time frame to garner the full effects of the mindfulness-based intervention program. Establishing the relationship of mindfulness on burnout among medical students raises its significance in creating a healthier coping mechanism for students.

Keywords: *mindfulness, burnout, medical students, physiology*

Prevalence of Digital Eye Strain among First Year Medical Students in Davao Medical School Foundation, Inc.

Gealon, S. D., Digal, C. L., Digal, V. Q. S, Dilangalen, D. C., Dimaukom, A. A., Dumanig, D. J. P., Embodo, K. J. B., Endrina, J. C. G., Escobar, D. F. E., Estocapio, N. A., Falcasantos, J. M., Fernandez, K. P. D., Galino, C. F., Gapol, J. J. B., Garcia, F. R. R., Grana, L. G. B., Hernan, K. R. N. C., Hombre, R. J. O., Inguillo, V. E. B., Jacob, D. E. E., and Nobleza, G. G., MD

COLLEGE OF MEDICINE

The COVID-19 pandemic has forced medical schools to shift to an online learning setup. These changes could be detrimental to eye health. The objective of this study was to determine the prevalence of Digital Eye Strain (DES) among first-year medical students at Davao Medical School Foundation, Inc. The study used a descriptive cross-sectional design. 154 First-year Medical students qualified and participated in the study. Data gathering was an adapted survey questionnaire. The data acquired included demographics such as age and sex, type of device used, duration of exposure, and signs and symptoms manifested. The data obtained was analyzed using SPSS. Out of 154 participants, 93 used desktops, 148 used laptops, 93 used tablets, and 122 used android and apple phones. The majority of the participants are exposed to screens of those devices for more than six hours. Ocular symptoms are manifested in the responses of the participants. Headaches and eye fatigue are the most common symptoms with percentage shares of 64.9% and 61%, respectively. Visual symptoms have also manifested with blurred vision as the most common with 32.5%, while double vision with 4.5% is the least common. Furthermore, 74% suffered from musculoskeletal symptoms as manifested by experienced pain in the neck. Overall, 67% of the participants manifested three or more symptoms of DES. The researchers suggest using this study to support related and future studies and would benefit the general public by providing awareness and knowledge about Digital Eyestrain.

Keywords: *Digital Eye Strain (DES), ocular symptoms, visual symptoms, descriptive cross-sectional design, Davao Medical School Foundation, Inc.*

Fatigue Assessment among First Year Medical Students of DMSFI using Multidimensional Fatigue Inventory (MFI)

Hofeleña, R. D. B., Duay, D. T., Dugho, K. D., Dumarpa, P. S. N. M., Ebon, K. D., Elpa, M. D. F., Enguito, R. Z. C., Faelnar, J. F., Fuerte, D. N. C., Ligsanan, K. M., Gales, A. V., Gualberto, S. R. S., Javier, J. R. A., Javier, R. F. A., Jordan, V. V. G., Josol, G. F. A., Libres, L. M., and Lim, M. V., MD

COLLEGE OF MEDICINE

The COVID-19 pandemic and its accompanying restrictions in our daily living shifted the mechanics of modern learning. The imposed restrictions resulted in the sudden online learning platform in higher educational institutions like Davao Medical School Foundation, Inc. (DMSFI). This sudden transition to online platforms has led to the popular usage of the slang term Zoom fatigue or video conferencing fatigue, which is believed to be caused by over usage of video conferencing apps. To address this issue, the investigators conducted a cross-sectional fatigue assessment in 1st-year medicine students of DMSFI using the Multidimensional Fatigue Inventory (MFI) using a descriptive study design with a correlational approach. Results of the fatigue assessment in the total of 95 respondents showed higher levels of Mental Fatigue than Physical Fatigue, with General Fatigue being the most severe. The General and Physical Fatigue subscale also showed a moderate correlation, while Mental and Physical Fatigue subscales showed a weak correlation. Distance learning 1st-year medicine students also scored higher in all the fatigue subscales of MFI versus Parkinson's disease patients of another study that also used MFI.

Keywords: *Fatigue assessment, distance learning, multidimensional fatigue inventory, COVID-19, video conferencing*

Knowledge, Social Pressure, and Risk Perception on COVID-19 among Women of Lawig Bubai, Inc. in Davao City

Palermo, L. C., Pamaylaon, B. L., Pamongcales, K. L. M., Panal, H. N., and Lindo-Valdez, B. M. K.

COLLEGE OF MEDICINE

The coronavirus 2019, better known as the COVID-19 pandemic, has led to a significant loss of human life globally and has caused many challenges not only to public health but also to the economy and the different workforces in the community. This study specifically aimed to assess the knowledge, social pressure, and risk perception on COVID-19 disease among active prostituted women of Lawig Bubai Incorporated in Davao City. This descriptive research utilized a set of questionnaires specifically for the study. The researchers gave it to 15 respondents through non-probability purposive sampling from a list of active prostituted women of Lawig Bubai Incorporated. Researchers obtained informed consent from the respondents before data collection. Results showed that none of the respondents knew about the incubation period of COVID-19 and had moderate knowledge about COVID-19. Furthermore, social pressure was not significant such that all the respondents do not have any family members or friends who have had COVID-19. However, the respondents showed a high degree of risk perception. Further correlational studies are then recommended to analyze further the data gathered in this study.

Keywords: *community medicine, active sex workers, knowledge, social pressure, risk perception, COVID-19, descriptive study, Davao City*

Unmet Family Planning Needs among Selected Reproductive Aged Women (15 to 49 years old) in Davao City

Retiza, S. S. S., Roche, C. M., Roferos, R. F., Rojo, J. E., Romancap, J., and Lindo, J. S. A., MD

COLLEGE OF MEDICINE

Several strategies and programs to improve family planning are implemented in Davao City. However, unmet family planning remains high. This study aimed to describe the context of Women of Reproductive Age (15 to 49 years old) in Davao City and their unmet family planning needs, to describe their knowledge about sexual reproductive health attitudes, influences, and awareness and access regarding family planning methods. A quantitative descriptive study design was applied using the Demographic and Household Survey (DHS) and the Health Pregnancy Knowledge Survey (HPKS) as the primary survey tools. The selection of the respondents was made through total population sampling technique with the criteria of women who were of reproductive age, pregnant (married or in a union), whose pregnancies are unwanted or mistimed at the time of conception, and postpartum amenorrheic (married or in partnership) not using family planning or whose last pregnancy was unwanted or mistimed. Data collection was done through phone call interviews, with the consent of 30 reproductive-aged women from Bunawan Poblacion, Davao City. The findings showed that most of them were knowledgeable about the purpose and effects of family planning and were unaffected by their peer's influences regarding contraceptives. However, most were not currently using any methods to raise family planning methods, mainly due to health concerns and side effects. It is noteworthy that barriers such as social norms prevent them from accessing family planning services. More than half of the respondents were under the poverty threshold. They do not prioritize availing and buying contraceptives since their time and budget limit them from doing so.

Keywords: *women of reproductive age, unmet family needs, Demographic and Household Survey, Health Pregnancy Knowledge Survey, quantitative descriptive design, Davao City*

Assessment of the Quality of Prenatal Care in Agdao District: A Descriptive Study

Pinsoy, M. M., Pinili, J. L. M. B., Rabat, V., Rabor, K. A., and Fabian, J. C., MD

COLLEGE OF MEDICINE

This study assessed the quality of prenatal care of selected women who were of reproductive age (15 to 29 years old) living within the Agdao District of Davao City. This study took into account the Pregnancy and Maternity Care Patients' Experiences Questionnaire (PreMaPEQ) and the Pregnancy and Postnatal Care questionnaire by the Philippines National Demographic and Health Survey from the Philippine Statistics Authority to formulate a questionnaire suited for the sample population to be interviewed. Researchers used the data from the developed questionnaire to assess these women, and the information extracted was helpful to determine the conclusion of this study. It was observed that better pregnancy outcomes, lesser pregnancy complications, quality health care services all boiled down to these respondents' educational and economic status. Therefore, the significant finding of this study was that the higher academic level and financially equipped households yielded better quality prenatal care among the residents in the Agdao District.

Keywords: *prenatal care, pregnancy, maternity, descriptive study*

Vaccine Readiness in Haran UCCP Center

Versola, D. G., Villacorta, J. A. D., Villaneza, M. K. L., Villaruel, Y. G. S., and Mariano, R. B. II, DMD, DDPH, MPD, FDPH

COLLEGE OF MEDICINE

Vaccination is one of the most cost-effective and successful tools in preventing and eradicating diseases worldwide, especially in this pandemic era, where vaccination with adherence to health protocols will help combat COVID-19. Thus, the community must establish vaccine readiness to gauge the community's knowledge and willingness towards the COVID-19 vaccine. Interestingly, the Barangay Health Workers in Haran UCCP Center mentioned that some residents in the community had expressed apprehensions concerning the COVID-19 vaccine, stating that even if there were available vaccines given, they would still not avail the free vaccine. Moreover, any government offices did not visit the community regarding COVID-19 vaccinations. Thus, this study aimed to describe the vaccine readiness situation in HARAN UCCP Center. Descriptive design was used in this study, having frequencies for data analysis. A survey questionnaire on vaccine readiness was adapted and modified. Results showed that the respondents in HARAN were not vaccine ready. All the respondents were vaccine-hesitant, mainly because of the lack of information they received. It was challenging to encourage them to receive the vaccine due to their firm adherence to their belief and culture. Most of the respondents do not believe and trust the vaccine's safety and efficacy. Most of them do not understand the safety and effectiveness of the vaccine. Therefore, the study can conclude that the HARAN community is not vaccine ready.

Keywords: *COVID-19, COVID-19 Vaccine, Vaccine readiness, Vaccine hesitancy*

Knowledge, Attitude, and Practices of Self-Medication Among Selected Residents of Barangay Maa, Talomo District, Davao City

Tan, Y. L. F., Tanauerido, M. J. S., Te, S. J. F., Tecson, M. J. C., and Quianzon-Manuel, M. F. L., MD, DFM

COLLEGE OF MEDICINE

Gauging self-medication knowledge, attitude, and practices is a significant concern as this has become a common problem globally. When a survey was conducted on these respondents for a community diagnosis, it was found that most of them practice self-medication. Hence, this study was conducted to describe respondents' sociodemographic profile and their knowledge, attitude, and practices of self-medication. This study was conducted via calls and texts due to the COVID-19 pandemic and involved 20 respondents from Barangay Maa, Talomo District, Davao City. This study utilized a descriptive quantitative research design, and an adapted survey questionnaire was used. Most of the respondents of this study were 21 to 45 years old, female, married, belonged to a family with two to four members, high school or college graduates, housewives, and Php 10,000 monthly income earners. The results revealed that nine (9) respondents had good knowledge about self-medication, 19 had positive attitudes, and 19 had irrational self-medicating practice. Although most respondents have good knowledge and a positive attitude, most possess foolish or irresponsible self-medicating practices, leading to the misuse of medications. Consequently, in the best-case scenario, the misuse of medicines may not relieve the individual's illness. The worst-case scenario may even bring about an additional disease to the individual.

Keywords: *Community Medicine, self-medication, knowledge, attitude, practices, descriptive quantitative, Maa, Talomo, Davao City*

Knowledge, Attitudes, and Practices on COVID-19 Prevention in Inayangan, Calinan, Davao City

Rodriguez-Evangelio, J. J., Rosalinda, G. S., Rufule, D. G., Salce, K. M. B., and Fajardo, D. C., MD

COLLEGE OF MEDICINE

Rural communities are at an increased risk of getting COVID-19 because of limited healthcare infrastructure and lack of access to health information. As COVID-19 cases rise in Davao City, the rural communities in it are also vulnerable. Thus, there is a need to assess their level of knowledge, attitude, and practices towards COVID-19 prevention. This study collected their demographic profiles, sources of information, knowledge, attitude, and practices from 20 residents of the rural community of Barangay Inayangan, Calinan District. The majority were female, married, unemployed, and belonged from low to poor income families. Television, followed by social media and family or friends, were their primary source of news and updates on COVID-19. In terms of knowledge, attitude, and practices, the results indicated moderate in all three aspects.

Keywords: *Medicine, knowledge, attitude, practices, descriptive study, Davao City*

Knowledge, Attitudes, and Practices towards Breastfeeding among Selected Mothers of Calinan District, Davao City

Cabig, A. M., Cachero, S. J. E., Cadir, J., Cadorna, M. J., and Fajardo, D. C., MD

COLLEGE OF MEDICINE

Breastfeeding initiation and cessation can be affected by many factors. This study describes the knowledge, attitudes, and practices towards breastfeeding among selected mothers of Calinan District, Davao City. This study used a qualitative descriptive research study design with a sample size of 17 mothers. Most participants were 28 to 32 years old, married, high school graduates, and housewives. The study utilized structured questionnaires from the previously conducted survey with four parts; demographic profile, knowledge, attitude, and practices towards breastfeeding. The data was gathered through interviews and questionnaires. Based on the results of the study, all of the 17 respondents were knowledgeable about exclusive breastfeeding from birth up to six months, and 15 out of 17 respondents had a positive attitude towards the continuation of breastfeeding up to two years of age and have a negative attitude towards giving pre lacteal feeds. The researchers recommended informing all pregnant women about breastfeeding benefits and risks as a priority during antenatal visits and strengthening prenatal and postnatal interventions.

Keywords: *breastfeeding, Calinan District, demographic profile, knowledge, attitude, practice, mothers*

‘Ok raman ko’: A Case Series of Three Mothers with No Postnatal Visits at Barangay 2-A

Facturan, R. E., Fanuncial, J. P. G., Ferenal, C. L. S., Fernandez, R. F. D., and Mariano, R. B. II, DMD, DDPH, MPD, FDPH

COLLEGE OF MEDICINE

In the community diagnosis of 20 households in Barangay 2-A, District A, the researchers identified four (4) mothers who gave birth in the last five years but did not have postnatal visits. This is despite its proximity to hospitals and barangay health centers. The researchers investigated the possible reasons for the non-utilization of postnatal care services among mothers who have given birth within the last five years in Barangay 2-A, District A, Davao City. The research followed a case series research design. It is a qualitative research design to evaluate the factors that contributed to the inability of the mothers to avail of postnatal care services. The study was conducted in Barangay 2-A, District A, Davao City. Three (3) mothers who gave birth within the last five years and did not have a postnatal visit in their previous pregnancy were among those who took part in the study. The data collection was done through an in-depth interview. This study used thematic analysis to analyze the qualitative data that was gathered. Researchers obtained informed consent from the respondents before the conduction of the study. All three (3) mothers were aware of the necessity of having a postnatal visit, but they had not given it importance. Multiple factors, such as lack of information, access to healthcare services, and lack of complications, lead to a lack of need and non-compliance. Ultimately, their main reason for non-compliance was that they felt okay and had no difficulties. This study will benefit the health sector in the country and in Barangay 2-A to be aware and develop ways to improve existing programs that promote maternal and child health care, especially postnatal care.

Keywords: *postnatal care, mothers, maternal and child health, case series, Davao City*

Knowledge and Use of Family Planning Methods among Women of Reproductive Age in Agdao District, Davao City

Dimaano, L. C., Diranggaren, M. Z. D., Dizor, C. N. B., Doromal, N. A. K. A., and Fabian, J. C., MD

COLLEGE OF MEDICINE

Family planning (FP) is one of the fundamental pillars of safe motherhood and reproductive health rights. In developing countries, women with unmet needs for FP constitute a significant proportion of all women of reproductive age, and it is an ongoing public health challenge in Agdao District. The study employed a quantitative descriptive cross-sectional study design conducted for 20 women of reproductive age (18 to 49 years old) from Agdao District through purposive sampling technique. The data was collected through an interviewer-administered structured tool based on a related study. Data entry and analysis were done using the Microsoft Excel software. A large proportion of the participants (85%) knew about pills, with 59% of them were learning how to use them. About 80% reported preventing unwanted pregnancy as a significant benefit of FP, and 40% reported weight gain as contraceptives' most common side effect. In comparison, 40% said that they had no reason for not practicing FP before. Pills (progesterone only and combined pills) and female condoms were the two most commonly used FP at 40% and 30%, respectively. The study further recommends the government and family planning and different contraception methods, benefits and possible side effects, and implications of FP use.

Keywords: *knowledge, practices, family planning, women of reproductive age, benefits, side effects, reasons*

Level of Job Burnout of among Selected Contact Tracers in District D, Davao City

Gallardo, V. J., Gaña, A., Garcia, A. M., Geguinto, J. M., Gelaver, K. L. P., and Lindo-Valdez, B. M. K.

COLLEGE OF MEDICINE

The emergence of the COVID-19 pandemic and increase in cases has significantly affected healthcare workers. It has made them more vulnerable to occupational burnout due to increased workload amidst pandemic-related stresses, affecting their mental health and professional efficacy. This study aimed to identify and assess the level of job burnout among selected contact tracers of District D, Davao City. This study used a quantitative descriptive study design with a purposive sample size of 25 contact tracers. The participants were asked to answer the Oldenburg Burnout Inventory (OLBI) questionnaire to assess occupational burnout. It is a 16-point questionnaire that measures the two dimensions of burnout: exhaustion and disengagement. Researchers gathered data through a face-to-face self-administered Visayan-translated version of the said questionnaire. Results showed that 24 out of 25 contact tracers experienced low levels of overall burnout, 24 of which had low levels of disengagement, and 22 had low levels of exhaustion. Only one (1) out of 25 contact tracers had moderate levels of burnout, one (1) out of 25 had moderate levels of disengagement, and three (3) out of 25 had average levels of exhaustion. More significant fatigue and disengagement were experienced among participants who were 40 years old and above, females, married, Catholics, unfinished college degree holders, less than Php 10,000 monthly income earners, and diagnosed with a chronic illness. Overall, the results showed a high prevalence of low levels of burnout among contact tracers of District D, Davao City.

Keywords: *burnout, contact tracers, Oldenburg Burnout Inventory, quantitative descriptive study design, District D, Davao City*

Breastfeeding among Mothers in Barangay Maa, Talomo North District, Davao City During the COVID-19 Pandemic

Dayao, R. I. A., De Leon, L. O., De Nuevo, F. J. B., Deduyo, R. M. V., and Quianzon-Manuel, M. F. L., MD, DFM

COLLEGE OF MEDICINE

Using a descriptive study design, the researchers gathered data to describe breastfeeding among mothers in Barangay Maa, Talomo North District, Davao City during the COVID-19 pandemic. The data collection was done through structured interviews via a phone call which follows a predetermined questionnaire. Twenty respondents were involved in this study using a simple total enumeration sampling. The respondents were all female, with at least one child in the past 24 months, and aged 18 to 45 years old. The majority were college graduates, married, more than Php 20,000 monthly income earners. The obstetric histories indicated that most of them are multiparous and delivered vaginally, notably without any maternal and infant complications. Their profile and description of their breastfeeding practices were done and obtained using an adapted questionnaire. Overall, all mothers intended to breastfeed their baby during pregnancy, and the majority received family and hospital support with breastfeeding. However, only eight out of 20 mothers continually breastfeed their baby, while the remaining have given formula milk as supplementation. More than half of the women cited inadequate breast milk production, sore or painful nipples, time consumption, and concerns that their baby will not receive adequate nutrition as barriers to breastfeeding. The pandemic has encouraged 18 of the respondents to breastfeed, including having a more flexible schedule at home, the less frequent need to leave home, and quickly finding better support with breastfeeding during the COVID-19 pandemic.

Keywords: *breastfeeding, mothers, Barangay Ma-a, Talomo North District, COVID-19*

Perceptions and Practices on Regular Medical Check-Ups of Selected Residents of Agdao District, Davao City

Dejan, J. N. M., Dela Cruz, H. C. B., Deleña, A. J. D, Delos Santos, J. A. M., and Fabian, J. C., MD

COLLEGE OF MEDICINE

Despite advances in managing and treating infectious diseases, many Filipinos continue to suffer from diseases for which effective interventions are available. This study was conducted to determine the perceptions and practices on regular medical checkups among selected residents of Agdao District, Davao City. A quantitative descriptive research design was used. The researchers selected 20 respondents using non-probability, purposive sampling. The survey questionnaire adapted from a study was used to describe the demographic profile and determine the participants' perception and practices on regular checkups. Researchers interviewed in a limited face-to-face setting at SM Lanang Premiere Vaccination Hub. They recorded results through Epi Info software version 7.2.2.6. In conclusion, almost all of the respondents were aware of regular checkups. However, despite nearly all respondents' awareness on having regular checkups, only five (5) of them had gone for regular checkups in the last six months. The most known type of checkup is the general exam. The majority of the respondents expressed that everyone needs a regular checkup. Eighteen respondents said both genders need regular checkups equally. In this study, only a few people go for a regular checkup, and the majority of the people visit hospitals only when they fall sick. Results also revealed a significant number of respondents that have do not have regular checkups, and most of them said that their last visit for a checkup was more than 12 months ago. These results may be used as a reference for future studies.

Keywords: *check-up, treatment, perception, residents, practices, Agdao, Davao City*

Knowledge Attitude, and Practices Towards Face Mask Use Amid the COVID-19 Pandemic among Community Health Workers in Barangay Tambobong, Baguio District, Davao City

Canda, J. T., Calledo, K., Cancel, V. R., Canta, M. D., and Lindo, R. H.

COLLEGE OF MEDICINE

In this COVID-19 pandemic, the compliance of community members becomes an integral part of increasing the effectiveness of minimum public health standards such as the wearing of face masks across all settings, regardless of the severity of the risk. Since community health workers (CHW) serve as pioneers for prevention, promotion, and curative activities at the community level, this study has evaluated them to determine their knowledge, attitude, and practices (KAP) towards face mask use amid the COVID-19 pandemic. Researchers did this quantitative descriptive study by giving questionnaires to available CHW from Barangay Tambobong. At the time of its distribution compliance with the IATF-EID guidelines against COVID-19 were followed. KAP was assessed using a numeric scoring pattern, and outcome variables of knowledge were computed. Based on the calculated mean score, they were categorized as binary (satisfactory or unsatisfactory) for knowledge, positive or negative for attitude, and good or poor for practice. All 20 participants were female. Eight (8) of them aged 38 to 47 years old, seventeen (17) of them were married, 13 finished secondary education, and six (6) attained tertiary education. Sixteen out of 20 participants had satisfactory knowledge, 19 out of 20 had a positive attitude, and all of them had good practice towards using face marks to limit the spread of COVID-19. Despite the adequate knowledge, positive attitude, and good practices, the LGU should continue to properly educate its CHWs and the community about COVID-19, how to protect themselves, and the proper use and disposal of face masks.

Keywords: *knowledge, attitude, practices, face mask, COVID-19, community health works, Davao City*

Liwanag sa Dilim—Healthcare Experiences of Prostituted Women: A Case Series

Cortez, R. J. P., Cosina, P. L. C., Cueno, A. K. O., Curaza, A. M. R., and Lindo-Valdez, B. M. K.

COLLEGE OF MEDICINE

Prostitution, payment for the exchange of sexual services, is deemed a major social problem in most countries today, with little to no consensus on how to address it. While the debates on prostitution usually focus on the different legislative approaches or the so-called choices of persons in prostitution, this study aimed to give light to the health care experiences of prostituted women. This qualitative study explored the healthcare experiences of two prostituted women by conducting a phone interview using a semi-structured set of questions. They were asked for consent, informed about the purpose of the study, and told about the ethical practices observed throughout. The participants were invited through the phone to describe their healthcare experiences verbally. It is also noted that discrimination against them for their line of work is still apparent. The inequality and lack of comprehensive healthcare were also evident. Despite the struggles and mishaps, these women have done their best and come to terms with adapting to the changing work-life environment.

Keywords: *prostitution, case series, healthcare experiences*

Lived Experiences of Contact Tracers During the COVID-19 Pandemic in District D, Davao City

Ferrer, E. A. P., Fortolazo, H. C. B., Francisco, K. J. F., Gaga-a, K. B. M., Galido, M. S. G., and Redoble, L. B., MD

COLLEGE OF MEDICINE

Contact tracing is a process used in public health to identify contacts of COVID-19 positive individuals and analyze in what settings the infection has occurred to find the source of infection and aid in the proper quarantine protocols to contain its spread. Local contact tracing teams are considered essential frontliners as they are vital in helping to contain COVID-19 spread. However, few studies talk about them during the pandemic, especially in the local setting. This study aimed to discover the work of contract tracers in District D, Davao City, and explore how this impacts their well-being. By using a descriptive phenomenological approach, the great question to be asked during the interview would be: “What do you do in a day as a contact tracer during this COVID-19 pandemic?” Furthermore, a subset of broad, general, and open-ended questions better draws out rich narrative data of the contact tracers. Data analysis of narrative dialogues illuminated four essential themes: (1) contact tracing is a demanding job, (2) adverse effects of contact tracing to the local contact tracing team, (3) influence of COVID-19, and (4) management of expressed stress due to work and COVID-19. Like most of us in this world, the respondents were also forced to adjust their lives according to the COVID-19 pandemic. To conclude, the contact tracers face a lot of hardships that have multiple effects on their life, yet they still uphold their sense of duty and continue serving the community at large.

Keywords: *contact tracers, lived experiences, COVID-19 Pandemic, Davao City*

Levels of Depression, Anxiety, and Stress Among Barangay Health Frontliners from Toril District during COVID-19 Pandemic

Embang, A., Enriquez, V., Escuadro, M. C., Escueta, D. R., and Lindo, J. S. A., MD

COLLEGE OF MEDICINE

Healthcare workers (HCW) may undergo severe psychological depression, anxiety, and stress due to the COVID-19 pandemic. In addition, the lack of social support, poor sleep quality, isolation, and fear of spreading the disease to their families trigger more psychological problems. This study aimed to describe the levels of depression, anxiety, and stress among barangay health front liners from Toril District, Davao City, through the application of a pre-validated Visayan-translated questionnaire tool. Researchers utilized a quantitative descriptive study design with 11 barangay health frontliners. The study used DASS-21, a 21-item questionnaire with three scales, namely depression, anxiety, and stress scale, to describe the level of each scale of the respondents. Results showed that five (5) out of 11 respondents had a corresponding level of depression, seven (7) out of 11 had anxiety, and five (5) out of 11 had a corresponding level of stress experienced. The mean score for the depression scale is 10.72, 9.63 for the anxiety scale, and 14.90 for the stress scale. Higher depression, anxiety, and stress scores were recorded from the 11 female respondents aged 35 to 50 years old, married, earning Php 7,000 to Php 9,999 per month, and working six to 10 years as a barangay health frontliner. The results emphasized the need for further investigation on what factors affect depression, anxiety, and stress levels among the barangay health frontliners to formulate effective strategies that would address depression, anxiety, and stress during the COVID-19 pandemic.

Keywords: *depression, anxiety, stress, barangay health frontliner, DASS-21, quantitative descriptive, Toril District, Davao City*

Level of Knowledge on Postnatal Care among Selected Mothers during COVID-19 Pandemic in Calinan District, Davao City

Cahulugan, Z. L. I., Calague, M. I., Calimbas, M. T. D., Camelotes, Y. Y. T., and Fajardo, D. C., MD

COLLEGE OF MEDICINE

Postnatal care is the most neglected time for providing quality care, even more so during the outbreak of COVID-19 infection. This study aimed to describe the level of knowledge of selected mothers about postnatal care during the COVID-19 pandemic to constitute a foundation for detailed counseling and to prevent any morbidity and mortality for both the mother and their child. A quantitative descriptive research study design was employed with a sample size of 10 mothers living in Calinan District, Davao City. Most of the participants are in the age group of 19 to 23 years old, married, and undergraduates. The study utilized a structured questionnaire from the previously conducted surveys with a 16-item questionnaire for knowledge. In addition, the data was gathered through a limited face-to-face interview and survey questionnaire. Results showed that six respondents had average knowledge and four respondents had good knowledge of postnatal care. The highest knowledge score attained by the participants was 16 over 16 (100%) and the least knowledge score achieved by the participants was eight out of 16 (50%). The overall mean knowledge score was 11 (69%). The results highlighted the need for further investigation on the factors such as attitude and practices that contribute to low seeking behavior of postpartum mothers on postnatal care, especially during the COVID-19 pandemic.

Keywords: *postnatal care, COVID-19 pandemic, level of knowledge, quantitative descriptive, Davao City*

Knowledge and Practices of Postnatal Care among Selected Mothers of Barangay Maa, Talomo District

Cuta, R., Dagondon, V. O., Dalumbar, R. R., Dato-on, V. P., and Quianzon-Manuel, M. F. L., MD, DFM

COLLEGE OF MEDICINE

A large proportion of maternal deaths occur during the first 28 hours after delivery where 99% of deaths occur in developing countries, including the Philippines. Young adolescents face a higher risk of complications and death due to pregnancy than other women. Skilled care before, during, and after childbirth can save the lives of women and their infants. This descriptive correlation research study assessed the knowledge and practices of postnatal care among postnatal mothers. This study was carried out in Barangay Maa, Talomo District, Davao City, which involved 20 respondents. Researchers collected data via survey questionnaires. This study was conducted via calls and text messages due to the COVID-19 pandemic. The majority of the respondents were within the ages of 21 to 30 years old, female, cohabiting with their partners, living with family size of two to four members, undergraduates, homemakers, Php 10,000 monthly income earners, and residing 0-5km away from the health center. The assessment of the respondents' knowledge of postnatal care showed that the majority had a moderate to good understanding of postnatal care. In contrast, most of the respondents had inadequate practice on postnatal care. Concerned authorities can use this information to strengthen the approach of the health sector to improve the postnatal care services in the area.

Keywords: *postnatal care, postnatal mothers, newborn, knowledge, attitude, practices, Barangay Ma-a, Davao City, community medicine*

Knowledge, Attitude, Practices and Concerns on COVID-19 Vaccination among Unvaccinated Residents in Barangay Cadalian and Barangay Carmen

Catalbas, M. R. E., Carorocan, J. R. Q., Cezar, J. G. G., Coching, K. T. D., and Lindo, R. H.

COLLEGE OF MEDICINE

The COVID-19 pandemic has caused a substantial economic loss and social disruption throughout the world. Aside from maintaining minimum health protocols, vaccination helps in controlling the virus. However, with the limited supply of vaccines, vaccine hesitancy, and inaccessibility to certain people, achieving herd immunity remains a challenge. This descriptive quantitative study was conducted using the total enumeration of the population. This aimed to describe the socio-demographic profile, knowledge, attitude, and practices towards the COVID-19 vaccine of the 19 residents from Barangay Cadalian and Carmen, Baguio District. A self-administered questionnaire was distributed to the respondents, and researchers analyzed the quantitative and qualitative data for frequencies and thematic analysis, respectively. It showed that 18 out of 19 respondents are unvaccinated, and only one (1) of them refused to get the second dose of the vaccine. This study also revealed that the respondents had inadequate knowledge on the COVID-19 vaccine with a mean score of 5.7 ± 1.59 out of 11, a low level of attitude towards getting the vaccine, a low level of good practices following vaccination, and a high level of concerns on the COVID-19 vaccine. Most concerns arised from fear of the side effects, personal choice due to doubts about vaccine production and efficacy, and religious beliefs. The results also showed that the respondents' preferences were significantly influenced by news from television and social media and discussion among family members and friends. Therefore, the government and healthcare experts should utilize these platforms in increasing knowledge and awareness to correct misinformation, resolve concerns, improve practices, and increase acceptance of the COVID-19 vaccine.

Keywords: *knowledge, attitude, practices, COVID-19, vaccination*

An Appreciative Inquiry on Breastfeeding Experiences of Selected Mothers in Toril District, Davao City

Dulla, D., Durano, L., Edding, M., Elorza, J. G., and Lindo, J. S. A., MD

COLLEGE OF MEDICINE

Exclusive breastfeeding is crucial for child health and survival. However, although breastfeeding is widespread in the country, the rate of exclusive breastfeeding still falls behind the global target. Thus, this study aimed to describe the breastfeeding experiences of selected mothers in Toril District, Davao City. This study employed an Appreciative Inquiry model involving five (5) mothers who gave birth in the last five years and could not breastfeed their child for at least six months exclusively. The findings of this study revealed that the respondents' positive breastfeeding experiences were linked to its perceived health benefits to their child and the economic impact. Furthermore, the respondents expressed that the absence of breastfeeding problems, adequate knowledge on breastfeeding, having proper support of her spouse, family, community, and the health workers may positively contribute to their breastfeeding journey. On the other hand, the respondents could not immediately appreciate the programs and healthcare services in their communities that are helpful in exclusive breastfeeding. Lastly, the respondents pointed out that the main barrier to exclusive breastfeeding is breastfeeding problems, particularly inadequate breastmilk production, which can be effectively addressed through adequate knowledge and access to healthcare services. Consequently, it is essential to strengthening breastfeeding education to mothers during prenatal and postnatal check-ups, emphasizing solutions when breastfeeding problems arise. Lastly, with the ongoing COVID-19 pandemic, adapting to the "new normal" for breastfeeding protection, promotion, and support should be worked on.

Keywords: *community medicine, exclusive breastfeeding, maternal health, child health, appreciative inquiry*

Sexual and Reproductive Health Awareness among 15 Respondents in a Non-Government Organization in Davao City

Consigna, A. M., Coraje, R. O. M, Corpuz, J. L., Corpuz, W. B. M., and Lindo-Valdez, B. M. K.

COLLEGE OF MEDICINE

This descriptive study determined the sexual and reproductive health (SRH) awareness of 15 enumerated respondents from a non-government organization (NGO) in Davao City. The survey covered the profiling of the respondents. It included five basic and common SRH issues: prevention and management of reproductive tract infections (HIV/AIDS), prevention of abortion and control of post-abortive complications, maternal and child health, breastfeeding practices, and family planning methods. The data gathered were analyzed using frequency and mean. Based on the data collected, 10 women were aware of prevention and management of RTI, HIV/AIDS, and abortion, 12 were aware of maternal and Child Health, and 11 were aware of the promotion of breastfeeding and family planning methods. However, there were still several unaware individuals that the local government must give importance to.

Keywords: *awareness, sexual and reproductive health abortion, breastfeeding, maternal and child health, family planning*

Mental Well-Being in the Time of COVID-19 Pandemic among Selected Residents of Barangay 2-A, Poblacion District

Espanto, R. J., Espino, Y. A., Estabillo, G. R., Fabella, V. D. R., Fabian, E. C., and Mariano, R. B. II, DMD, DDPH, MPD, FDPH

COLLEGE OF MEDICINE

The COVID-19 pandemic has been going on for almost two years now, which has taken a toll on the different aspects of people's lives, with mental health being the most evident as it is frequently and openly expressed. Vaccination is one of the critical factors the government focuses on to lessen transmission and cases of severe COVID-19 patients. As the vaccination drive continues, the mental well-being of individuals is assessed. Hence, this descriptive cross-sectional study on mental well-being during COVID-19 pandemic in Barangay 2-A, Poblacion District was done to describe their profile and mental well-being between vaccinated and unvaccinated individuals using the WHO-5 questionnaire. Thirty vaccinated individuals had good mental well-being, with an average score of 19.8. The 31 unvaccinated individuals also had good mental well-being though a lower average score of 16.4 compared to vaccinated individuals. Despite 33% of the respondents being unemployed and having a monthly family income of less than Php 10,000, they generally have a score of more than 13 on the WHO-5 Well-being index questionnaire. This indicated that the respondents of Barangay 2-A have excellent mental well-being despite being vaccinated or not during COVID-19 pandemic.

Keywords: *COVID-19, mental well-being, vaccination, WHO-5 well-being index*

Knowledge and Practices of COVID-19 Amidst Pandemic among Prostituted Women from Talikala Inc. Residing in Different Barangays within Davao City

Sinajon, K. M. D, Sison, S. J., Solatorio, J. K. O., Sorinio, C. D. N., and Lindo-Valdez, B. M. K.

COLLEGE OF MEDICINE

The COVID-19 pandemic has completely changed our lives and has affected all walks of life. Prostituted women are among those who have been affected the hardest in the COVID-19 pandemic. As this pandemic is already in its second year, many prostituted women are forced to continue to live and work on the margins as they struggle to survive and provide food on the table amidst the turmoil wrought by the pandemic. In short, the pandemic has exacerbated the economic instability these prostituted women are already facing. Therefore, these women have needs that must be considered by researchers, policymakers, and service providers. In this paper, the efforts of the rotator in the Department of Community Medicine during the pandemic period and Non-Governmental Organization (NGO) Talikala, Inc. evaluated prostituted women through interview, under the guidance of the NGO. They were asked for consent, informed about the study's purpose and ethical practices that would be practiced throughout the study. The respondents were asked several questions during the interview to help the rotators assess their knowledge and practices during the COVID-19 pandemic. Results showed that respondents were vaccinated and have an adequate understanding of the importance of the vaccination, and gave importance to the preventive measures against COVID-19. This data could be a basis for which future programs could be developed to provide adequate assistance to our fellow citizens further.

Keywords: *knowledge, practices, prostitution, COVID-19 pandemic*

Hypertension among Eight Hypertensive Adult Patients from Barangay Daliao

Valdez, E. J. C., Valdez, P. B. D., Valencia, E. K. A., Vedra, K. P. P., and Lindo, J. S. A., MD

COLLEGE OF MEDICINE

Knowledge and medication adherence are essential factors in managing chronic diseases, such as hypertension. Patients' adherence to antihypertensive drug regimens is a complex but essential factor in achieving blood pressure control and reducing adverse cardiovascular outcomes. This study aimed to describe hypertension among hypertensive adult patients from the selected households of Barangay Daliao, Toril District, Davao City, Philippines, in terms of knowledge and antihypertensive medication adherence. This case series used an 8-item questionnaire based on the Morisky Medication Adherence Scale and a 15-item questionnaire on Hypertension Knowledge Scale. Researchers conducted the questionnaires among eight (8) adult participants who were clinically diagnosed with hypertension. Results showed that most participants have poor medication compliance while having average knowledge about hypertension. The maintenance drugs were a significant factor for the adherence of the hypertensive patients. Reasons for these include forgetfulness, inconvenience of taking medication, and complacency when symptoms are under control. Data obtained may significantly assist in increasing awareness about hypertension due to its high mortality rate in the Philippines.

Keywords: *medication adherence, hypertension, blood pressure control, Morisky-pattened, maintenance drugs*

Knowledge and Perception About Family Planning among Selected Women with Unmet Family Planning Needs in Barangay Bato

Ulama, R., Umacob, T., Uy, A. P., Uy, B. B., and Lindo, J. S. A., MD

COLLEGE OF MEDICINE

Family planning knowledge and perception are essential aspects of the practice itself. Women from Barangay Bato with unmet needs for family planning were selected as participants. Survey questionnaires were given online as a guide, and interviews were conducted through phone call interviews with consent during data gathering. Demographic profiles were recorded first before completing the survey for knowledge and perception. Most women were knowledgeable and agreed about the use of family planning services. However, there is still a lack of adequate knowledge on having BTL without prior screening for cervical cancer, IUD removal not necessary for pelvic infections, and women who have never become pregnant are also eligible to use IUDs. Nevertheless, the perception of family planning is generally favorable. All of the participants are not afraid of using contraceptive pills and other medications and are aware of using irreversible contraceptives such as vasectomy and BTL.

Keywords: *family planning, unmet family planning need, Barangay Bato, knowledge, perception*

Mental Health Status of Selected Health Workers of Agdao District, Davao City during the COVID-19 Pandemic

Tono, H. I. M., Trinidad, J. M. M., Tumagantang, N. E., Tuquib, J. M. C., and Fabian, J. C., MD

COLLEGE OF MEDICINE

The COVID-19 pandemic has led to a dramatic loss of human life worldwide and havoc on health workers, causing severe psychological distress. This study aimed to describe the effects of the COVID-19 pandemic on the mental health of the health workers of Agdao District, Davao City. It also described their profile, occupational characteristics, level of distress, and prevalence of depression, anxiety, and stress. Moreover, a quantitative descriptive research study design was used for this study with twenty (20) health workers. The respondents were asked to answer the Depression, Anxiety, and Stress Scale-21 (DASS-21) questionnaire to assess their mental health symptoms. Among the health workers included in the study, the prevalence of mild to extremely severe depression, anxiety, and stress was 55%, 65%, and 50%, respectively. From the data gathered, the factors that predicted higher impact and adverse mental health are being a female, not having complete personal protective equipment during working, and facing any emotional abuse during the COVID-19 pandemic. This study showed a high prevalence of mental health symptoms among health workers, and inadequate preventive measures were associated with higher odds of anxiety and depression symptoms among health workers. Thus, it is essential to urgently implement specific measures to promote the mental well-being of health workers involved in the COVID-19 response.

Keywords: *COVID-19, depression, anxiety, stress, health workers, pandemic, mental health status*

Health Seeking Behaviors on Health Services and Family Planning Amidst COVID-19 Pandemic of Selected Mother of Barangay Maa

Tagalog, M. T. J. D., Taganahan, C. C., Taki, A. J. M. S., Tan, M. A. A., and Quianzon-Manuel, M. F. L., MD, DFM

COLLEGE OF MEDICINE

The COVID-19 pandemic has changed the way we live and access health services. Family planning service is a significant area affected. As the disruptions of these services have affected women of reproductive age, this study aimed to know the health-seeking behavior of these women amidst the challenges and how it affected their access to health knowledge and services during the pandemic. This study used a purposive sampling method, and researchers have selected women of reproductive age in Barangay Maa, Davao City as participants. The latter have experienced and are knowledgeable of the topic of interest. The respondents were asked for consent, informed about the purpose of the study, and that ethical practices would be observed throughout the study. The respondents were asked through calls to verbally describe their health-seeking behavior and access to family planning throughout the pandemic. This study used qualitative measures, utilizing interview-guided questionnaires adopted from a previous study. The majority of the respondents noted an improved health knowledge in terms of health information and understanding of health issues attributed to numerous sources available during the pandemic. In seeking family planning services, most of them use family planning methods and try their best to access them. To delay pregnancies due to the risk of hospital stay and financial burden. This data could serve as a guide in organizing programs for women of the reproductive age population to provide adequate assistance to their health care needs.

Keywords: *Community Medicine, family profile, solid waste management practices, descriptive-correlational study design, Tibungco, Davao City, Philippines*

COVID-19, an Evil Spirit in the Eyes of a Datu: A Case Study

Velasco, J. A. Jr. B., Vergara, A. S., Vergara, A. R. N., Vergara, E. A. M. L., and Mariano, R. B. II, DMD, DDPH, MPD, FDPH

COLLEGE OF MEDICINE

The research aimed to explore why the tribal leader of the Ata-Manobo evacuees is hesitant to get vaccinated against COVID-19. This research utilized a qualitative approach to thoroughly examine and uncover the reasons behind the participant's hesitancy to vaccinate. By doing a qualitative research design, the researchers were able to understand the participant's beliefs and perceptions of the COVID-19 vaccine. This research showed that the Ata-Manobo tribe is aware of COVID-19 but have various views and opinions regarding it. The Datu of the Ata-Manobo tribe believes that being vaccinated is not necessary at that moment, and he mainly relies on cultural traditions, such as doing the Panubadtubad. According to Datu, having the Panubaran faith and the health center is enough for their medical needs in the community. Also, Datu believes that he needs to follow his Abyan's (guardian angel) directions about the vaccination. According to Datu, life in the mountains differs from in the lowlands. The healing provided by the Babaylan in the Panubaran is still the accepted first-line of treatment by the Manobos. Since the Datu is also the Babaylan, the community trusts and relies on his vaccine judgment and guidance. For the time being, the UCCP-Haran community only allows certain medicines, such as antitussive medication and Paracetamol, to be used for common ailments such as cough and fever.

Keywords: *COVID-19, vaccination, perception, tribe, Datu, Ata-Manobo, vaccine hesitancy, community medicine*

Si Magdalena sa Gitna ng Pandemya: The Lived Experiences of Prostituted Women During the COVID-19 Pandemic

Suelto, L. J. D., Sueno, A. S., Sunga, J. J. B., Tac-an, R. T., and Lindo-Valdez, B. M. K.

COLLEGE OF MEDICINE

Prostitution of women and children is still a growing societal problem that has not seen the light at the end of the tunnel, more so during the current pandemic. This qualitative study explored the lived experiences of six prostituted women by conducting a phone interview using a semi-structured set of questions. The survey results yielded that business is down and has taken a toll on their income and mental well-being. The discrimination against them for their age and line of work is still apparent. The government's limited assistance and lack of knowledge on service catered for them were also evident. Despite this, these women came to terms with the new normal and adapted to the change in work life.

Keywords: *lived experiences, prostitution, COVID-19 pandemic*

Utilization of Prenatal Care Services among Selected Mothers in Agdao District, Davao City

Tecuala, C A. D., Tinagnan, D. A. V., Toledo, M. L. D., Tomaro, I. D., and Fabian, J. C., MD

COLLEGE OF MEDICINE

Despite the government's provision of maternal and child health care services, it is evident that a percentage still do not avail of these. This study was conducted to describe the utilization of prenatal care services among selected mothers in Agdao District, Davao City. A quantitative descriptive research design was used. The researchers selected 19 women of reproductive age with at least one previous pregnancy using non-probability purposive sampling. The Adequacy of Prenatal Care Utilization (APNCU) Index was used as a tool to determine the Adequacy of Initiation of Prenatal Care, Adequacy of Received Services, and APNCU Index. Researchers only did the interviews through phone calls due to the restrictions imposed by the local government of Davao City. Results were recorded and tallied using mean and frequencies. Results noted that the most frequent classification of Adequacy of Initiation of Prenatal Care was Adequate Plus, with a total of 12 participants, which showed their first prenatal care (PNC) visit on the 1st to 2nd month of pregnancy. Furthermore, an Intermediate classification of the Adequacy of Received Services had the highest frequency, with nine participants. This indicated that the participants had 50% to 79% of the recommended PNC visit. Also, the APNCU Index showed that Inadequate is the most frequent classification, with nine participants. This indicated that the participants had their initial PNC visit after the 4th month of pregnancy or less than 50% of the recommended PNC visit. These results may be used as a reference for future studies and the basis of the local government of Agdao District, Davao City, in improving their implementation of PNC services among their residents.

Keywords: *prenatal care, mothers, APNCU index, Agdao District, Davao City*

Awareness, Practices, and Attitude Towards Waste Disposal Management among the Selected Respondents of Barangay Tambobong, Baguio District

Albarillo, V. I., Amen Amen, B. M., Amolo, J. C., Amparo, C. B., and Lindo, R. H.

COLLEGE OF MEDICINE

The importance of proper waste disposal is seemingly apparent given the adverse consequences of improperly disposed waste in the environment and health. The Philippine government has a law that would improve solid waste management. It is the Republic Act 9003 or the Ecological Solid Waste Management Act of 2000 that provides the needed policies for reducing solid waste and implementing strategies to integrate these policies into local government units (LGUs). Davao City has a stricter law regarding waste disposal compared to other LGUs. Davao City's Ecological Solid, Waste Management of 2009, has stern penalties to any violators. The study aimed to determine the awareness, practices, and attitude on waste disposal management among the respondents of Barangay Tambobong, Baguio District, and to educate residents about appropriate waste disposal management and encourage its application in the community. The total number of respondents is 19 who are all female. The majority were 28 to 46 years old (mean age of 37.73) and high school graduates (56.63%). All 19 respondents threw their waste outside their homes. Notably, there was still garbage seen on the roadside in their community. However, most of the respondents acknowledged their responsibility in proper waste disposal. Thus, it was evident that Barangay Tambobong Baguio District respondents were well-aware of appropriate solid waste management laws and penalties, principles, and practices.

Keywords: *waste disposal, awareness, practices, attitude, Baguio District*

Knowledge, Attitude, and Practices Toward COVID-19 Prevention among Selected Prostitution Survivors in Davao City

Ampatuan, N., Ampoloqui, A. C., Anayatin, J., Andrin, C. J., and Lindo-Valdez, B. M. K.

COLLEGE OF MEDICINE

COVID-19 cases continue to surge globally, nationally, and locally. Understanding the knowledge, attitude, and practices (KAP) of people toward the disease helps identify the epidemiological dynamics of the disease and the effectiveness, compliance, and success of measures adopted in the community. Active prostitution survivors are among the underserved sectors in society. Their line of work puts them at a higher risk of acquiring the virus due to their close contact with other people. Thus, this study aimed to describe the KAP towards COVID-19 among selected prostitution survivors in Davao City. This study used a quantitative descriptive design and was conducted via telecommunication. Thirteen (13) active prostitution survivors, selected using a convenience sampling method, were interviewed. A four-part survey questionnaire consisted of their demographic profile, and KAP towards COVID-19. The overall knowledge towards the disease with a mean attitude score of 53.1 out of 60. As for the participants' practice, they recorded a good practice score of 40.54 out of 50. With the results gathered, the researchers would like to suggest to the local government health unit to help maintain and further develop the KAP of the respondents.

Keywords: *knowledge, attitude, practices, COVID-19, prostitution*

Knowledge, Attitude, and Practices Regarding COVID-19 Pandemic among the Respondents in Barangay Megkawayan, Calinan, Davao City

Adlao, C. W., Adorable, J. J., Adtoon, M. D., Advincula, J., and Fajardo, D. C., MD

COLLEGE OF MEDICINE

Knowledge, attitude, and practices (KAP) towards COVID-19 are integral in the fight against the COVID-19 pandemic. This factor could make or break any attempts of the government to curb the widespread of the disease. For this reason, gathering information on the KAP and involvement of the people could lead to an increase in deterring this pandemic. Thus, this research was done to observe KAP towards COVID-19 among the residents of Barangay Megkawayan, Calinan, Davao City. The researchers tasked respondents to answer three parts to ascertain their KAP towards COVID-19. The respondents aged 18 years old and above, with the youngest aged 19 years old and the oldest aged 73 years old. Their knowledge score showed a positive value of 87.33. They have an attitude score of 87.74, and lastly, their practice score is 86.32. The data gathered portrays a very good and positive KAP for residents in Barangay Megkawayan, Calinan, Davao City. However, the researchers would like to suggest that though their KAP is good, there is still room for improvement for further enhancing the KAP of the people in the barangay.

Keywords: *knowledge, attitude, practices, COVID-19, Calinan District, Davao City*

Attitudes and Acceptance on COVID-19 Vaccine among the Selected Residents of Barangay Megkawayan, Calinan, Davao City

Abad, M., Abelita, R., Aclan, N.J., Acosta, F., and Fajardo, D. C., MD

COLLEGE OF MEDICINE

COVID-19 devastated, not just the health sector, but also economic and social sectors, sparking a combined global effort in the development of a vaccine to prevent and mitigate the rising cost associated with this pandemic. However, vaccine acceptance remained a pressing concern for health authorities. With the development of COVID-19 vaccines and their growing availability, there is not enough information to adequately gauge public attitude and acceptance of COVID-19 vaccines at the national and local levels. Hence, the study aimed to describe the attitude and acceptance of COVID-19 vaccines at the local levels to help strategize methods to improve local vaccine acceptance rates. The study used a descriptive quantitative design with a modified survey questionnaire from pre-existing international research completed in June 2021. A total of 30 respondents completed the survey. Most of the respondents were 18 to 29 years old, female, married, employed, and high school graduates. The majority of them had neutral attitudes to vaccination, and were willing to get vaccinated when it came to acceptance. However, most respondents preferred to receive more vaccine safety and efficacy information. Undecided respondents expressed interest in further consultations. Due to safety concerns, only a small minority were not willing to accept the COVID-19 vaccines. Due to this, the researchers recommend better information dissemination and education efforts and diversification of avenues for vaccinations and consultations to improve attitudes and acceptance towards COVID-19 vaccines.

Keywords: *vaccine acceptance, attitude, COVID-19, Calinan District, Davao City, community medicine*

Depression and Anxiety among College Students from Barangay Maa During the COVID-19 Pandemic

Aquitania, R. L. W., Aragon, M. K., Arakama, R. J., Ranana, A. N. A., and Quianzon-Manuel, M. F. L., MD, DFM

COLLEGE OF MEDICINE

Mental health problems most often hamper academic success. The COVID-19 pandemic has augmented and generated novel stressors such as fear and concern in many aspects of life. This circumstance has heightened mental health awareness across the globe to alleviate such stressors. Studies have shown that college students' anxiety and stress levels have increased since the start of the pandemic. The purpose of this study is to provide baseline data about the depression and anxiety levels of college students residing in Barangay Maa, Davao City. A qualitative descriptive research design was utilized along with the Patient Health Questionnaire (PHQ-9) and General Anxiety Disorder-7 (GAD-7) questionnaires. The selection of the participants was made by purposive sampling. The PHQ-9 questionnaire is a screening instrument for mental health disorders, including depression, while the GAD-7 questionnaire is used to screen mainly general anxiety disorder. With such a questionnaire, results have shown that the college students of barangay Maa have none to minimal, mild, moderate, and severe depression. Results have also revealed the presence of minimal, mild, moderate, and severe anxiety among these students. Thus, this COVID-19 pandemic has brought forth a challenge in many facets of society, particularly among the college students of barangay Ma-a, Davao City.

Keywords: *mental health, college students, PHQ-9 GAD-7, COVID-19, barangay Ma-a, Davao City, Philippines*

Food Consumption of Children among Selected Residents of Agdao, Davao City

Ascaño, A. L., Bacote, N., Baid, S. R., Bañas, J. J., and Fabian, J. C., MD

COLLEGE OF MEDICINE

In children, malnutrition, especially underweight and stunting, is prevalent in the Philippines. Without proper nutrition and guidance, children are vulnerable to develop malnutrition, which can lead to various health consequences when not managed appropriately. The early assessment of food habits and food access can improve nutritional care to the population and provide information for the development of health programs. Thus, this study aims to assess breastfeeding practices and children's food consumption from Agdao District, Davao City. The study used a quantitative descriptive research design and structured questionnaire to gather respondents' demographic, food consumption, and food security information. A total of 20 participants (19 females and one male) completed the study and included parents who visited the health center for prenatal or immunization of their children. The respondents were given questionnaires to answer, and the data were analyzed using descriptive statistics. Most of the respondents are around 28 to 35 years old, Roman Catholics, cohabiting, high school graduates with regular jobs, and below Php 10,000 monthly income earners. Most children under 48 months have been breastfeeding, receiving vitamins, supplements, and medications, drinking plain water only and eating semi-solid to solid food. On the other hand, most children aged less than 24 months old were given complimentary food between one to six months old and have not finished exclusive breastfeeding until six months. For fruit consumption, most consumed less than the recommended daily intake. Also, children aged three to 15 years old consumed less than the recommended daily intake of vegetables, except for children aged one to two years old who finished equal to more than the recommended amount. For dairy, the majority consumed more than one cup of milk per day, and the most consumed type of milk was whole milk. However, cheese and yogurt were rarely consumed by children ages three to 15 years old. Most children ate meat, including processed meat, at least once a week for meat consumption. For other consumptions, such as chips and fast food, most of them rarely or never consumed these products. Lastly, only four were reported to have run out of supply in the past 12 months for food security. The responses showed varied results in food consumption. However, future researchers should verify these findings in a more extensive population study.

Keywords: *food consumption, children, Agdao district, Davao City*

Impact of COVID-19 Pandemic on Mental Health of Selected Families in Barangay 1-A, District A, Davao City

Ycong, J-F., Yoshida, H., Yumang, J. L. R., Yurango, M. A., Zacaria, A-J., and Lindo, R. H.

COLLEGE OF MEDICINE

The COVID-19 pandemic has led to poor mental health outcomes because of causes like the economic recession, job loss, and isolation, to name a few. These stressors can lead to adverse effects making one feel overwhelmed or unable to cope. Long term, this can affect one's own physical and mental health. Hence, this descriptive cross-sectional study was conducted to determine the impact of the COVID-19 pandemic on the mental health of selected families in Barangay 1-A, District A, Davao City. The researchers adapted the World Health Organization (WHO)-5 Well Being Index questionnaire to help assess the mental well-being of the residents of Barangay 1-A, District A, Davao City. The questionnaire results revealed that most of the respondents do not have poor mental well-being even though most of them were unemployed, with no college degree, and below Php 10,000 monthly income earner. None of these respondents exhibited a score less than 13 on the WHO-5 well-being index questionnaire, which implies that the residents of Barangay 1-A, District A, Davao City have excellent mental well-being despite the pandemic.

Keywords: *COVID-19, mental health, WHO-5 well-being index questionnaire*

Knowledge, Attitudes, and Practices on Water, Sanitation and Hygiene among Respondents in Barangay Cadalian and Barangay Malagos, Baguio District, Davao City

Afable, K., Aguayo, D. M., Agustin, A. B., Alamis, M. K. R., and Lindo, R. H.

COLLEGE OF MEDICINE

Water-borne diseases are common and significant health burden among rural areas. That is why, it is only fair and appropriate to assess and hopefully, improve the community's knowledge, attitude, and water, sanitation, and hygiene (WASH) practices. More specifically, considering the views of the barangay health workers who serve as frontliners in preventive information dissemination regarding water-borne diseases among the barangay constituents is necessary. Therefore, this study evaluates the knowledge, attitude, and practices on WASH among the respondents in Barangay Cadalian and Malagos, Baguio District, Davao City. This study utilized a descriptive quantitative research design through an adapted standardized questionnaire. Analysis of the result showed 100% (17 out of 17) had good knowledge, 59% (10 out of 17) had a positive attitude, and 100% (17 out of 17) had a good practices on WASH. This result may indicate an adequate and accurate education and dissemination of healthcare information within the community. Hence, the continuation and promotion of the program are vital to improving the knowledge, attitude, and practices on WASH in the community.

Keywords: *knowledge, attitude, practices, water sanitation, hygiene*

Knowledge, Attitude, and Practices on Water Sanitation and Hygiene of Selected Health Workers of Barangay Tibungco Health Center, Bunawan District, Davao City

Basiga, R. C., Bayocboc, D. S., Belandres, C. L. L., Beltran, C. J. P., Benignos, K. S. B., and Lindo, J. S. A., MD

COLLEGE OF MEDICINE

Knowledge, attitude, and practices (KAP) associated with water, sanitation, and hygiene (WASH) are essential concerns towards sustainable and effective implementation of WASH programs in communities. Information from the initial community diagnosis raised the respondents' concerns with potable water sources, which are scarce in the locality, and open defecation into a nearby body of water. Thus, a descriptive study was conducted to describe the KAP of WASH among the 25 selected respondents of Barangay Tibungco, Bunawan District, Davao City representing their respective households. This study did an interviewer-administered structured survey via phone call with verbal consent from the respondents. All the respondents were female government employees working as Barangay Health Workers (BHW) who have achieved secondary education. The majority of the respondents were in their late middle adulthood, married and more than Php 10,000 family income earner. They showed good knowledge about the relationship between unsafe water and diarrhea, its contamination risk, the importance of latrine in every household, and the risks of not washing hands. Positive attitudes were also observed in all respondents, agreeing that drinking uncontaminated and clean water can avoid waterborne diseases, poor sanitation can cause diarrhea, and washing hands after using the toilet prevents diseases. Twelve respondents disagreed that diarrhea is transmissible, stating that personal tolerance to food contents is one of the main factors of acquiring diarrhea. Lastly, all respondents observed good practices on WASH. All have appropriate solid waste collection and disposal practices, own toilets with handwashing facilities, and use soap with water when washing hands. These positive results may have been the outcome of their occupation as barangay health workers.

Keywords: *community medicine, Tibungco, Bunawan, Davao City, knowledge, attitude, practices, water, sanitation, hygiene, barangay health workers*

Treading Unfamiliar Grounds: Hospital Birth Experiences of Two Manobo Mothers

Bongalo, J. A. J., Budac, K. A. J. P., Burdeos, A. R. E., Buxani, P. J. J., Cabilao, T. A., and Mariano, R. B. II, DMD, DDPH, MPD, FDPH

COLLEGE OF MEDICINE

Hospital births are entirely foreign for indigenous people such as the Manobos. With their strong culture and beliefs passed from generation to generation, they have always been practicing the traditional birthing at home with the help of traditional birth assistants known as “hilot.” Research shows that most maternal and neonatal mortality are brought by births done outside the hospital, including home births. Modern times are getting the Manobos to acquire knowledge on proper maternal and neonatal health care through hospital births and help them decide on their birthing plans. This qualitative research focuses on the experiences of hospital births of two Manobo mothers from UCCP Haran Center, an evacuation center in Davao City. Interviews and questionnaires were used to collect and analyze data. The participants were chosen with a set of criteria that included indigent mothers aged 18 years old and above living in UCCP Haran Center, having different obstetric histories, and having a history of hospital delivery. Two Manobo mothers were chosen as participants. A thematic analysis approach showed that the two Manobo mothers think of hospital birth as a privilege that only people who can afford it could avail of such an amenity. One of the participants had four (4) out of six (6) births in the hospital, with the remaining two last births at home, at UCCP Haran Center. The other participants had all their births in the hospital. Both mothers agreed that hospital births are better than home births because of the proper care that would be given. One of the participants was previously a healthcare worker. Thus, she was educated on the advantages of hospital births, such as newborn screening, and immediate and proper care could be given to both mother and newborn. All the participants continue to support and educate other pregnant women in their community about the advantages of giving birth in a hospital and highly suggest that future generations do the same. Since home births are a big part of the culture and tradition of the Manobos, it would be helpful to learn how these particular mothers who chose hospital births over home births came to a decision and what their experiences were. This understanding will hopefully aid in respectfully promoting safe deliveries, hospital births, and try to bridge the gap between the ever-changing science in medicine and the constancy of culture.

Keywords: *mothers, pregnancy, hospital delivery, home birth, experiences, case series, Manobo, Mindanao*

Assessment of Lifestyle Changes During COVID-19 Pandemic among Selected Households in Talomo North District

Arani, F. R. M., Arat, B. Z. D., Arayan, G. C. B., Aronzado, C. A., and Quianzon-Manuel, M. F. L., MD, DFM

COLLEGE OF MEDICINE

Lifestyle behavior is greatly affected by an individual's day-to-day activities, which resulted from an interplay between a person's values, knowledge, and norms. Therefore, the behavioral ability of an individual to adapt to lifestyle changes is also affected by the individual's life circumstances. Due to the COVID-19 protocols, people's lifestyle around the globe is significantly affected, including Davao City residents, due to the limited movements within the Metro. Hence, the study was conducted to assess the lifestyle changes among selected respondents of Talomo North District, Davao City. The study investigated the lifestyle changes during the COVID-19 pandemic among respondents aged 18 years old and above. It described the demographic profile, family structure, and lifestyle changes in diet, physical activity, and sleeping patterns. The study utilized descriptive quantitative research and gathered data using the adapted questionnaire. The survey results yielded that the majority of the respondents showed significant changes in their dietary habits, physical activity, and sleep pattern during the COVID-19 pandemic. This showed that the pandemic has caused significant changes in the residents of Talomo North, Davao City. The data and findings gathered can serve as a basis for future studies and necessary interventions.

Keywords: *lifestyle changes, lifestyle-related behavior, COVID-19, Barangay Maa, Talomo North District, Davao City, Philippines*

Postpartum Depression among Women who Gave Birth from 2020-2021 at a Local Birthing Home in Davao City

Banquerigo, E., Bantillo, R., Bantugan, R. R., Bañez, Z., and Fabian, J. C., MD

COLLEGE OF MEDICINE

Postpartum depression is the most common psychological problem affecting women after childbirth. This has detrimental effects on women, but it also has a damaging impact on their children. To date, there are only limited studies that focus on postpartum depression, and this study aims to assess postpartum depression among women who gave birth between 2020 and 2021 at a local birthing home in Davao City. Non-probability purposive sampling was used as the sampling design for the respondents, and descriptive statistics were used to summarize the data. Among the 11 respondents, only two (2) were high-risk for postpartum depression, and nine (9) were considered low-risk. Eight out of 11 individuals showed positive signs of anxiety. Two of them had an early cessation of breastfeeding. The eight who have high-risk depression have low educational attainment. This study did not establish a significant relationship between variables due to the limited sample size. The researchers recommend a larger sample size to develop a significant relationship among variables.

Keywords: *postpartum depression, anxiety, non-probability purposive sampling*

Knowledge, Attitude, and Practices on COVID-19 among Residents of UCCP Haran, Davao City

Samaniego, C. B., Samaon, J. T., Sambaranni, S. J. M., San, K. A. E., San Pedro, C. C., and Mariano, R. B. II, DMD, DDPH, MPD, FDPH

COLLEGE OF MEDICINE

The COVID-19 pandemic has led to a dramatic loss of human life worldwide and presents an unprecedented challenge to public health, food systems, and the world of work. It has fundamentally changed our daily lives, and the poor and vulnerable populations are not exempted from this. UCCP Haran Center is a home for indigent people displaced from their ancestral land due to armed conflict in the mountains. The knowledge, attitude, and practices on COVID-19 among these indigent residents in Haran Center were described in this study using a standardized questionnaire by World Health Organization. A quantitative descriptive research design was utilized in this study. A total of 31 questionnaires from the respondents in the community were evaluated. Results showed that 15 out of 31 respondents had a low level of knowledge about the characteristics, symptoms, and preventive measures of COVID-19. Thirteen out of 31 respondents had a low level of attitude towards management and preventive measures of COVID-19. However, the results revealed that 19 out of 31 respondents had moderate knowledge about the transmission routes and groups at higher risk for the disease. Although these findings are poor, currently, they have zero cases. Therefore, despite the absence of cases of COVID-19 in the community, there is still a need for targeted health education as a response strategy to COVID-19 in this community.

Keywords: *knowledge, attitude, practices, COVID-19, Haran Center*

Knowledge, Attitude, and Practice on Waste Disposal among Residents in Barangay Gumalang, Baguio District

Muhammad, S. A. G., Mundo, J. A. I., Najera, A. B., Naval, R. M. T., and Lindo, R. H.

COLLEGE OF MEDICINE

Environmental degradation has become a very alarming issue at present. Human activities have been the primary cause of this unfortunate event, resulting in other complications such as health problems. The resources are limited, and people solely depend on it for a living. Thus, the necessity to address these concerns arises. Various solid waste management programs have been established. However, the people's commitment has continued to challenge the local authorities and the cooperating agencies. This study was conducted to assess the knowledge, attitude, and practices towards the residents' existing solid waste management programs in Barangay Gumalang, Davao City. It also aims to measure these implemented programs' effectiveness and current status. The study used a survey method. Twenty-one out of 1,800 households were surveyed using a validated, self-administered instrument. The study revealed that the majority of the residents were well aware of the existing solid waste management programs, practiced them, and were willing to learn more about the issue. Others do the opposite. It is of great importance that all citizens commit to implementing environmental programs to be more effective.

Keywords: *waste disposal, knowledge, attitude, practices*

Si Nanay, Kumusta Ngayong Pandemya: A Case Series

Lariosa, A. D. S, Lascuña, J., Latras, M. M., Laude, A., and nzon-Manuel, M. F. L., MD, DFM

COLLEGE OF MEDICINE

Mental health is an essential indicator of a person's overall well-being. The pandemic, which has started in late 2019, continues at the time of this study's writing and has severely affected the economy, and without a doubt, has also put a strain on people's mental well-being. The study aimed to shed light on the personal experiences of selected mothers in Barangay Maa, Talomo District, Davao City during the COVID-19 pandemic and how it has affected their behavior. It was a qualitative study wherein a set of five questions were asked to each respondent, and a common theme was analyzed using Giorgi's method based on their responses. The study results yielded that most of the respondents showed fear of getting infected, increased anxiety since the pandemic started, were more overprotective of their children, and had less social interaction owing to following government-mandated health protocols. However, regardless of the restrictions in their daily lives, the mothers were hopeful that the pandemic would end soon. Their coping mechanisms included gardening, religious faith, and family bonds as they weathered through the pandemic. The findings of this study do not assess for mental health disorders of the publication. Still, help reflect the effects of the pandemic on the mental well-being and behavior of mothers, who have to think of themselves and the family, children, and environment.

Keywords: *mothers, mental health, well-being, behavior, coping mechanisms, COVID-19 pandemic, Davao City*

Mental Health, Social and Family Support, and Quality of Life During COVID-19 Pandemic among Selected Families in Matina Pangi, Davao City

Pausal, I. P., Paypa, J. A., Pelaez, G. J., Perez, F. J., and Quianzon, M. F. L., MD, DFM

COLLEGE OF MEDICINE

Mental health cases has been often overlooked to increase worldwide over the past years. However, with the advent of the COVID-19 pandemic and the imposed quarantine restrictions, there has been a surge of mental health cases and caused changes in the daily lives of individuals. This study aimed to describe the mental health, social and family support, and quality of life during the pandemic among selected families spanning from January to March 2021. The study is purely descriptive and used a close-ended survey questionnaire. This study found that the most significant impact of the COVID-19 pandemic falls on the population's mental health. The main aspect that has affected mental health involves the financial stress resulting from the pandemic's economic impact. On the contrary, there had been no change in the social and family support, and such results might have stemmed from the reported situation and living conditions of the families and their relatives. The impact on quality of life was similar to a study of Panchal et al., who reported an increased positive mental health-relative lifestyle changes such as attention in medical health and spending more time relaxing and resting. The researchers recommend subsequent research with more significant respondents to better assess the trends.

Keywords: *mental health, COVID-19 pandemic, quality of life, social and family support, Mental Health Act, descriptive study, Davao City*

Knowledge, Attitude, and Practices of COVID-19 among Adults of Low-Income Households of Barangay Maa, Talomo District, Davao City

Pangan, C. G. C. T., Paragele, K. C. R., Paras, S. J. D., Parilla, I. M. C., and Quianzon, M. F. L., MD, DFM

COLLEGE OF MEDICINE

The impact of the COVID-19 pandemic is especially devastating for low-income communities who have to suffer the brunt of the shortage in health workers and facilities due to health restrictions and protocols. Despite the increased curiosity to COVID-19 within the research community, the focus of these researches on the vulnerable groups remained much to be desired. Therefore, the researchers conducted a study about the knowledge, attitude, and practices (KAP) of adults among low-income households in Barangay Maa, Talomo District, Davao City towards COVID-19 to assess the perception of these vulnerable groups with regards to the pandemic. This study took into account the community's demographic profile, such as age, sex, occupation, level of educational attainment, and monthly family income, and described how these factors influenced the KAP results of the respondents. This study utilized a descriptive quantitative research design wherein data were collected through a self-administered questionnaire. Thirty adults belonging to low-income households consented to participate in the survey. The results reported low scores on the knowledge, attitude, and practices on COVID-19. Half of the respondents had insufficient knowledge on the characteristics, symptoms, prevention, and control of COVID-19, 83% had moderate knowledge about the transmission routes and groups at higher risk for the disease, 60% had low attitude, 87% had reasonable practices scores. The results echoed the principle of a KAP theory, which associates knowledge scores with attitude and practice scores. By utilizing the information by focusing on educational programs tailored to address the gaps identified by this study and making these information sources readily accessible to the community.

Keywords: *knowledge, attitude, practices, COVID-19, demographic profile, low income households, descriptive quantitative research design, Davao City*

Knowledge, Attitude, and Practices Towards Family Planning among Selected Women in Davao City

Ramirez, J. B. L., Rapacon, K. E. M. B., Resmundo, M. R. M., Respeto, K. P. P., and Lindo, J. S. A., MD

COLLEGE OF MEDICINE

This research aimed to determine the knowledge, attitude, and practices towards family planning among selected women in Davao City. A descriptive quantitative research design was employed, and the data were obtained from women of reproductive age from Bunawan District, Davao City, using interviews done through phone/cellular or Facebook messenger calls. A 45-item questionnaire was utilized to gather the information needed. A total of 13 women aged 29 to 43 years old were interviewed. Eight out of 13 respondents were early adults (18 to 35 years old). In the knowledge domain of the survey tool, only one of the respondents had inadequate knowledge of family planning methods. The attitude domain of the survey tool indicated that with regards to perceived physical health consequences, nine out of 13 are not concerned that family planning can lead to illness or cancer. Ten out of 13 do not experience sadness when using family planning for perceived emotional effects. However, eight out of 13 were bothered to feel angry and aggressive. Lastly, for social consequences, most of them agree that family planning can ease the family's financial burden and that poverty and educational attainment were not barriers to access family planning methods. Regarding the practice domain, all the respondents discussed with their partners when to have a baby, 11 of them visited the health center for family planning services, and 10 of them were on artificial family planning methods. The findings in this study would provide the existing knowledge, attitude, and practices about family planning among selected women in Davao City. They may serve to inform targeted interventions in promoting family planning.

Keywords: *knowledge, attitude, practices, family planning, Davao City*

The Plight of the Forgotten: COVID-19 Pandemic Experiences of Three Lumads in UCCP Haran Community

Romanes, R., Roque, J., Rosete, T. M., Sale, S., Saligan, K. A., and Mariano, R. B. II, DMD, DDPH, MPD, FDPH

COLLEGE OF MEDICINE

The Lumads of the Community UCCP Haran have already struggled with access to proper healthcare, supplies for their daily living, and discrimination even before the COVID-19 pandemic began. The community is sustained mainly through donations from charity groups and the UCCP church. Having these pre-existing struggles, this study was conducted to gauge and address how this global pandemic affected this and the lives of the members of this community. The study is a qualitative design as it is concerned with identifying the different concerns of the target population rather than correlating the data to be collected with pre-existing theories. This descriptive phenomenology study aims to describe the essence or essential structures of subjective experiences. The study was conducted in the United Church of Christ in the Philippines (UCCP) Haran Compound, Madapo, Davao City. The study participants included three lumads selected by the chieftain Datu Tanguig of the UCCP Haran Community. A purposive sampling technique was used wherein three participants who fit the inclusion criteria were asked to participate. Formal informed consent was given verbally via voice call, and their thumbprints were also obtained. Researchers did data gathering through an interview via voice call, and each call was scheduled according to each respondent's convenient time. The interview tool used was from the Office of Behavioral and Social Sciences Research (OBSSR) compiled the list. The study results have shown the UCCP-Haran community's determination amidst the challenges brought by the COVID-19 pandemic and, at the same time, their extreme difficulty. Their plight shows the need for finding alternative strategies to help them meet their essential commodities. They also hold great hope for the government to one day see their actual well-being and provide sufficient medications and food donations. The researchers believe that the study will aid in identifying the priorities and concerns which would guide more helping hands, charity groups, and other sectors of the society in coming up with contingency plans that can be established so that the well-being of the families of this community would no longer be compromised if a similar situation arises in the future.

Keywords: *COVID-19, experiences, Lumad, Davao City*

Knowledge, Attitude, and Practices on Nutrition among Mothers with Under-Five Children of Purok-5, Barangay Lacson, Calinan, Davao City

Mirasol, P. I. T., Misoles, B. M. A., Mohanty, A. S. G., Mokamad, K. A. A., and Lindo, J. S. A., MD

COLLEGE OF MEDICINE

The nutrition of the under-five children is given most importance because this period laid the foundation for lifetime health, strength, intelligence, and vitality. Despite the good economic growth and increased health budgets, the country still faces the burden of diseases in which nutritional deficiencies are the most common. The Philippines ranks 5th among countries in the East Asia and Pacific Region with the highest number of stunted children. Knowledge of mothers has a vital role in maintaining the nutritional status of the children. These mothers must be aware of the feeding practices of children and other healthcare practices. This study was undertaken to evaluate the knowledge, attitude, and practices (KAP) of mothers regarding nutrition of under-five children in Purok 5, Barangay Lacson, Davao City. This community-based study was conducted among 10 mothers with under-five children. A structured KAP questionnaire was adapted but was revised to local conditions. The KAP questionnaire was composed of three parts that assessed the KAP of mothers regarding the nutrition of their under-five children. Results of the study showed that nine out of 10 mothers had good knowledge, seven had good attitudes, and six had good practices on the nutrition of under-five children. Overall, mothers had a fair to good KAP regarding nutrition of under-five children. The knowledge of mothers towards proper nutrition of children is given utmost importance. This will reflect on their attitude and help them change inadequate practices, which would go a long way in solving the nutritional health problems in the communities.

Keywords: *knowledge, attitude, practices, nutrition, malnutrition*

Knowledge, Attitude, and Practices on Water, Sanitation and Hygiene among the Respondents in Barangay Tambobong

Odal, C. W., Opamin, B. I. T., Orendain, M. J., Orig, L. M., and Lindo, R. H.

COLLEGE OF MEDICINE

In rural areas, water-borne diseases are a significant health burden. Therefore, it is essential for the local leaders, especially the barangay health workers, to have adequate knowledge, attitude, and practices regarding water, sanitation, and hygiene (WASH) since they are responsible for information dissemination to prevent morbidity related to water-borne diseases. This study evaluates the knowledge, attitude, and practices on WASH among the respondents in Barangay Tambobong, Baguio District, Davao City. It described the demographic profile and the level of knowledge, attitude, and practice on WASH of the respondents and their households. The study used a descriptive quantitative research design in which a standardized questionnaire was used. Nineteen respondents have been surveyed in which all of them work at the barangay health center. Analysis of the result showed 18 out of 19 respondents had good knowledge, and all of them had a positive attitude and good practices on WASH. These results may indicate that there is a good health care promotion in their group which may help in increasing the total knowledge, attitude, and practices on WASH in the community. Thus, continuing the program is essential to maintain and improve the level of knowledge, attitudes, and practices on WASH within the community.

Keywords: *knowledge, attitude, practices, water, sanitation, hygiene, WASH, Davao City*

COVID-19 Vaccine Acceptance among the Adult Members of Selected Households in Bunawan District, Davao City

Lisondato, P. M. D., Lomadilla, F. P., Lopez, K. W. R., Losaria, M. A. M., and Lindo, J. S. A., MD

COLLEGE OF MEDICINE

The global efforts to lessen the health and socio-economic impact of the COVID-19 pandemic rely primarily on preventive measures. Still, despite the compelling evidence of vaccines, vaccine hesitancy has become a growing concern globally. The utility of vaccine campaigns is not merely dependent on vaccine efficacy and safety. Vaccine acceptance has a decisive role in the successful control of the pandemic. Therefore, this study aimed to describe the COVID-19 vaccine acceptance among the adult members of selected households in Bunawan District, Davao City. Estimates of vaccine acceptance rates can be helpful to plan actions necessary to increase awareness and assure people about its safety and benefits, which in turn would help control virus spread and alleviate the effects of the pandemic. This study took into account the community's demographic profile and described how these factors influenced COVID-19 vaccine acceptance. It utilized a descriptive quantitative research design wherein data were collected through survey questionnaires administered through phone or online interviews. Sixty adults consented to participate in the survey. The results reported that 72% of respondents would volunteer to get vaccinated, while 8.3% disagreed and 20% were still undecided. Among the identified obstacles and constraints noted are biased towards products from western drug companies (22%), belief that vaccines with low efficacy rate are not practical (15%), thought that it will not provide enough protection (17%), fear about its side effects and complications (33%), and negative influences from social media (20%). Based on various studies in different countries, vaccination plays an important preventive measure to halt the current pandemic. Factors pointing out hindrances towards vaccine acceptance must be addressed urgently. It is essential to build trust among the general public via the spread of clear messages through trusted channels advocating vaccine safety and efficacy.

Keywords: *COVID-19 vaccine acceptance, COVID-19, demographic profile, adult households, descriptive quantitative research design, Bunawan District, Davao City, Philippines*

Impact of COVID-19 Pandemic on Mental Health among Selected Residents in Agdao District, Davao City

Laurel, R. J., Laurico, R., Lee, E., Leong, O-J., and Fabian, J. C., MD

COLLEGE OF MEDICINE

In this study, the researchers sought to assess the impact of the COVID-19 pandemic on mental health among selected respondents in Agdao District, Davao City. Participants completed a modified validated questionnaire that evaluated negative mental health impacts, social and family support, and mental health-related lifestyle changes. Participants also made use of the General Anxiety Disorder-7 questionnaire. A total of 20 participants, wherein five are males and 15 are females, completed the study through phone call interview. Majority of the respondents aged 20 to 29 years old, were high school graduates, and had attained elementary education. Twelve out of 20 respondents have unchanged feelings towards helplessness due to the pandemic. On the other hand, 18 out of 20 participants felt horrified and apprehensive due to the pandemic, respectively. Additionally, 17 out of 20 respondents received unchanged or same support from friends. Furthermore, 10 out of 20 respondents have increased support from their families. Eleven out of 20 respondents have the same or unchanged feelings with family members as before the pandemic. Moreover, more than half of the respondents have increased their need to care for their family members due to the pandemic. Out of 20 respondents, 17 reported that paying attention to their mental health during the COVID-19 pandemic has not changed compared to the time before the pandemic. Eleven of the respondents have decreased time spent to rest and relax. Thirteen out of 20 respondents reported that their physical activity had not changed during the pandemic. Among the 20 respondents, 12 had a score between 5 to 9 which corresponds to having a mild level of anxiety. Seven of the respondents had a score between 10 to 14 which implies moderate anxiety and the only one respondent had a score between 15 to 21 which indicates severe anxiety. In conclusion, the COVID-19 pandemic was associated with a mild stressful impact on the respondents, even though the COVID-19 pandemic is still ongoing. These findings are subject for verification in a more extensive population.

Keywords: *mental health, anxiety, COVID-19, Davao City, community medicine*

Perceptions on the Factors that Influence Health Screening of Chronic Diseases among Residents of Agdao, Davao City

Perez, J. III, Pilapil, G. K., Pillarte, L., Pineda, C. I., and Lindo, J. S. A.

COLLEGE OF MEDICINE

Health screening plays an essential role in maintaining the health and well-being of each patient. However, there are many different reasons why people tend to avoid these health screenings. It may be due to the fear of being diagnosed with a chronic illness or other factors that may be quickly addressed through some adjustment. Especially with the current pandemic, it should be critical for each patient to undergo health screening since the pandemic has been widespread and many people were being continuously affected. Knowing the factors that cause those people to participate in health screenings is critical since some possible factors are correctable and can be given priority. In this descriptive study, the aim was to describe the context, motivating factors, obstacles, and constraints of some residents of Agdao District, Davao City, regarding health screening for chronic illnesses. The 20 randomly selected study participants were grouped according to their age and were given questionnaires. Results showed that the most of them aged less than or equal to 30 years old. Also, 18 of the 20 respondents were female with different levels of education literacy. Most of them did not have any past medical condition. All of the respondents were aware of the community-based health screenings offered by the community. The primary positive motivating factors for patients were the convenience of the location and free or affordable screenings. Furthermore, negative experiences during check-ups were considered a negative motivating factor during health screening.

Keywords: *health screening, chronic disease, community medicine*

Lived Experiences with Mental Health Challenges of Prostitution Survivors of Talikala, Inc. During the COVID-19 Pandemic

Orlanes, J. P. P., Pacudan, A. J. T., Pagas, X. C., Pahm, N. A. P., and Lindo-Valdez, B. M. K.

COLLEGE OF MEDICINE

The COVID-19 pandemic has affected all of us in many ways, one of these is mental health. As the pandemic enters its second year, many people will continue to suffer from the poor mental health of facing other cognitive challenges. Lockdowns, which lead to loss of jobs, fear about the vaccine's effectiveness, and restricted movements within the city have impacted many Filipinos, thus, taking a toll on their psychological well-being. In this paper, with the efforts of DMSFI Community Medicine rotators and NGO Talikala, Inc., female sex workers were evaluated through interview. The respondents were asked for permission and consent, informed about the purpose of the study, and that ethical practices would be observed throughout the study. The respondents were asked through calls to describe their experiences throughout the pandemic verbally. This study used qualitative measures, which utilized questionnaires organized by the medical clerks. The majority of the respondents noted increased anxiety and fear of being infected by the virus. They also feel more anxious that the pandemic has been going on for more than one year. Unemployment and financial stress have exacerbated mental health problems during this pandemic. This data could be a basis for which future programs could be developed to provide adequate assistance to fellow Filipinos further.

Keywords: *mental health, lived experiences, COVID-19, prostitution*

Vaccination Acceptance: Attitudes and Perspective of Selected Women Survivors of Prostitution Work in Davao City

Anito, C. K. P., Anni, M. A., Apigo, J. G. B., Apion, I. A., and Lindo-Valdez, B. M. K.

COLLEGE OF MEDICINE

In Davao City, there are thousands of women and children exploited through the system of prostitution. Only hundreds of them managed to break free of these shackles and escape. However, the COVID-19 pandemic posed a very distinct threat to this collective of survivors. Their attitudes and perspectives about the vaccination process may indicate not just their vaccine acceptance but also other socio-political factors that have led to their exploitation. The dominant explanation for why women in the city entered prostitution is financial gain and being illegally trafficked from the provinces. There is enough information on how and why these women enter prostitution, but there is seldom information on their lives after they get out of it. This study used a descriptive cross-sectional survey to describe the attitudes and perspectives of selected prostituted women survivors in Davao City about the COVID-19 pandemic and how it was being addressed in the city. Results showed that the majority of the concerns of these women regarding the pandemic were related to financial security. On their attitudes towards the vaccine, more than half strongly agreed that they would accept the vaccine for protection, while all respondents were firmly against paying for their vaccines. Also, all of the respondents showed utmost trust about COVID-19 vaccine information from healthcare workers, followed by the government, the media especially social media, and their family members. In addition, their general perspectives about vaccines vary, ranging from solid distrust to complete confidence. On their perspectives of vaccine safety, half have complete confidence while the other half range from complete distrust to doubtful. The same can be said about their perspectives on the importance of vaccines and their trust in pharmaceutical companies. This trend continues with their perspectives on vaccines from America and Europe compared to vaccines from other countries, with half having complete confidence in the former and the other half ranging between levels of doubt. The majority of them also believed that the Philippine Government is between levels of doubt. The majority of them also have confidence that the Philippine Government will provide vaccinations for everyone, including themselves.

Keywords: *vaccination acceptance, COVID-19, attitude, perspectives, prostitution survivors*

An Appreciative Inquiry on Postnatal Care Delivered by the Barangay Health Workers of Toril, Davao City

Benignos, A. M., Bernido, E. A., Bersamen, D., Boiser, G. A., and Lindo, J. S. A., MD

COLLEGE OF MEDICINE

The postnatal period is crucial for both the mother and the child, yet it remains a neglected period. Studies pointed out that postpartum women lack knowledge about postpartum health concerns. At this time, the Philippines have a lack of health workers qualified to address the community's postpartum needs. Barangay Health Workers (BHW) are community health workers in the Philippines that bridge the gap between the health facility and community. Despite their recognized potential, no studies describe the work journey or experiences of BHW in delivering postnatal care. Thus, this study performed an evaluative qualitative research study using Appreciative Inquiry. Five BHW from Toril, Davao City were interviewed through phone call using a semi-structured questionnaire. Data derived was transcribed, translated, and analyzed thematically. Findings showed that the postnatal care activities are already in line with the Maternal, Newborn, Child Health, and Nutrition (MNCHN) strategy. However, disparities and inconsistencies were still identified in the provision of care. Self-satisfaction and observed benefits were discovered as motivations of BHW in providing maternal and child health service. All participants recognized that current postnatal services must be improved to achieve healthy mothers and babies. Results highlighted the need for processes that enhance knowledge and increase the capacity of BHW to provide uniform and complete postnatal care services. The current COVID-19 pandemic is highly considered as a barrier to achieving the healthy mothers and babies as healthcare human resources are being redirected.

Keywords: *community medicine, barangay health workers, postnatal care, public health, appreciative inquiry*

Knowledge, Attitude, Practices (KAP) and Involvement of Men on Family Planning and Contraceptive Use in Barangay Duterte, Agdao District, Davao City

Libre, I. C. G., Lim, C. P. P., Lim, Z. J. E., Lipardo, C. L. O., and Fabian, J. C., MD

COLLEGE OF MEDICINE

Family planning aims to have proper spacing between two pregnancies and control the number of childbirths. The involvement of males in family planning decisions is essential to the long-term sustainability of the overall family financial situation. Bringing awareness by gathering information on the knowledge, attitude, practices, and involvement of men in family planning could lead to a healthy discussion with men's full and voluntary participation. This descriptive study aimed to describe the knowledge, attitude, and practices on contraceptive use and involvement in men's decision-making in Barangay Duterte, Agdao District. Twenty male respondents were recruited for the study. Data collection was done via survey interviews conducted through telecommunication methods in compliance with current quarantine regulations. The data gathered was analyzed by employing frequency on men's knowledge, attitudes, practices, and involvement in family planning and contraceptive use. The respondents had a relatively high knowledge of family planning methods. Contraceptive knowledge was higher in older age groups and lower educational attainment, although statistical significance was not established. The majority of the respondents had positive attitudes toward family planning to limit the number of children, proper birth spacing, the ideal number of children, being beneficial to both the male partner and the community. Half of the respondents practice family planning wherein most of them use temporary methods like pills. For male involvement in family planning, the majority encourage their partners in using family planning and admit to discussing it occasionally.

Keywords: *knowledge, attitude, practice, family planning, community medicine*

COVID-19 Vaccine Acceptance: Willingness, Beliefs, and Barriers among the Residents in Barangay Baguio 1, Davao City

Guerra, J. M., Guimala, R. A., Gupeteo, C., Gutierrez, D. L., and Lindo, R. H.

COLLEGE OF MEDICINE

Vaccination could be an important preventive step against COVID-19. It is essential to understand the general population's willingness, beliefs, and barriers, especially in a developing country. Therefore, this study aimed to determine the acceptability of the COVID-19 vaccine in selected households of Barangay Baguio 1, Davao City, and discover the reasons for hesitance. This quantitative-descriptive study had gathered 26 responses through an online survey. Participants were asked if they were willing to get vaccinated, why they wanted to get vaccinated, or why they did not want to get vaccinated. In addition, the participants responded on sociodemographic factors, their beliefs, and barriers against the COVID-19 vaccine. The proportion of participants who were willing to be vaccinated was 73%. The majority believed that the vaccines against COVID-19 are safe, effective, and best way to avoid complications of the infection. Results indicated that importance of public health and community protection played an essential role in accepting the vaccine.

Keywords: *acceptability, COVID-19, vaccine acceptance, beliefs, barriers*

The Chronicles of a Babaylan: A Case Study

Maduay, R. M., Magallanes, J. C., Magarang, A. N., Makalingkang, S., Malang, I. A., and Mariano, R. B. II, DMD, DDPH, MPD, FDPH

COLLEGE OF MEDICINE

Despite the modernity of today's era, the Babaylan of the Manobo tribe continues to practice their tradition and culture. Previous research has primarily investigated the Babaylan and its sociocultural roles, rituals, and practices. In this case study, researchers described the Babaylan's functions of the Talaingod Manobo tribe in Haran. This study also discussed their Babaylan's history and development, healthcare practices, reasons for maintaining the use of traditional medical practices, experiences during COVID-19 in their healing practices, and stand on the integration of modern medicine with their traditional practices. After the interview with the Babaylan, findings provided insight into the rationale for their traditional healing practices with detailed stories of the Babaylan's healing rituals and accounts of a few community members who have witnessed and experienced the works of the Babaylan.

Keywords: *Babaylan, Manobo tribe, healthcare, traditional medical practices, modern medicine*

Knowledge, Attitude, and Practices Towards COVID-19 among the Respondents in Barangay Biao Joaquin, Calinan, Davao City

Gonzaga, J. J. M., Gonzales, M. L. I. J., Granda, J. R. B., Gretare, A. J. R., and Fajardo, D. C., MD

COLLEGE OF MEDICINE

Despite the efforts of the Philippine government to enforce a nationwide community quarantine and distribution of vaccines, the country remains to contribute approximately 20% of the COVID-19 cases in Southeast Asia. Among these positive individuals, around 1.8% have died. This event solidifies the fact that the COVID-19 pandemic remains to be a global and societal emergency. Although the information on preventive measures has continuously been disseminated, said measures are greatly affected by one's knowledge, attitude, and practices (KAP) towards the disease. Thus, this study aimed to observe KAP towards COVID-19 among the residents of Barangay Biao Joaquin, Calinan, Davao City. Participants were asked to answer a three-part KAP questionnaire. The respondents were adults who were mostly aged 40 to 49 years old. Their overall knowledge score was 75% which was considered below average. The participants, however, had a positive attitude towards the disease as they had a mean score of 89%. For the practices, they scored 78% which implies below average. With these results, the researchers suggest that further enhancing of residents' KAP in the barangay should be the priority of the local government.

Keywords: *knowledge, attitude, practices, COVID-19, community medicine*

COVID-19 Vaccine Acceptance among the Selected Households of Barangay Biao Joaquin, Calinan, Davao City

Gempesaw, C. B., Giducos, A., Go, L. J., Goned, A. M., and Fajardo, D. C., MD

COLLEGE OF MEDICINE

COVID-19 continues to be a global public health emergency with no effective medicine. Hence, the development of the COVID-19 vaccine is considered a key determinant in stopping the pandemic. However, the success of the vaccination roll-out is not only dependent on the development of a safe and effective vaccine but also on the acceptance of the public, which in turn, depends on the beliefs and perceptions towards the COVID-19 vaccine. Thus, this study aimed to describe the vaccine acceptance among the selected households in Barangay Biao Joaquin, Calinan, Davao City. This study was conducted through phone interviews, text messages, or online questionnaires. The questionnaire was composed of sections about the demographic profile, perceived risk of getting COVID-19 infection, beliefs toward COVID-19 vaccination and overall vaccine acceptance, and barriers associated with COVID-19 vaccination. Among the 65 respondents, only 27.7% planned to be vaccinated, while 72.3% refused. Among these respondents, ages 40 to 59 years old, females, and employed are more willing to be vaccinated. Results showed that 24.6% believed the vaccine to be safe, 27.7% thought it would be effective, 50.6% believed that vaccination could avoid COVID-19 complications. In comparison, 49.2% believed that by getting a vaccination, they would protect others. The study also identified that concerns regarding vaccine safety are the key barriers to vaccine acceptance. The results of this study can be used in improving vaccination campaigns while waiting for the vaccination roll-out in the general public.

Keywords: *COVID-19, vaccine acceptance, household survey, community medicine, Davao City*

Awareness, Practices, and Attitude Towards Waste Disposal among the Selected Members of Lawig Bubai at Kilometer 10, Sasa, Davao City

Kadatuan, R. H. B., Kiamko, R. B., King, A. R., Labaco, R. M. T., and Lindo-Valdez, B. M. K.

COLLEGE OF MEDICINE

Globally, environmental pollution has long been a problem and far from resolution. The Philippines is not spared from the challenges of waste management. Significant causes of such issues are the lack of awareness, practice, and inappropriate attitude of some people towards proper waste segregation, which result in health problems in their communities. Thus, this study is focused on assessing the awareness, practices, and attitude towards proper waste disposal among the respondents of selected members of Lawig Bubai at Km. 10, Sasa, Davao City, along with their demographic profiles. The study utilized a descriptive quantitative research design in which a standardized questionnaire was derived. The researchers surveyed 15 female respondents who are all prostitution survivors. This study reveals that most respondents are well aware of proper waste disposal and are willing to understand the issue better. However, despite their awareness, most of them are not practicing waste segregation. To address this global problem, all citizens must understand and commit to implementing environmental programs.

Keywords: *awareness, practice, attitude, waste management, community medicine*

Perceptions on Sex Education, Sexual Behavior, and Opinions among the Selected Senior High School Students of Barangay Maa, Davao City

Labtang, T., Lagrimas, L., Laguirin, D. V., Lagurin, P., Lapitan, H., and Quianzon, M. F. L., MD, DFM

COLLEGE OF MEDICINE

The Philippines has become the fastest-growing HIV-AIDS epidemic in Asia and the Pacific, affecting primarily the younger population accounting for about 80% of the people living with HIV (PLHIV). Moreover, there is also an increased incidence of teenage pregnancy with a 7% increase in births. The Philippines reported a rise in teenage pregnancies for the ninth consecutive year. In line with these significantly rising cases, the objective of this quantitative descriptive study aimed to know the different views and perceptions of the selected senior high school students about sex education, sexual behavior, and opinions. A purposive sampling technique was used in choosing the 40 respondents from Barangay Maa, Talomo District, Davao City. A questionnaire was developed and administered online via Google Forms along with the necessary consent and assent forms. The results revealed that 62.5% of the senior high school students had already tried engaging in sexual intercourse. Most of their first sexual experience was around 16 to 17 years old, having one to two sexual partners. The students had little knowledge about the different forms of contraception and had average perceived knowledge about the available information in sexual education. They also had a high sexual understanding. However, they scored very low on the extent of sexual behaviors, identical with those who already had sexual opinions. With the adolescents' quest towards identifying one's sense of self, the integration of Comprehensive Sexual Education in the K-12 curriculum will help increase the knowledge of young Filipino students about the different aspects of sexuality, reduces risky sexual behaviors, increase knowledge about the uses of contraception and protection from any forms of STIs.

Keywords: *HIV/AIDS, Teenage pregnancy, sex education, sexual behaviors and opinions, Maa, Davao City*

Acceptance of COVID-19 Vaccine on Selected Prostituted Women in Davao City

Into, K. L., Iraj, N., Javelona, R. Q., Juban, K. J., and Lindo-Valdez, B. M. K.

COLLEGE OF MEDICINE

One hundred twenty-nine million, the number of COVID-19 cases worldwide. With a death rate of nearly three million, this pandemic has managed to take the world to a pause. Vaccines being rolled out to the people is a breakthrough to end the pandemic. However, the next hurdle is vaccine acceptance. With this, the study aimed to determine the level of COVID-19 vaccine acceptance among the 13 selected prostituted women in Davao City. This descriptive cross-sectional study aimed to obtain their sociodemographic profile, COVID-19 health status, knowledge, barriers, and perceptions, and COVID-19 vaccine acceptance, beliefs, and obstacles. Data was gathered through phone call and results showed that only five positively said yes to COVID-19 vaccination, four women were unwilling to be vaccinated, and another four were undecided. Only five out of 13 prostituted women believed that vaccination is safe. Eight of them believed that it will be effective, seven of them believed that it is the best way to avoid complications of COVID-19, and another seven of them thought that it would help them protect others. However, most of them were worried about the vaccine's side effects. The second most frequent concern was that they did not know how to avail free vaccination. Among the undecided, three of them were afraid of the vaccines' side effects, and two respondents do not believe in vaccines, another two would observe first, and one respondent said that she is healthy and does not need the vaccine. Thus, the researchers believe that the results of this study will help raise awareness about vaccination and improve vaccination acceptance in the general community.

Keywords: *vaccine acceptance, COVID-19, prostitution, Davao City*

Knowledge, Attitude, and Practices on Water Supply and Sanitation among Residents in Barangay Tambobong, Baguio District, Davao City

Hassan, M. J., Herrero, R. P. P., Hipulan, L. A., Hong, H. I. N., and Lindo, R. H.

COLLEGE OF MEDICINE

Waterborne diseases have always been a significant problem in rural and suburban communities. According to the World Health Organization, in 2016, the Philippines has experienced a series of waterborne disease outbreaks during the last decade, which could have been minimized if bolstering information dissemination to water sanitation and improvements in access to sanitation facilities had been given full attention. At the grassroots level, it is essential for the community leaders and residents to have sufficient knowledge on proper water sourcing, sanitation and hygiene, and information dissemination, and to have regular practice on such acquired information. This action will help achieve diminished cases of waterborne diseases, resulting in lessened morbidity and economic losses brought about by such diseases. Thus, this descriptive quantitative research study aimed to describe the demographic profile and the level of knowledge, attitude, and practices on Water, Sanitation and Hand Hygiene (WASH) of the respondents' households in Barangay Tambobong, Baguio District, Davao City. Twenty residents participated in the survey using a standardized questionnaire. Results showed that 18 out of 20 respondents are barangay health workers. All of them had good knowledge, positive attitude, and practiced desirable habits of WASH. The study results indicated that the group was well informed and educated with sanitation and hygiene and proper treatment of water. Hence, feasible programs and assessments must be continually delegated to the community to constantly uphold its good levels of knowledge, attitudes, and practices.

Keywords: *WASH, diarrhea, sanitation, water treatment, Davao City, Philippines*

Knowledge, Attitude, and Practices on Self-Medication of Selected Residents of Barangay Panacan, Bunawan, Davao City

Lualhati, C. C., Lumakin, C. L., Madayag, N. B., Madrangca, E. J., and Lindo, J. S. A., MD

COLLEGE OF MEDICINE

Self-medication is the use of drugs to treat symptoms without a physician's consultation. It is a common practice among Filipinos to use medicine when experiencing symptoms such as fever, cough, and body pains. However, inappropriate self-medication with over-the-counter drugs or home therapy may have profound health implications. Researchers did a quantitative descriptive study to describe the knowledge, attitude, and practices of residents towards self-medication in Barangay Panacan, Bunawan District. A total of 12 eligible participants were selected and a four-part questionnaire was designed to assess their demographics, knowledge, attitude, and practices. The study used descriptive statistics to analyze the data. Results showed that all respondents were females, aged on average around 44.4 years old, and had an average monthly household income of Php 6,555.56. Seven out of 12 participants had good knowledge, three had moderate knowledge, and only two had poor knowledge on self-medication. All respondents had an overall positive attitude towards self-medication and majority of them showed good general practices towards self-medication. The researchers strongly recommend increasing the number of participants for future studies.

Keywords: *knowledge, attitude, practices, self-medication, community medicine, Davao City*

Knowledge, Attitudes, and Practices on COVID-19 Prevention in Inayangan, Calinan, Davao City

Rodriguez-Evangelio, J. J., Rosalinda, G. S., Rufule, D. G., Salce, K. M. B., and Fajardo, D. C., MD

COLLEGE OF MEDICINE

Rural communities are at a high risk of getting COVID-19 because of limited healthcare infrastructure and health information access. Furthermore, as COVID-19 cases increase in Davao City, the rural communities are also vulnerable. Thus, there is a need to assess their knowledge, attitude, and practices towards COVID-19 prevention. This study collected demographics, sources of information, knowledge, attitude, and practices from 20 residents of the rural community of Barangay Inayangan, Calinan District. The majority are females, married, unemployed, and belong to low-to-poor income families. Television, followed by social media and family or friends, is their primary source of information regarding news and updates on COVID-19. In terms of knowledge, attitude, and practices, the results indicated moderate in all of these three aspects.

Keywords: *medicine, knowledge, attitude, practices, descriptive study, Davao City*

Perceived Levels of Stress and Anxiety among Community Health Workers in Barangay Tambobong

Seares, E. E., Sebumpan, J. M., Sexcion, J. A., Sialana, R. L. M., and Lindo, R. H.

COLLEGE OF MEDICINE

The researchers gathered data to describe the perceived levels of stress and anxiety of community health workers (CHW) during the COVID-19 pandemic at Barangay Tambobong, Baguio District, Davao City, using a quantitative descriptive research design. The data collection was done through self-administered questionnaires which were sent to 15 CHW through Facebook messenger. Results showed that most of them aged 23 to 57 years old and all are females. The majority were high school graduates, married, with an average of four persons in the household, a monthly income that ranges from Php 5,000 to Php 6,999, and worked as City-Paid Barangay Health Workers. Two of them were Barangay Nutrition Scholars and two were volunteers. On the other hand, perceived levels of stress and anxiety were assessed using the Perceived Stress Scale of COVID-19 (PSS-10-C) and the General Anxiety Disorder 7-Item Scale (GAD-7). Overall, the participants in this study did not experience high perceived stress ($PSS-10C < 25$) in the last seven days. The highest PSS-10-C score was only 24. For GAD-7, the majority had mild symptoms of general anxiety disorder, while two respondents experienced moderate symptoms and only one experienced severe symptoms in the last two weeks.

Keywords: *stress, anxiety, community health workers, barangay health workers, COVID-19, Barangay Tambobong, Baguio District*

Knowledge, Attitudes, and Practices on Proper Solid Waste Management of Selected Households of Barangay Cadalian and Barangay Malagos, Baguio District, Davao City

Saquilayan, F. S. D., Sarad, C., Sarmiento, K., Satol, H., and Lindo, R. H.

COLLEGE OF MEDICINE

Proper waste disposal is essential for the protection of health and the environment. Survey questionnaires were distributed in the school gym of Malagos Elementary School, Brgy. Cadalian, Baguio District in August 2021. A total of 20 Barangay Health Workers were surveyed during the study period. This study assessed proper waste management based on their demographics, knowledge, attitude, and practices. The respondents' demographic profile varied except for gender because all of them were females. Their ability in proper waste management in terms of storage, processing, and disposal is affected by their educational, environmental, and geographical differences. However, their attitude and practices on proper solid waste management did not work because of their gender similarities. Their role as women in their households affected their attitudes and practices. Hence, this study is biased towards females' concepts, preferences, and needs on proper solid waste management.

Keywords: *proper waste management, Baguio district, Barangay Cadalian, Barangay Malagos, demographic profile, knowledge, attitudes, practices, females*

Knowledge, Attitude, and Practices on Solid Waste Management of Selected Households in Inayangan, Calinan, Davao City

Salvado, R. A., Sam, A. M., Samanodi, A. K., Sandoval, P. C., and Fajardo, D. C., MD

COLLEGE OF MEDICINE

Over 21.8 million tons of waste are expected to be produced by the Philippines for this year alone. Almost one-third of these are solid wastes not handled in environmentally safe manners, and these numbers are expected to rise despite national and local government policies implemented. This study aimed to fill the gap information at the barangay level and describe community members' knowledge, attitudes, and practices when it comes to solid waste management. Researchers did this study among 20 selected households in Barangay Inayangan, Calinan District, Davao City. As a quantitative descriptive study, the demographics of the purposively sampled population were defined along with their level of knowledge, attitudes, and practices. The data showed that most of the participants showed good knowledge and positive attitudes regarding solid waste management within the household, but poor results when it comes to final waste disposal as they usually practiced burning and throwing of wastes in vacant lots. Results also found that most of the poor practices in final waste disposal were due to the lack of waste disposal facilities and insufficient information dissemination about resources that were already available.

Keywords: *medicine, knowledge, attitudes, practices, solid waste management, quantitative descriptive study, Davao City*

Prevalence and Levels of Burnout among Barangay Health Workers of District D During the COVID-19 Pandemic

Villegas, H. M., Visande, H. M., Wee, A. M., Yap, S. M., Yata, L. A., and Lupase, V. T., PhD

COLLEGE OF MEDICINE

Burnout is gradually gaining recognition as a significant concern on a global scale that affects a large number of healthcare frontliners who encounter tremendous difficulties especially during the COVID-19 pandemic. This study aims to determine the prevalence and levels of burnout among Barangay Health Workers (BHW) of District D, Davao City, during the COVID-19 pandemic. A quantitative descriptive research study design was employed to 25 BHW. The study utilized the Oldenburg Inventory Scale (OLBI), a 16-item questionnaire with a 4-point Likert scale designed to assess two burnout dimensions, namely exhaustion and disengagement. The data was gathered through a self-administered Visayan-translated questionnaire. Results showed that 19 out of 25 BHW met the criteria for burnout. Among these 19 BHW who have burnout, the majority (17 out of 25) experienced low levels of exhaustion while only two experienced moderate levels of fatigue. All 19 BHWs experienced low levels of both disengagement and overall burnout. Greater levels of exhaustion were experienced among those aged 50 to 54 years, unmarried or widowed, having a monthly household income of less than Php 6,000, and working for more than 11 years as a BHW. These results showed a high prevalence of burnout, albeit at low levels, among the BHWs of District D. These highlights the need for further investigation on the factors that affect burnout among the BHWs to come up with effective preventive strategies and interventions to address burnout, especially during the COVID-19 pandemic.

Keywords: *public health, burnout, Barangay Health Workers, Oldenburg Burnout Inventory, Quantitative Descriptive, Davao City*

Health Maintenance Practices of High-Risk Middle-Aged Adults Amidst COVID-19 Pandemic in Davao City

Adlaon, T. N., Angwas, C. J. M., Argente, S. C. N., Balios, M. C. B., Barbadillo, L. D. C., Ganotise, J. R., Gelido, A. E. A., and Andrada, M. A. O., RN, MAN

COLLEGE OF NURSING

COVID-19 has brought the world to a standstill, bending and restructuring time and economy on a whole new level of crisis. This event has become a significant health problem causing severe acute respiratory illness that spread rapidly worldwide, forcing countries to impose lockdowns and restrictions to reduce unending patterns and contagion of transmission. As part of the community, this study aimed to attempt a comprehensive understanding of high-risk middle-aged adults' health practices and experiences amidst COVID-19. Through a random sampling technique, the researchers identified twelve participants, six male and six females aged 40 to 60 years old those individuals with one or more comorbidity such as diabetes, cardiovascular and chronic respiratory diseases. They are currently employed in either private or government agencies and reside in Davao City. Sixty-six clustered themes have been extracted out of the participants' experience. These themes that reflected the same vision were combined to create a distinct construct of theme, which yielded six emergent themes. The six emergent themes were (1) Health Maintenance Practices; (2) Negative Health Practices; (3) Impacts of the Pandemic towards Health Maintenance; (4) Primary Prevention; (5) Secondary Prevention; and (6) Knowledge on Health Maintenance and COVID-19. These findings implied that participants have enough awareness and knowledge about the prescribed medications and their consequences if not taken. Compliance with prescribed maintenance needs strict adherence to control present comorbidities, prevent possible complications and maintain overall well-being.

Keywords: *Novel coronavirus, high risk middle-age, adult, health practices, Davao City*

Lived Experiences of Adult COVID-19 Survivors in Davao City

Bautista, S., Bolivar, R. M., Briz, R. M., Dionaldo, G. J., Estardo, K. F., Indino, J. D., Mabanyag, A. N., and Dela Cerna, S. M. G., RN, MAN

COLLEGE OF NURSING

The rapid and widespread infection of COVID-19 urged the World Health Organization (WHO) to declare a global public health emergency, emphasizing the gravity of the situation. Therefore, it is essential to explore the experiences of COVID-19 moderate or severe cases survivors in promoting health protocol compliance and disease mitigation. It also addresses the harmful effects of being infected on the relationships between family and community. Thus, this study is conducted to determine the lived experiences of ten adult COVID-19 survivors in Davao City. Data was collected from the mid-week of April 2021 until the mid-week of May 2021, using a guided questionnaire following phenomenological study methods. Researchers recorded in-depth virtual interviews, verbatim transcription, and data analysis using coding and thematic analysis. The study revealed five significant themes: (1) Darkest Hours, which discusses the experiences regarding the physical domain; (2) Life in Four Walls, which explains their thoughts and emotions identified during isolation; (3) Four Seasons in a Day, which expressed their challenges; (4) Every Cloud is a Silver Lining, which discusses of their source of hope and coping mechanisms; and (5) Upside-Downside, which discusses their bittersweet outtake from the disease. These findings suggest that COVID-19 experiences are holistically a challenging journey, emphasizing high levels of stress and mental distress. Thus, psychological assessments should be carried out. Furthermore, after admission, proper orientation and assessments of the health team in isolation centers should be improved, and follow-up consultation in surveillance of the long-term sequelae of the disease.

Keywords: *COVID, Lived experience, Davao, Nursing, Phenomenological, Qualitative*

Knowledge, Attitude, and Preventive Measure Practices about COVID-19 among the Student Nurses in Davao Medical School Foundation, Inc.

Villagonzalo, S. F. D., Toroba, A. P. Y., Tayaban, P. J. U., Pagarán, M. Q. A., Villaruz, R. J., Omo, A. M. O., Lagapa, F. C., and Pangan, N. C., RN, MAN

COLLEGE OF NURSING

COVID-19 has remained a problem and dramatically impacted the course of the whole world since its outbreak began. This sudden event caused rapid information dissemination about the virus that has caused many misconceptions about its health practices. Thus, this study aimed to determine the relationship between knowledge, attitude, and practices in preventing COVID-19 among student nurses of Davao Medical School Foundation, Inc. (DMSFI). The study used Schwartz's Knowledge, Attitude, and Practices model, and results showed that the student nurses' knowledge about the transmission of COVID-19 was outstanding with an average score of 4.63, the student nurses' attitude toward COVID-19 was poor with an average score of 2.86, and the student nurses' practices toward COVID-19 was good with an average score of 2.96. Also, there is a significant positive relationship between their knowledge and practices on COVID-19. This result implies that improving their knowledge of the disease transmission also improves their practices towards COVID-19. This study suggests that having the proper knowledge and appropriate preventative behavior against COVID-19 will prepare the student nurses at DMSFI. Further results revealed that awareness directly impacted attitudes. Current guidelines still emphasize the importance of washing or sanitizing hands, maintaining social distance, and avoiding crowds and contact.

Keywords: *COVID-19, Knowledge, Attitude, Practices, Student nurses, Pandemic, Vaccination, COVID-19 preparedness, Preventive Measure Practices*

Lived Experiences of Working Mothers on Breastfeeding Practices

Capilitan, R. H., Fernandez, E. F. B., GarciaSy, M. K. S, Gutierrez, P. A. M., Hernandez, R. E. B., Malcampo, Y. B., Maulana, F. Z. M., and Segurola, L. G. L., RN, MAN

COLLEGE OF NURSING

Breastfeeding has been recognized for having protective nutrients beneficial for the infant's growth. This makes it a clinical gold standard for infant feeding by meeting the baby's needs in the long run. It also plays a vital role in preventing child morbidity and mortality in private and public health settings. However, due to numerous influences of different practices and methods, breastfeeding promotion influenced breastfeeding mothers differently. Therefore, this study aimed to attempt comprehensive enlightenment of influences, struggles, and challenges based on the experiences of working breastfeeding mothers in Davao City. This study used phenomenology, a qualitative method with an in-depth interview, to collect information from ten breastfeeding working mothers from Davao City. These interviews were videotaped, transcribed, and analyzed through the Colaizzi method. The study showed thirteen themes emanated from the lived experiences of working breastfeeding mothers: (1) oh, to touch, stay connected; (2) divine nourishment; (3) healthy baby is priceless; (4) be someone's baby; (5) birth control while breastfeeding; (6) wake up with determination; (7) not all superheroes wear capes; (8) circle of support; (9) keep calm, pump on, I make milk; (10) healthy food, more milk; (11) meals on heels; (12) society's opinion matters; and (13) pumping chronicles. Given how the working breastfeeding mothers affect breastfeeding practices, this study suggests that the private and public health services must consider expanding the conventionality of breastfeeding and strive to work with healthcare professionals and the government to amend such practices that involve feeding newborns with different formulas.

Keywords: *Lived Experiences, Breastfeeding, Mothers, Phenomenology, Davao City, Philippines*



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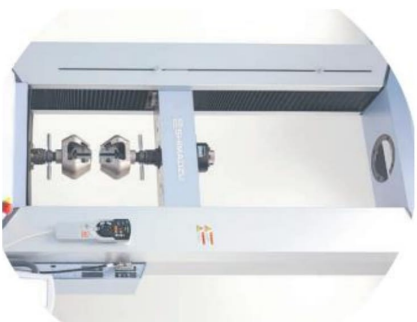
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EDITORIAL OFFICE

Research and Publication Office (RPO)
Davao Medical School Foundation, Inc. (DMSFI)
Dr. A Gahol Street, Bajada, Davao City, Philippines 8000

 dmsfrpo@email.dmsf.edu.ph

 +6382 298-6544 | +6382 226-2344