

## Successes and Milestones in the Arena of Research at the Mariano Marcos Memorial Hospital and Medical Center

In addition to providing patients with quality healthcare and education, the Mariano Marcos Memorial Hospital and Medical Center (MMMHC), a 200-bed capacity tertiary level teaching and training hospital in the North, maintains an extensive research program to better satisfy its clients. This research thrust is cognizant to MMMHC's role of protecting and promoting the health of the people and in view of its vision to be the center of excellence in research in Ilocandia. Since its founding in 1968, the MMMHC has remained committed to patient care and innovative research. The following are the strategies of the hospital in terms of research.

- **Clinical Case Reports for Residency Training Programs**

One of the ways in the development of researches at the MMMHC is its residency training programs wherein resident doctors are required to develop clinical case reports/manuscripts in their respective fields. Indeed, there are six residency training programs that are accredited by their respective specialty boards namely the Departments of Pediatrics (1997), Obstetrics and Gynecology (2012), Ophthalmology (1992), Pathology (1997), ENT (2010), Internal Medicine (2011) and Anesthesia (2011) and through these training programs, the MMMHC is able to prepare the next generation of physicians and other healthcare professionals for leadership roles in the life of sciences and medicine.

To recognize the researches of the resident doctors, presentation of their respective case reports is being done at MMMHC. In fact, in August 2013, the Hospital Research Committee which provides leadership in research development at the MMMHC, administered competition for research case presentations in time for the Hospital Week Celebration. A total of twenty-one (21) researches were presented by the resident doctors (6 from the Obstetrics and Gynecology Department, 6 from the Pediatrics Department, 4 from the Internal Medicine Department, 2 from the Otolaryngology Head and Neck Surgery Department, 2 from the Anesthesia Department and 1 from the Ophthalmology Department). The research cases of **Dr. Geraldine C. Sanchez** of the Department of Anesthesia entitled *"Bleeding Love: A case of Disseminated Intravascular Coagulopathy Secondary to Acute Fatty Liver in Pregnancy"* and **Dr. Glenda P. Rabino** of the Department of Obstetrics and Gynecology entitled *"Case Series Report: Dengue in Three Different Trimesters of Pregnancy"* garnered 3<sup>rd</sup> places while the researches of **Dr. Ma. Rosita S. Quitola** of the Department of Pediatrics entitled *"The Hidden Hole"* and **Dr. Maria Fe L. Salvador-Navarette** of the Department of Ophthalmology entitled *"The Mimicry" Primary Conjunctival Non-Hodgkin's Lymphoma, Diffuse Large B Cell Type, Left: A Rare Case of Conjunctival Lymphoma* won the 2<sup>nd</sup> place and 1<sup>st</sup> place, respectively.

Among the case researches presented by the resident doctors in August 2013 are the following:

	Title	Name of Resident
1.	Organ Preservation Technique-the Horizontal Partial Laryngectomy	<b>Dr. Danilo A. Sanchez Jr.</b> Department of ORL-HNS
2.	"The Hidden Hole" (2 <sup>nd</sup> place)	<b>Dr. Ma. Rosita S. Quitola</b> Department of Pediatrics
3.	Hepatocellular Carcinoma: A Case with a Curative Intent	<b>Dr. Donaryn V. Pasamonte</b> Department of Internal Medicine
4.	"Bleeding Love" A Case of Disseminated Intravascular Coagulopathy Secondary to Acute Fatty Liver in Pregnancy (3 <sup>rd</sup> place)	<b>Dr. Geraldine C. Sanchez</b> Department of Anesthesia
5.	Case Series Report: Dengue in Three Different Trimesters of Pregnancy (3 <sup>rd</sup> place)	<b>Dr. Glenda P. Rabino</b> Department of OB-GYNE
6.	"Double Jeopardy" The First Case of Congenital Leukemia at a Government Tertiary Hospital	<b>Dr. Kristen Torida-Balalio</b> Department of Pediatrics
7.	Insular Carcinoma: A Rare Variant of a Common Head and Neck Malignancy	<b>Dr. Ja P. Malvar</b> Department of ORL-HNS
8.	Heal my Aching Heart	<b>Dr. Genevieve B. Siazon</b> Department of Pediatrics
9.	"Unveiling the Masquerade of Hydrops Fetalis" Hydrops Fetalis from Thalassema	<b>Dr. Michelle Bracerros-Panaligan</b> Department of OB-GYNE
10.	Cutaneous T Cell Lymphoma: A Case Report	<b>Dr. Annalyn Q. Urbano</b> Department of Internal Medicine
11.	"The Mimicry" Primary Conjunctival Non-Hodgkin's Lymphoma, Diffuse Large B	<b>Dr. Maria Fe L. Salvador-Navarette</b>

	Cell Type, Left: A Rare Case of Conjunctival Lymphoma (1 <sup>st</sup> place)	Department of Ophthalmology
12.	"Primary Omental Pregnancy" A Case Report	<b>Dr. Melody Anne C. Dumlao</b> Department of OB-GYNE
13.	"It Takes Two to Tango" A Case Series on Familial Polyposis Syndrome in a Tertiary Hospital	<b>Dr. Krizen L. Dabalos-James</b> Department of Pediatrics
14.	An Unusual Cause of Dysphagia: Esophageal Tuberculosis	<b>Dr. Butch Bigornia</b> Department of Internal Medicine
15.	"Conquering the Barrier" A Case Report of Cervical Myoma in Pregnancy	<b>Dr. Marjorie Tubon-Fariñas</b> Department of OB-GYNE
16.	Nasopharyngeal Carcinoma: Foliea deux (Double Madness)	<b>Dr. Raymond Jerry V. Baguio</b> Department of Pediatrics
17.	"A Tale of Two Births" A Case Report of Mature Cystic Teratoma of Aberrant Origin in Pregnancy	<b>Dr. Jennifer Villegas Nuñez</b> Department of OB-GYNE
18.	"The Transient" Congenital Diaphragmatic Hernia in a Neonate in MMMH & MC	<b>Dr. Rosalie A. Labrador</b> Department of Anesthesia
19.	Adult Germ Cell Tumor: A Case Report	<b>Dr. Gisele V. Gonzales</b> Department of OB-GYNE
20.	Testicular Cancer: A Case Report	<b>Dr. Arnulfo B. Tomas Jr.</b> Department of Internal Medicine
21.	My Lumps, My Bumps, Why have you forsaken me?	<b>Dr. Patricia Zenaida F. Cajigal</b> Department of Pediatrics

- **Other Research Contributions of Clinical Departments**

The presence of clinical departments armed with research-oriented individuals is a manifestation of MMMHMC's adherence to research thrust.

For the Department of Otolaryngology Head and Neck Surgery, the research output of **Dr. Ja P. Malvar** of the Department of Otolaryngology Head and Neck Surgery entitled "***Insular Carcinoma: A Rare Variant of a Common Head and Neck Malignancy***" was submitted for interesting case in PSOHNS while the output of **Dr. Danilo Sanchez Jr.** was presented in May 2013 at Northern Luzon Quarterly Meeting at Baguio City. Moreover, the case report of **Dr. Christianne Lumang Salvador** entitled "***Highly Invasive Inverted Papilloma at the Laryngopharyngeal Area***" was presented in the free paper Poster Presentation of the Society of Otolaryngology – Head and Neck Surgery held at Iloilo Grand Hotel, Iloilo City Philippines on April 28, 2012. To continue the development of researches at the ENT Department, **Dr. Ja P. Malvar** and **Dr. Jose B. Orosa III** is currently doing the paper, "***Efficacy of Mandibular Advancement Devices in the Treatment of Obstructive Sleep Apnea Syndrome among Filipinos: A Pilot Study.***"

Another interesting milestone of MMMHMC in the field of research is the development of the paper entitled "***The Role of the Human Papilloma Virus in Head and Neck Squamous Cell Carcinoma Among Filipinos***" wherein MMMHMC physicians namely, **Christianne Lumang Salvador, Jose B. Orosa III, Sheryl Racelis, Modesty Leaño** and **Danilo Sanchez Jr.** joined the UST Research Center in coming up with the said research (by Pia Marie Albano, Dana Holzinger, Christianne Lumang Salvador, Jose B. Orosa III, Sheryl Racelis, Modesty Leano, Danilo Sanchez Jr., Lara Mae Angeles, Gordana Halec, Markus Schmitt, John Donnie Ramos and Michael Pawlita of the *Research Center for the National and Applied Sciences and Dept of Natural Sciences, College of Nursing, University of Santo Tomas, Espana, Manila, Philippines; Division of Genome Modifications and Carcinogenesis, Research Program Infection and Cancer, German Cancer Research Center (DKFZ), Heidelberg Germany; Dept of ENT Head and Neck Surgery and Department of Pathology, Mariano Marcos Memorial Hospital and Medical Center, Batac, Ilocos Norte, Philippines; Department of Clinical Pathology, University of Santo Tomas Hospital, Manila, Philippines; Dept of Biological Sciences, College of Sciences, University of Santo Tomas, Espana, Manila, Philippines*). This research was presented during the Mid Year Conference of PSOHNS at Holiday Inn Hotel in Clark Pampanga in April 2014 and it is one of the 30 finalists and at the top 6 of medical/pharmaceutical/chemical category during the National Research Council (NCRP), Philippine General Membership Assembly on March 26-27, 2014 at the Manila Hotel. In addition, the paper, "***Overall Survival of Filipino Patients with Squamous Cell Carcinoma of the Head and Neck: A Single-Institution Experience***" by **Pia Marie Albano, Christianne Lumang Salvador, Jose B. Orosa III, Sheryl Racelis, Modesty Leano, Lara Mae Angeles, John Donnie Ramos** was also published (*Asian Pac J Cancer Prev.* 2013;14(8):4769-74).

The Department of Pathology and Laboratories also garnered 1<sup>st</sup> place, poster presentation award out of the 22 participating hospitals nationwide including NCR during the ARSP 25<sup>th</sup> Annual Conference. Likewise, the Department of Obstetrics and Gynecology garnered 3<sup>rd</sup> place in the POGS R1-Research Contest.

On the other hand, the Department of Pediatrics had long been producing several case reports and researches which include the following:

CASE REPORTS			
Year	Resident	Title	Awards
1996	DR. TERESITA REALIN	Anemia: A Diagnostic Dilemma	1 <sup>st</sup> Place MMMH&MC Case Report Contest
1997	DR. ALMA ERICE-TAGANAS	The Dilemma in the Etiology of Edema	2 <sup>nd</sup> Place MMMH&MC Case Report Contest
1997	DR. LALAINE BRAVO	Ascites in Infancy	
1998	DR. ROGELINE GILERA	Kawasaki Disease	1 <sup>st</sup> Place PPS-NLC Case Report Contest
1999	DR. GLADYS BUMANGLAG	Neonatal Cyanosis	
2001	DR. IRWINA LAZO	Hemolytic Uremic Syndrome	3 <sup>rd</sup> Place PPS-NLC Case Report Contest
2001	DR. JHOAN TUBON-GALANO	TB: Don't Delay	
2002	DR. FRANCES GARAZA-MORA	The Many Faces of Pallor	3 <sup>rd</sup> Place PPS-NCL Case Report Contest
2002	DR. MARLYN FONGAYAO	Hyperglycemia in the Very Young	1 <sup>st</sup> Place MMMH&MC Case Report Contest
2003	DR. MELISSA EDIC	Respiratory Distress in the Newborn	
2008	DR. KHRISTINE OFILAS	Low Back Pain in Children	
2009	DR. LEILA LUIS	Wheezing and Beyond	
2010	DR. REMELIE BALLESTEROS	The Missing Piece	3rd Place MMMH&MC Case Report Contest
2011	DR. MILA JOY TABILI	Braveheart With a Slow Start	
2012	DR. NOREEN CALA-MAYUBAY	"Incredible Liver" A case of Infantile Hepatic Hemangioendothelioma	1st place PPS-NLC Annual Resident Case Report Contest
2012	DR. MA. ROSITA QUITOLA	"The Hidden Hole" A case of late presentation of Congenital Diaphragmatic Hernia	2nd Place PPS-NLC Annual Resident Case Report Contest 2nd Place MMMH-MC Resident's case presentation contest
2013	DR. KRISTEN TORIDA-BALALIO	"Double Jeopardy", 1st Case of Congenital Leukemia in a Tertiary Hospital	
2013	DR. RAYMOND JERRY V. BAGUIO	"Folie a deux" (Double madness) Nasopharyngeal Carcinoma	2nd Place PPS-NLC Annual Resident Case Report Contest

RESEARCHES			
Year	Resident	Title	Awards
1998	DR. TERESITA REALIN	Changing Trends of Dengue Hemorrhagic Fever at MMMH&MC	
1999	DR. ALMA ERICE-TAGANAS	Birth Weight Doubling Time in Purely Breastfed, Mixed Fed, and Thick Formula Fed Babies	1 <sup>st</sup> Place PPS-NCL Interhospital Research Contest 2 <sup>nd</sup> Place MeadJohnson Research Contest PPS Annual Convention (Prospective Category)
2000	DR. IMELDA DALLO	Outcome of Premature NICU Graduates at One Year of Age: MMMH&MC	1 <sup>st</sup> Place PPS NCL Research Contest, Poster Presentation-PPS Annual Convention (Prospective Category)

2001	<b>DR. GLADYS BUMANGLAG</b>	Neonatal Outcome of Premature Infants Exposed to Antenatal Steroids vs Unexposed to Steroids	
2001	<b>DR. ERNELLA AGULAY</b>	Morbidity Patterns Among Breastfed, Formula Fed, and Mixed Fed Infants in a Mother-Baby Hospital	Presented by Dr Matiasin the 23 <sup>rd</sup> International Congress of Pediatrics Beijing, China Sept 9-14, 2001 Published in the Proceeding of the Congress and PPS-NCL Newsletter Vol. 2 No.1 June 14, 2002
2001	<b>DR. LALAINA BRAVO</b>	Touch Therapy and Weight Gain in Preterm Infants: The MMMH&MC Experience	Presented by Dr Matiasin the 23 <sup>rd</sup> International Congress of Pediatrics Beijing, China Sept 9-14, 2001 Published in the Proceeding of the Congress and PPS-NCL Newsletter Vol. 2 No.1 June 14, 2002
2002	<b>DR. ROGELINE GILERA</b>	The Incidence of Possible Etiologic Factors of Congenital Malformations at MMMH&MC	Poster Presentation in the PAP Convention Set 2002, Century Park, Manila
2003	<b>DR. IRWINA LAZO</b>	Clinical Predictors of Outcome of Patients with Acquired Prothrombin Complex Deficiency (APCD): The MMMH&MC Experience	Poster Presentation in the PAP Convention Set 2002, Century Park, Manila Poster Presentation in the National Perinatal Association Conference, Bethesda, Maryland Oct 22-23, 2003 Published in the Journal of Perinatology Vol.24, No.6, June 2004
2004	<b>DR. MARLYN FONGAYAO</b>	Etiologies of Pleural Effusions at MMMH&MC Pediatric ward: A Five Year Review	2nd Place, PPS-NCL Research Paper Contest 1st place, Annual Resident Physicians' Research Contest MMMH&MC
2008	<b>DR. MARY FRANCES GARAZA-MORA</b>	Profile of Pediatric Patients with Congenital Heart Disease at MMMH&MC	Presented at PPS Convention Simultaneous Symposium April 2009
2011	<b>DR. LEILA LUIS</b>	Clinical Profile of Pediatric Patients Diagnosed as Nephrotic Syndrome at Mariano Marcos Memorial Hospital and Medical Center	Third Place in MMMH&MC Residents' Research Presentation Contest 2012
2011	<b>DR. MELISSA EDIC</b>	Profile of Child Sexual Abuse from 0-18 years old at MMMH&MC from 2004-2008	Third Place in MMMH&MC Residents' Research Presentation Contest 2012
2011	<b>DR. REMELIE BALLESTEROS</b>	Kangaroo Mother Care A Randomized Controlled Trial On its Effects on Growth and Neonatal Stability for Low Birth Weight Infants < 2000 grams in a Tertiary Government Hospital	1st Place 1. PPS-NCL Annual Residents Research presentation 2012 2. PAPI Research Forum 2012 3. MMMH & MC Residents' Research Presentation Contest 2012 4. Poster Presentation in the International Perinatal Association Conference, Bethesda, Australia 2011 5. Published officially in the journal of Pediatrics in April 2013
2012	<b>DR. MILA JOY TABILI</b>	Evaluation of the G6PD Deficiency Program at MMMH&MC as Confirmatory Center: A Two Year Study	
2012	<b>DR. NOREEN CALA-MAYUBAY</b>	Antibiogram and Resistance Patterns of Tracheal Isolates in the Pediatric Intensive Care Unit of Mariano Marcos Memorial Hospital and Medical Center	

The multi-awarded research on ***“Kangaroo Mother Care: A Randomized Controlled Trial On Its Effects on Growth and Neonatal Stability For LBW Infants ≤ 2000 grams In a Tertiary Government Hospital”*** by Dr. Remelie Ballesteros garnered 1<sup>st</sup> place in PPSNL and was recently published officially in the journal of Pediatrics last April 2013. This was also presented for poster presentation in the International Perinatal Association

Conference at Bethesda, Australia in 2011. As such, the introduction of the Kangaroo Mother Care (KMC) at MMMHMC is a very successful innovation as the hospital is the first recipient of KMC program outside Manila. With the partnership of MMMHMC with Bless-Tetada Kangaroo Mother Care Foundation, Philippines, Inc., training of doctors, nurses and midwives about KMC program is not only in the institution but also to the community. The hospital collaborated with the Perinatal Association of the Philippines Ilocos Chapter in the training and implementation of KMC Training Program in Bangued, Abra and in Candon, Ilocos Sur. The hospital was also awarded by the said foundation headed by Dr. Socorro de Leon-Mendoza as one of the KMC centers of excellence outside Manila.

- **Affiliation with Other Government Agencies such as Region 1 Health Research and Development Consortium (R1HRDC) and Philippine Council for Health Research and Development (PCHRD)**

The MMMHMC is not only active in the development of researches as a result of the training program of resident doctors. To strengthen its research capabilities, the hospital is also affiliated with the Region 1 Health Research and Development Consortium (R1HRDC), chaired by Dr. Maria Lourdes K. Otayza, the Medical Center Chief of MMMHMC under the Philippine Council for Health Research and Development (PCHRD) of the Department of Science and Technology (DOST). To support researches, research proposals from the residents and nurses are submitted to these agencies for funding. Moreover, selected staff attend workshops conducted by these agencies and go into a MOA once the research proposals are approved.

Funded research of the MMMHMC by the R1HRDC includes the *“Predisposing Factors of Mental Illness among Psychiatric Patients of Mariano Marcos Memorial Hospital and Medical Center”* by Ma. Marcia Abadilla which was completed in December 2004. The PCHRD also funded the research of Mr. Bryant Tabije in 2010 entitled *“Health Worker Migration: It’s Impact in the Delivery of Services to the DOH-Retained Hospitals in Region 1.”* This research was awarded as one of the top 10 researches in professional division at Bacolod, Negros Occidental in 2011 by the PCHRD. Other papers submitted to R1HRDC for finalizing are *“The Efficacy and Safety of Spirulina Supplementation (Cell Life Powder) in the Treatment of Anemia in Preschool Age Children (24-59 months old): A Randomized Controlled Trial”* by Dr. Ma. Rosita Quitola and *“Child Abuse Victims seen at Mariano Marcos Memorial Hospital and Medical Center-Women and Child Protection Unit: An In-Depth Clinical Study”* by Mrs. Marcia Abadilla-Fellizar. Presented also to R1HRDC are researches of MMMHMC physicians which include the following: *“Gestational Sac Measure as Predictor of Pregnancy Outcome: An Analysis of 204 Cases”* by Dr. Anette Andres of the Department of Obstetrics and Gynecology, *“Prophylaxis for Stress-Related Gastritis in the Medical Intensive Care Unit A randomized Placebo-Controlled Trial a Pilot Study”* by Dr. Maria Blanca O. Kua, of the Department of Internal Medicine (together with Dr. Marie Cristie P. Ciriaco of ITRMC), *“Assessment of Capability of Rural Health Units in Ilocos Norte in Managing Uncomplicated Deliveries”* by Dr. Charina V. Nacion and Dr. Mary Lu B. Magno of the Department of Obstetrics and Gynecology and *“Family Planning and Premarital Sex: Practices and Awareness among Female College Freshmen in Ilocos Norte: A Descriptive Study”* by Dr. Mimi Pira-SY of the Department of Obstetrics and Gynecology.

- **Public-Private Partnerships of Research Training**

In the past years, Abbott has partnered with MMMHMC by conducting a series of research workshops (3 cycles a year) to cover topics like literature search, critical appraisal of literature, protocol writing, metaanalysis, statistical analysis, paper writing and publication. These workshops were not limited to doctors but also to nurses and administration staff. This year, Dr. Ma. Blanca O. Kua, the chairman of the Hospital Research Committee has opened this invitation to the Research Coordinator of the Philippine College of Physicians to assist the MMMHMC in continuing these workshops.

- **In-House Research Funding**

The hospital’s Research Committee will finally streamline and document the processes through which a researcher has to go through before implementing his/her proposal. This would involve the Chief Training Officer, the Research Chair and the ERC Chair. Dr. Kua has also allotted a budget for funding of selected research proposals.

- **Quality Studies through Continuous Quality Improvement (CQI)**

Development of research outputs at the MMMHMC is already centralized with the implementation of the Eight Steps to Continuous Quality Improvement (CQI) as per regulatory mandate issued by the Department of Health re: Administrative Order No. 2006-0002 entitled Establishment of the Continuous Quality Improvement (CQI) Program and Committee in DOH Hospitals. In compliance to this mandate, the QMS Office headed by the QMR, Dr. Jose B. Orosa III thru the Deputy QMR, Dr. Rosemarie Garganta and the Chairman of the Training and Education Committee Dr. Maria Cristina Dulay spearheaded a training on Continuous Quality Improvement on January to March 2014 to all representatives of all departments, sections and units of the hospital. After the training, the different offices were required to undergo quality studies following the steps of the CQI with the objective to address problems in the workplace for better delivery of quality health care. Below are the CQI titles of the different departments, sections and units of MMMHMC.

AREA/DEPARTMENT/SECTION/UNIT	TITLE
1. 2F Annex	Non Compliance of some nurses on proper practice of universal safety precautions when entering and existing isolation rooms
2. 2F Main	Doctors failed to make prescriptions for 24 hour medicine consumption
3. 3F Annex	Non Compliance of some staff to orient newly admitted, Trans In Patient as to Room Amenities, Proper Waste Disposal and Hospital Policies
4. 4F Annex	Increasing incidence of not immediately attending patients' concerns
5. 4F Main	Improper endorsement in the ward
6. Accounting	Delay in the preparation of liquidation report of cash advance within 30 days after his return to his permanent official station
7. Acute Psychiatric Unit	1. No trained medical staff (resident physician) to manage emergency psychiatric cases 2. No trained security guards to give preventive measures during consultation and non-consultation days
3. Admitting	Increasing incidence of a patient having two or more hospital number at Emergency Room
4. Billing and Claims	Long queue of discharging PHIC patients
5. Budget	Untimely submission of accomplishment reports every quarter
6. Cash Operations	Cancellation of official receipt
7. Emergency Room	Too many watchers going to ER
8. Engineering and Facilities Management	Inability of the technical persons of the EFM to undertake/implement Air Conditioning Units Preventive Maintenance Servicing and Corrective Maintenance Servicing as per schedule thus causing backlog & inconvenience of the End-users
9. ENT-HNS	Failure to do reporting of journals, grand rounds
10. Health Information Management	Increasing number of Borrowed In-patient charts not returned immediately
11. Housekeeping, Linen and Laundry	Not enough linen delivered to wards on time
12. Human Resource Management	Incomplete/not properly accomplished HRMS documents (ex. PDS)
13. IHOMP Unit	Increasing number of delay in repairs for computer hardware and peripherals and LAN
14. Materials Management	Delayed processing of Purchase Request (Regular Purchase)
15. Medical Intensive Care Unit	Increasing number of watcher per patient
16. Medical Social Work	Increasing number of incomplete Psychosocial Assessment Tool
17. Neonatal Intensive Care Unit	Increase in number of patients with new growth
18. Nuclear Medicine	Lack of awareness on the use of nuclear medicine request form
19. Nutrition and Dietetics	Increasing numbers of Tray Wastage
20. Obstetrics-Gynecology	Increasing number of malfunctioning episiotomy scissor at the Delivery Room
21. Office of the Medical Center Chief	Increasing number of unsorted and improperly filed communications/documents/records
22. Operating Room	First Scheduled Case not Started on Time
23. Ophthalmology	Uncomfortable waiting area; Long Waiting Time before examined by the doctor
24. Post Anesthesia Care Unit/ Anesthesiology	Increasing incidence of violators of dress code at PACU
25. Department of Pathology & Laboratories	Overcrowding of patients during peak hours at the laboratory reception area
26. Pediatric Intensive Care Unit	Quality of patient care delivered at PICU not evaluated
27. Pediatrics	Increasing number of bacterial growth isolates at the NICU from January to April 2014
28. Pharmacy	Delayed deliveries of Medicines to Nursing Unit
29. Radiology	Improper patient preparation for Ultrasound and Special Procedures thus subjected to re-scheduling
30. Rehab	Some medical department are not using Inter-department referral slip as to In-patient (wards) and Out-patient medical departments
31. Security	Increasing number of watchers beyond visiting hours.
32. Surgical Intensive Care Unit	Incidence of Hospital Acquired Infection Particularly Nosocomial Pneumonia in January, 2014

In like manner, nurses under the Registered Nurse Health Enhancement and Local Service (RN HEALS) program are also required to make their respective researches. The following were the top 10 researches of nurses under the said program at MMMHMC which were awarded in December 2012 during their graduation.

	<b>TITLE OF RESEARCH</b>	<b>RESEARCHERS</b>
1.	The Extent of Knowledge of Mariano Marcos Memorial Hospital and Medical Center Intensive Care Unit Nurses Regarding Operating Mechanical Ventilator	Lorelie Garvida and Jonalyn Vergara
2.	Level of Knowledge and Coping Mechanism of Caregivers of Psychiatric Patients	Ethel Jane Malicad and Jervin Venecario
3.	Informatics Literacy of Nursing Personnel of Mariano Marcos Memorial Hospital and Medical Center	Leilanie Corpuz and Jazelle Joise Rosario
4.	Degrees of Compliance and Awareness of Visitors or Watchers on Waste Segregation	Marlymin Nalundasan and Ferdinand Teodoro
5.	Research on Budget Proposal for Implementing a Solar Power Plant for Mariano Marcos Memorial Hospital and Medical Center	Ivan Francis Abella and Ivy Deborah Castro
6.	The Extent of Nursing Errors during Graveyard Shift in Mariano Marcos Memorial Hospital and Medical Center	Ma. Jadel Janssena Velasco and Patrick Gail Jose
7.	Electric Consumption at Medical Intensive Care Unit Versus the Amount of Electricity Paid by Patients as of November 2012	Paul Pugat and Paul Michael Martinez
8.	Supply/Reagent Consumption of the Mariano Marcos Memorial Hospital and Medical Center Clinical Laboratory Department: A Three Year Retrospective Study	Mark John Farinas and Gian Paul Pambid
9.	Variation on Actual Hospital Bill Among Obstetric Patients Under Case Mix Scheme: A Descriptive Cross-Sectional Research Study	Joanna Marie Bartolome and Kariza Marie Ingente
10.	Feasibility of Nursing Home	Kristine Chielsey Mangasep and Robynne Aiza Gervacio

Below are the list of researches of the RN HEALS from 2011-2012/January – December 2013-2014 (BATCH 10)

	<b>TITLE OF RESEARCH</b>	<b>RESEARCHERS</b>
1.	Level of satisfaction Among Patients and Watchers of MMMH&MC on Pre-billing Service (2013)	Kristine Cariaga & Maria Teresa Talioaga
2.	Determinants of Non-Compliance of Mothers Newborn Screening	Wilson Ellis Domingo & Michael Gian Belen
3.	Level of Knowledge and Extent of Compliance of Mothers Towards Breastfeeding During Hospital Stay and at Home.	Rachelle Ramos & Kyle Aurellano
4.	Environmental Factors Affecting Health Care Services Rendered to Patients in MMMH&MC	Levigen Sulicipan & Jimalyn Presbitero
5.	Functional Outcomes of Diabetic Patients who Underwent Amputation (2013)	Ashley Alejandro & Carine Lacuesta
6.	RN HEALS Job Satisfaction Level as to Psychological Physical and Environmental Factor(2013)	Reimond Ulit & Rachel Anne Yap
7.	Level of Knowledge of Mothers on the Importance of KMC and BF (2013)	Vanity Rose Obien & Janine Valdez
8.	Level of Compliance of MMMH&MC Nurses on the Healthy Lifestyle Program of the Department of Health	Arman Dave Baysa & Mike Laurenze Tagavilla
9.	A Study of Patients Satisfaction in the Emergency Department of MMMH&MC (2013)	Danah Lorraine Coma & Jamaica Dinky Cabute
10.	Degree of Compliance and Awareness of Visitors or Watchers on Waste Segregation	Michelle Kairuz & Steffie Ramones
11.	Compliance on No Balance Billing Policy of the MMMH&MC (2013)	Leah Dela Cruz, Benjamin Francis Santiago II, Alcibiades Gorospe Villarin
12.	Promotion of Breastfeeding: A Battle Against Bottle Feeding (2013)	Gerald Barangay & Maria Cecilia Tumulian
13.	Improving Patients Safety with Color Coded Wristbands (2013)	Miguel Austin Gapuzan & Evangeline Rigonan
14.	Extent of Use of MMMH&MC Operating Room Personnel on the WHO Surgical Safety Checklist (2013)	Timothy John Llaguno & May Antonette Tabones
15.	Level of Awareness of Mothers on Pregnancy Induced Hypertension in MMMH&MC – Out-Patient Department	Esperanza Guillermo & Knedrick Kevin Macalma
16.	Compliance of Breast Cancer Patients in MMMH&MC to their Treatment Regimens	Kaye Audrey Bulllayao & Jorshinelle Gail Puyaoan
17.	Safety Precautions of Eateries Around MMMH&MC:Implications to Primary Health Care	Renz Patrick Florentino & Audrey Precious Raquino
18.	Awareness of Mothers Regarding the Effects of Smoking/Second Hand Smoke and Smoke to their Neonates (2012)	Nixon Zafaralla & Mark Jay Marquez
19.	The Extent of Application Florence Nightingales Environmental Theory on MMMH&MC (2012)	Arnel Tagudin & Wilma Sagun
20.	Stress Experiences and Coping Mechanisms of Mother on their Childs Hospitalization	Errol Gagarin & Julie Anne Castro
21.	The Level of Competency of MMMH&MC Critical Care Nurses in	Grace Faustino & Jan Frederick Agliam

	Addressing Patients with or at Risk of Pressure Ulcers (2012)	
22.	Awareness of Postpartum Mothers to Newborn Screening and Its Implication	Chrysantheme Garcia & Lea Sheena Atriginio
23.	Survey Outcome on women and Child Protection Unit Consultation in MMMH&MC (2012)	Ian Luza Arzadon & Ma. Jesusa Charisma Ipac
24.	Lived Experiences of Patients with Breast Cancer (2012)	Christian Hernando & Jonathan Cajudoy
25.	Incidence of Morbidity and Mortality of Mariano Marcos Memorial Hospital & Medical Center Patients (2012)	Lem Micah Pascua & Reeza Fernandez
26.	Effects of Back Massage During the Active Phase of Labor Among Young Adults	Alyssa Trixia Ilagan & Fritzie May Rubio
27.	Extent of Knowledge and Practices of MMMH&MC Hospital Nurses on Cleaning, Disinfection and Sterilization of Reusable Hospital Equipment's (2013)	Nina Marie Pitpit & Thezza Jane Sagun
28.	Preoperative and Postoperative Practices of Staff Nurses In MMMH&MC	Renamil Navarro & Juvilyn Caroy
29.	Degree of Compliance of Surgical Patient to Preoperative Health Teaching	Kristoffer Dagdagan & Luckylyn Nicolas
30.	The Level of Awareness and Compliance of MMMH&MC on the Philhealth Benchbook Standards on Patients Care	Mark John Rey Fiesta & Naima Sultan Matanog
31.	Hospital Employees Level of Awareness on Infection Control (2012)	Kathleen Mae Magana & Fatima Malvar
32.	Socio Demographic Profile and Compliance of Pregnant Mothers to Prenatal Check Up	Lynette Cabello
33.	Training Needs Assessment of Hospital Nurses of MMMH&MC	Jay Roldan Rabanal & Nelia Rose Oducayen
34.	TB Dots Program of DOH: Effectiveness and Evaluation	Sissel Wilfaye Salucop & Mae Anne Parbo
35.	The Common Defense Mechanism Utilized Among Registered Nurse for Health Enhancement and Local Employment of MMMH&MC (2012)	Joeffrey Jacinto & Michael Dela Cruz
36.	Level of Acceptance and Awareness of Hospice Care Center in the City of Batac (2012)	Princess Anne agbannaog & Ricabelle Corpuz
37.	Profile and Prevalence of DHF Cases in Ilocos Norte at MMMH&MC (2011)	Geraldine Viernes & Mariz Gee Francisco
38.	Extent of Awareness and Practices of Registered Nurses Employed at MMMH & MC on the Infection Control Guidelines (2012)	Kathleen Joy Ordonia & Jani Frances Hombrebueno
39.	Referrals to MMMH & MC Form Nearby Health Institution in Ilocos Norte & Other Provinces From January to June 2012	Aiza Sagun & Wayne Anthony Ganotisi
40.	Extent of Knowledge of Mothers to their Post-Partum Follow-up Check-ups (2012)	Ely Leth Arucan & Norizen Joy Taguicana
41.	Awareness of Adult Residents of Nalupta, Batac City regarding Symptoms, Mode of Transmission and Prevention of Dengue Fever (2012)	Igea Chavelle Buuquing & Edward Kenneth Culannay
42.	The Level of Compliance to Hand washing Among Every Different Hospital Staff of MMMH&MC (2012)	Dianne Toledanes & Reynalyn Nicolas
43.	Comparative Study on the Efficacy and Cost of Healthika and Alcolgel Hand Sanitizer	ConieBlanco & Gwynne Gidgette Millare
44.	Acceptability of Nursing Home in MMMH&MC	Kristine Cheilsey Mangasep & Robynne Aiza Alcoy
45.	Level of Knowledge of Mariano Marcos Memorial Hospital & Medical Center Employees on the International Organiztaion for Standardization after Certification (2013)	Ma. Ellen Manding & Marie Ashley Rico
46.	Level of Satisfaction on the Patient Care at the Emergency Room of Mariano Marcos Memorial Hospital & Medical Center (2013)	Mark Medessey Pablo & Lhovelie Joy Marie Alejandro
47.	Knowledge and Attitudes of Medical and Surgical nurses Regarding Pain Management in MMMH&MC(2013)	Jenalyn Visitacion & Lawrence Angelo Curammeng
48.	Knowledge and Attitude of Teenagers on HIV Infection Prevention (2013)	Hallen Tawali & Herbert Gabriel
49.	Functional Outcomes of Diabetic Patients who Underwent Amputation (2013)	Ashley Alejandro & Carine Lacuesta
50.	Extent of Knowledge and Practices of MMMH&MC Nurses in the Prevention of Nosocomial Pneumonia (2013)	Michelle Anne Macadangdang & Arbie Jade Mandac
51.	Degree of Awareness of Health care Workers ( Nursing Service) of Mariano Marcos Memorial Hospital & Medical center regarding Hospital Waste Disposal (2013)	Marielle Mai Borja & Hazel Hanny Hipol
52.	A Survey on the Ten Leading problems Encountered by Patients/Watchers in the Private Ward in Terms of Facilities and Services (2013)	Eunice Loise Banito & Elaine Columbano
53.	Level of Adherence of the Nursing Staff on the Duty Rules	Richianne Mae Basilio & Ria Rose Macadangdang
54.	Level of Compliance of MMMH & MC Nurses on the Healthy Lifestyle Program of the Department of Health	Arman Dave Baysa & Mike Laurenze Tagavilla
55.	The Effect of Sanitary Toilet Facilities to the Adherence of Postpartum Patients to proper Hygiene in MMMH&MC (2013)	Marius Melnard Baguion & Alteo Tagaban
56.	Compliance and Awareness of Parents or Guardians in Their Childs	Aileen Concepcion Agustin & Princess Tessa Corpuz



	Immunization Status (2013)	
57.	Waiting Time of Stat Laboratory Result on Emergency Department of Mariano Marcos Memorial Hospital(2013)	Angelica Sarmiento & Al-Najeeb Dumacil
58.	Lived Experiences of Adolescents and Adulthood their Experienced Abuse in their Childhood(2013)	Mriejoy Calma & Linette Pascual
59.	Patients Perception on the Caring Behaviors of Nurses in Mariano Marcos Memorial Hospital & Medical Center (2013)	Garren Jeru Cacayorin & Ross Kevin Tomas
60.	Practices of Mariano Marcos Memorial Hospital & Medical Center on Waste Segregation Management (2013)	Cherish Bunnao & Van Wilson Tabios
61.	Level of Awareness and Extent of Practice on the Prevention of Pregnancy Induced Hypertension of Pregnant Women at MMMH&MC	Peniel Montnte & Isabel Jeanne Ragadi
62.	Role Strain of Male Nurses in Rendering Nursing Care to Patients (2012)	Mellowe Mae Ricarter & Franzes Ymei Pungtilan
63.	Effectiveness of Guided Imagery in Reducing Anxiety Among Pre-Operative Patients of Mariano Marcos Memorial Hospital & Medical Center	Benjamin Galapia & Jan Niccolo Ruiz
64.	Extent of Awareness of Patient Suffering from Pregnancy Induced Hypertension Admitted at Mariano Marcos Memorial Hospital & Medical Center Regarding Their Healthy Condition & Status (2012)	Hena Lyn Pasol & Jhara Tomas
65.	Evaluation of Nursing care Rendered in the Medical ICU	Chris Ian Paulo Raquedan & Ma. Anthea Ribac
66.	Level of Compliance of the Mariano Marcos Memorial Hospital & Medical Center to the Standards of Nursing Services (2012)	Gretchen Joy Maranon & Jaycel Patricio
67.	Level of Knowledge of Nurses Regarding Nursing Care Among Intensive care Units Patients of Mariano Marcos Memorial Hospital & Medical Center	Aizel Charmaine Arquillo & Jenar Buted
68.	Level of Knowledge of PHILHEALTH Members Regarding on their Benefits on Mariano Marcos Memorial Hospital & Medical Center	Frances Luisa Rina Usuquen & Abigail Calacal
69.	Electric Consumption at Medical Intensive Care Unit Versus the Electric Bill of Patients as of November 2012	Paul Pugat & Paul Michael Martinez
70.	Evaluation of Nursing Care Rendered to PICU Patients	Givenchy Espejo & May Antonette Gappi
71.	Effectiveness on the Pre-operative Care Rendered by Nurses to 2 <sup>nd</sup> Floor annex Patients	Phoebe Rose Paraton & Gretchen Liberty Valdez
72.	Reasons of Nurses in MMMH&MC in Pursuing their Professional Advancement	Arianne Rae Rubio & Karen Madarcos
73.	Post-operative Practices of Staff Nurses in MMMH&MC	Renamil Navarro & Juvilyn Caroy
74.	Evaluation of Nursing Care at MMMH&MC Emergency Room	Carlo Acierto & Maria Rosario Agustina Calsada
75.	Handling of Infectious Linens at Mariano Marcos Memorial Hospital & Medical Center (2012)	Dave Agcaoili & Romel Bucalig
76.	Comparative Study of Electronic Job Order Request and Written Job Order Request in MMMH&MC (2012)	Roxanne Paraoaan & Glenn Bagarra
77.	Comparative Study on Costs of Medicines at MMMH&MC Pharmacy and Selected Pharmacies in Ilocos Norte 2011-2012	Angelica Ragasa & Aiza Ildefonso
78.	Factors Affecting Patients Waiting Time at the Emergency Room (2012)	Jewel Madriaga & Kristal Cyril Benas
79.	Knowledge, Attitude, and Practice of Neonatal Care Among Post Natal Mothers	Catalino Pe Benito III & August Christian Tagudin

- **Participation to the Activities of PNHRs**

Adhering to its research mandate, the MMMHMC is also actively involved in the activities of the Philippine National Health Research System (PNHRs) in addition to the development of researches. Just recently, it participated in the hosting of the 7<sup>th</sup> PNHRs Week Celebration held at Plaza del Norte, Laoag City, Ilocos Norte on August 7-9, 2013 wherein concerned hospital employees were involved in different committees which contributed to the success of the event. Dr. Otayza, the Medical Center Chief, has also recently been designated as member of the Steering Committee of the PNHRs and chairman of the Research Agenda Committee.

- **Research as Key Component of the Performance Contract of Employees**

With the administration of the Medical Center Chief Dr. Otayza, not only the medical employees are encouraged to do research but also the non-medical employees. Dr. Otayza initiated the inclusion of research as one of the key result areas/performance objectives in the performance contract of employees to elicit research. This management strategy paved way into the development of researches at the MMMHMC.

## **Research Thrust Continues at MMMHMC**

The journey towards research at the Mariano Marcos Memorial Hospital and Medical Center continues as the physicians, clinical and other non-medical employees are always searching for a better, more efficient and effective way to achieve goals. Committed to the research advocacy of MMMHMC, the research chairman, Dr. Kua, when asked about the strategies to improve further the hospital's research said, *"We shall continue to conduct the research fora to foster and imbibe the culture of research within the hospital staff and encourage publication of research outputs in respectable journals."*

The hospital continuously adheres to make significant contributions in the field of research especially in terms of understanding, diagnosing and treating diseases as well as to understand, shape and advance the global profession. At MMMHMC, being committed to research is an investment in the future.

**ZARIEDDIE DOMINGO PARILLA, MBA**

Administrative Officer II

Medical Center Chief Office

Mariano Marcos Memorial Hospital and Medical Center

June 24, 2014