

# HIGHLIGHTS OF THE



The **10<sup>th</sup> Philippine National Health Research System Week** celebration was held at the Citystate Asturias Hotel, Puerto Princesa City, Palawan on 8 - 12 August 2016. It was attended by more than 900 different stakeholders in health R&D who interacted, shared their information and experiences to contribute research-based solutions to health problems.

The conference focused on the role of research innovation and development for health and the environment. As many environmental factors contribute to health outcomes, all plenary and parallel sessions revolved around the key areas, namely: innovation technologies in addressing climate change, science for safe water resources, use of information technology for health, ecosystem conservation, food protection and alternative functional foods, convergence in health and environment sustainable governance, government and community response to climate-induced health hazards and climate change pressures, role of media in building health and environmental protection awareness and actions.

## **PRE CONFERENCE SESSIONS**

### **1. Capacity Building Workshops**

#### **A. 10th National Medical Writing Workshop & 3rd Writeshop for Young Researchers**

The 10th National Medical Writing Workshop and 3rd Writeshop for Young, journal-writing experts from the Asia Pacific Association of Medical Journal Editors, together with proficient mentor-facilitators from different health fields, trained health investigators in developing/refining manuscripts that are worthy of a scholarly journal publication.

Dr. Lorna Gelito, OIC-President, Palawan State University & Chair, MIMAROPA Health Research and Development Consortium. welcomed everyone to Palawan. In her talk, she hopes that participants see the affair as an opportunity to further experience in health research and development and encourage everyone to learn from each other.

Professor Dr. Jose Florencio Lapena briefly introduced the objectives of the workshop. He also shared some of the programs, achievements, and plans of the Asia Pacific Association of Medical Journal Editors and the Philippine Association of Medical Journal Editors.

The talk was followed by a discussion led by Prof. Cecilia C. Maramba-Lazarte, Editor-in-Chief, Pediatric Infect Diseases Society of the Philippine Journal (PIDS-P) entitled "WHY WRITE?" In her talk, she mentioned that to write a journal article is bravery since you are subjecting your research work to the critique of peers, reviewers, etc. However, it is important to note that the scrutiny is with the goal of making your articles better and journal-worthy. Publishing journal articles has benefits that will affect your skills in writing effective articles. It will also further a researcher's career since it has direct bearing to advancement e.g. promotion, tenure, especially for those in the academe. It will also improve you professionally as published journal articles will help your researchers in building a reputation in their respective field and for experienced researchers be recognized as experts on their field. Publishing a journal article will also better your track record which is also important to generate research funds. According to Dr. Maramba-Lazarte, no matter how good a research paper is, it is not considered finished until it is published.

Dr. Lapena proceeded with the lecture on writing the introduction. The introduction should be able to capture the attention of the editor and make him/her read on.

Dr. Wilfred Peh, President of the Singapore Association of Medical Journal Editors, also discussed how to write an effective materials and method section. He said that every objective should have a corresponding methodology to make the research easier to follow and replicate.

Dr. Maramba-Lazarte facilitated the small-group discussions where participants are to criticize one research study among their group. During the presentation, the group identified areas on their papers that need to be revised/improved to increase publication chances. Lengthy introductions,

inability to establish focus in the study as well as the connection between introduction and methods were the recurring concerns of the group.

Dr. Lapena proceeded to discuss about the results and discussion part of the journal article. In cases where results and discussion are two different sections in the journal format, results should contain analysed data without discussing it. It should set the stage for the discussion. The discussion section of your journal is where you tell your readers why your research is relevant. The researcher should also be able to compare findings with other studies, to see basic science linkage or relationships. Conclusion should contain your most important finding. It should also provide answer to your questions in the introduction part.

Dr. Lapena also discussed about the statistical sample size is critical in validation. In his talk, he said that large samples waste time and resources. Small samples may generate inaccurate results. When in doubt, consult a statistician.

Dr. Peh also reminded the researchers to avoid redundant data presentation when writing for journals. This can be achieved by carefully choosing which presentation form would best express your data. If data cannot be explained in three to four paragraphs, it is best to use illustrations. Graphs effectively present trends and relationships among variables.

Dr. Peh also mentioned that the title of your article should make your readers want to read on. Different journals have different formats in terms of title page and abstract. So it is best to refer to respective instruction to authors.

In writing the references, Dr. Maramba-Lazarte should credit only references used in the study. Researchers must remember that it is not to impress readers with the number of citations. Verify all literature and ensure that references are not retracted papers.

Dr. Peh also introduced the four criteria to qualify for authorship according to International Committee of Medical Journal Editors. To become one, a researcher should have substantial contribution to the content of the research, drafted/revised the important contents, given final approval to get the research published, and have agreed to be accountable for all aspects of the research done.

Writing a journal also has ethical issues as discussed by Dr. Lapena. Photos must not be manipulated for publication purposes. Falsification of this kind can also be considered misconduct. Always cite sources to avoid plagiarism. For researches involving humans/animals, always secure clearance from respective ethical boards.

Journal papers differ in contents and formats mostly influenced by their mission and goals. It is best to be familiar with various types of scientific papers and construct your paper according to published formats to enhance acceptance for publication.

Scientific writing is direct to the point. Dr. Lapena suggests to always keep sentences short and clear. He also said that researchers, and writers in general, also tend to repeat ourselves and that should be avoided. In writing about science, it is the integrity of the knowledge that matters and not the length.

Dr. Maramba-Lazarte also shared what happens in a publication office based on her experience as Editor-in-Chief of the PIDS-P Journal. Some of the most important considerations of PIDS-P in accepting articles are that the paper should not be published elsewhere or is submitted simultaneously to another journal. Ethics board clearance for researches on human subjects is also required.

Dr. Lapena also added that if the journal requests for revision, it means that you're still in the running. You have to carefully consider the revisions you have to make. The waiting period is currently around three years.

For the 2nd small group workshop, participants were asked to look on their own papers and see what can be improved based on the lectures. The researchers were able to recognize the following errors and mistakes they need to address to make their papers journal-worthy:

- Redundant sentences
- Exclusion of negative results
- Lengthy article
- Co-authorship
- Data presentation

(CLOSING REMARKS)

DR. MICHAEL PIDO  
Vice President for Research and Extension  
Palawan State University

Dr. Michael Pido expressed gratitude to the resource persons and facilitators of the writing workshop. He said that one thing that we should remember in writing manuscripts is that the most difficult part of publication is the first, after that everything else will follow.

## **B. Framework for Disaster Research: Capacity Enhancement on Disaster Research in Health**

The PNHRs Week Pre-Forum Framework for Disaster Research: Capacity Enhancement on Disaster Research in Health Workshop is a two-day workshop conducted as a follow through action to the key messages from the disaster risk reduction (DRR) sessions at the Global Forum on Research and Innovation for Health 2015 (Forum 2015).

Highlighting the importance of scientific and evidenced-based research for the development of policies, programs, and technology and innovation efforts in disaster risk reduction, the Pre-Forum

workshop echoed the frameworks for disaster research for health cited by Dr. Marvin Birnbaum in his session to regional researchers in the country.

## **DAY 1**

### **Course orientation**

Dr. Ofelia P. Sanieel started the session with discussing the goal of the training which is to use standard concepts, methods and framework to develop the capacity to generate, translate, and utilize research findings for disaster risk reduction policies, programs, and services. She explained that the workshop mechanics include lecture, exercises and presentation of research questions/ideas. After introducing the trainers, mentors and resource persons for the capacity enhancement workshop, she showed the schedule of activities of the workshop.

Before proceeding with the lecture, the participants were requested to introduce themselves by stating their names, institution, designation, research background/ training and expectations. Most of the participants have little background on disaster research thus, it is expected that the session will expand their knowledge on disaster research in order to help their respective communities reduce the risks of disasters and health.

### **Disaster frameworks for action**

The first lecture of Dr. Carlos Primero Gundran was about the existing International Frameworks for Action in Disasters based on the presentation of Prof. Marvin Birnbaum during the Forum 2015. He discussed first the Hyogo Framework for Action which aims to assist the efforts of disaster risks. The HFA assisted the efforts of nations and communities to become more resilient to, and cope better with the hazards that threaten their development gains. Next discussed was the Sendai Framework for Disaster Risk Reduction. Dr. Gundran emphasized that the Sendai framework has more focus on health than the Hyogo Framework.

Dr. Gundran presented third, the WPR Framework for Action for Disaster Risk Management for Health as a more proactive approach rather than a reactive one. This framework aims to standardize Disaster Risk Management for Health.

### **The Philippine National Disaster Risk Management Plan**

To start the discussion, Dr. Teodoro Herbosa narrated his experience when typhoon Yolanda hit Manila. He recounted that the roof of their house was blown away by strong winds and that incidence made him a champion for disaster risk reduction.

In this lecture, Dr. Teodoro Herbosa described the national frameworks for disaster risk reduction (DRR) where he highlighted the shift from reactive to proactive approach to disaster risk reduction. In the new framework of the National Disaster Risk Reduction and Management Council (NDRMMC), the focus is safer, adaptive and disaster resilient Filipino communities toward

sustainable development. Dr. Herbosa presented the organizational structure of how the NDRMMC works. He discussed the public sector framework or the Department of Health - Health Emergency Management Bureau (HEMB) initiatives in disaster risk reduction in the areas of prevention and mitigation, preparedness, response, and rehabilitation and recovery. Dr. Herbosa enumerated the HEMB response and narrated his experience in emergency medical care, Water, Sanitation and Hygiene (WASH), public health service, nutrition support services and mental health and psychosocial support during disasters. He mentioned that the Philippines has improved in response but the country lags in relief and recovery during disasters. He stressed that the Philippines as a disaster prone area needs support from the private sector to fast track recovery and rehabilitation efforts. In the end, he emphasized the need for health research for disaster by showing disaster research hits on Google Scholar.

### **Introduction to frameworks in disaster research in health**

Dr. Sanie l i discussed the major features of the conceptual frameworks including the hazard, risk, events, damage, prevention, mitigation, and relief and recovery and explained the relationship between the different elements in the framework. As an introduction, Dr. Sanie l showed the National Disaster Risk Reduction and Management Plan (NDRRMP) Philippines, 2011-2028 which is geared toward safer, adaptive and disaster resilient Filipino communities for sustainable development. The societal framework for coordination and control has 13 priority areas including public health, medical care, water and sanitation, shelter and clothing, food and nutrition, energy supply, education, public works and engineering, social structures, logistics and support, security, communication, and economy.

According to Dr. Sanie l, for disaster research to be standardized there is no need to re-invent the variables in research but review existing definitions. The definition of hazard, risk, event, prevention, modification, damage, preparedness, disaster, mitigation were discussed.

As an exercise, Dr. Sanie l asked about the risks associated with too much rain. Dr. Benjamin Doria of PSU identified high level of waters in rivers and dams as risk thus, he recommended for local government to focus on evacuation of people living near rivers or bodies of water to minimize the economic costs of disaster associated with rain.

For the risks associated with deforestation, Mr. Randy Quitain, Mindoro State College of Agriculture and Technology, imparted that deforestation provide food security for the people doing it. However, as a forester, Mr. Aries Ativo, Central Bicol State University of Agriculture, stressed that deforestation affects people at the lowland.

### **Open forum**

Mr. Ramil Cyril Dacillo, Palawan Council for Sustainable Development, asked what if the local LGU cannot support its community is it a disaster or an emergency? Dr. Gundran answered by defining what is disaster and emergency. He emphasized that some emergencies become disaster due to mismanagement.

Dr. Herbosa defined disaster as event that cannot be managed but there are cases of mismanaged health emergencies these become disaster. He defines unavailability of fund to support an emergency as crisis.

Dr. Sanieel emphasized to remember first the elements preceding a disaster. She further explained that before a disaster happens, there should be a hazard and an event. Structural and functional damage happens when the absorbing and buffering capacity is exceeded by the demands impacted to a community by an event. When the event impacts local response capacity more greatly than it can cause only minor damages, needs and emergency arises. When even outside response capacity is not enough to cater to the demands due to an event, then a disaster happens. In short, a disaster is often the final step of a sequence of events, and as such there are many avenues for preventing it before it happens, or for learning lessons from present disasters to prevent it from happening again.

### **Relief & recovery and risk reduction frameworks**

Dr. Manuta discussed the relief, recovery and risk reduction frameworks derived from the presentation of Prof. Marvin Birnbaum during the Global Forum 2015. His presentation revolved around three topics including the components of the Relief and Recovery Framework, components of the disaster risk reduction framework and the utilization and illustration of the relief and recovery and risk reduction frameworks in Disaster Research.

First, Dr. Manuta showed the disaster management cycle and enumerated several types of disaster researches including epidemiological disaster research, and interventional disaster research.

The disaster logic model was also explained by Dr. Manuta. He emphasized that though this model is applicable in the evaluation of interventions provided before, during or following disasters this model is not appropriate for researches in disaster related to health.

Dr. Manuta defined the two frameworks used in disaster research, the relief/recovery and the risk reduction framework. He also enumerated the actions and processes involved in this model. The relief/recovery framework aims to evaluate and report on specific relief or recovery disaster responses/interventions to damages while, the risk reduction model directs its interventions at decreasing any risk in the risk cascade.

### **Open forum**

Dr. Ronald Law reiterated that the frameworks presented by Dr. Manuta are useful in determining potential research objectives. He said that researchers should look for activities under these frameworks to be able to get valuable research topics. These frameworks are aligned with the perspective of policymakers. It is also necessary to highlight the probability that disaster happens rather than focus only on the consequences of disaster.

Dr. Edna Oconer, Mindoro State University Director of Research, asked if there is a standard checklist per local government unit in which we can assess the preparedness of LGU in a disaster situation.

Dr. Law answered that there are parameters regardless of the number of population. There is an existing national preparedness plan and health wise there are already standards. The problem is in the dissemination of information. Dr. Law recommended that researchers should be well-versed on existing policies and their mission is to institutionalize the system. According to Dr. Law, there are seven parameters to say that an LGU is prepared to response as follows: existence of structure, presence of dream plan for health, existence of structure similar to operation centers, availability of response teams, access to logistical resources, and organized networks and systems.

### **Descriptive epidemiology in disaster research**

Dr. Saniel in her presentation provided an overview of the magnitude of disasters in the Philippines, discussed the importance and goals of disaster research, characterized the differences between descriptive and analytic epidemiology, and utilized descriptive study designs in the context of disaster research. According to Dr. Saniel, Asia is the region hardest hit by disasters which killed 332,000 people and affected 3.7 billion. The Philippines, on the other hand, is the fourth most disaster-prone country in the world.

Dr. Saniel presented a study entitled, "Post disaster health impact of natural hazards." The study looked at three disasters: flood, earthquake and typhoon.

### **Analytic epidemiology in disaster research**

In this presentation, Dr. Saniel reviewed the basic epidemiological study designs and disaster research concepts, defined analytic epidemiology, differentiated the analytic study designs and applied the analytic epidemiologic concepts in doing disaster research. She defined the five analytic study designs including ecological study, cross-sectional study, cohort studies, case-control study, and intervention study.

She discussed how analytic epidemiology plays a role in disaster research. According to her, it can help in four ways as follows: 1. determine segments of the population which are more likely to experience adverse outcomes as an effect of disasters, as in the case of hazard mapping and vulnerability analysis and injury; 2. Assess resilience, capacity-building and risk reduction strategies of towns and communities; 3. Evaluate disaster relief and emergency operations; 4. determine long-term health effects of disasters in study populations.

As an example, Dr. Saniel examined the four studies entitled: "Analytic Epidemiology in Determining Segments of the Population which are more likely to Experience Adverse Outcomes;" "Analytic Epidemiology in the Assessment of Resilience, Capacity-building and Risk Reduction Strategies;" "Analytic Epidemiology in the Evaluation of Disaster Relief and Emergency



Operations;" and "Analytic Epidemiology in the Determination of Long-Term Health Effects of Disasters."

### **Group Activity**

Dr. Saniel facilitated two group activities. In the first activity, the three groups were asked to identify the hazard, event, structural damage, functional damage, emergency and the needs that arise because of the damages in a community-based gastroenteritis outbreak after typhoon Haiyan in Leyte, Philippines. Participants were also asked to identify if this event led to a disaster.

In the second activity, the group were asked to apply the lessons on epidemiological study designs. Participants were tasked to identify the study population, exposure and outcome, study design used in the research, the findings of the study and the element in disaster conceptual framework in the same study reviewed in the first activity.

Mr. Aries Ativo presented his group's output for both activities.

### **Open Forum**

Dr. Herbosa commented that in cases like this, water from the source and the tap need to be tested. Only then, the DOH will declare if the water is potable or not. He reminded that the assumption is that aftermath of the hazard, water will be contaminated.

Dr. Ativo asked if internal injuries is still considered a structural damage. Dr. Saniel answered yes.

Ms. Diane Gepte commented that the gastroenteritis affects the body of the people causing decrease in their functionality. In order to bring back the body to pre-sickness level, medical care is required. If medical care is present then there is no emergency. However, failure to respond may cause an emergency.

## **DAY 2**

### **Risk Reduction: Risks, Capacities, and Resilience**

The first part of Dr. Herbosa's presentation was on identification of risks in disaster cascade. He defined risk as both the likelihood of occurrence and the consequences of the event. He emphasized the importance of systematic, structured, and timely process of risk management. Dr. Herbosa also presented the disaster cascade and the relationship of the elements with each other. These elements include hazard, event, structural damage, functional damage, needs, emergency, and the progression towards disaster.

Dr. Herbosa discussed the risk-reduction framework wherein the level of resilience and risk in the area or region depends on what stakeholders have done to increase capacity of society in disaster risk reduction and management. The framework entails analysis of structural and functional

damages, which occurs when risks are not managed. Dr. Herbosa emphasized that to reduce risks, one must attack all risks involved from the level of the hazard to the presence of disaster. However, by building absorbing capacity, buffering capacity, and response capacity, we increase likelihood of resilience among the community. As such, the entire framework is the resilience, or the ability of a system, community, or society exposed to hazards to resist, absorb, accommodate to, and recover from the effects of a hazard in a timely and efficient manner.

In conclusion, Dr. Herbosa reiterated that failure to mitigate disaster risk and failure of resilience leads to disaster and thus, there is a need to increase absorbing capacity, buffering capacity, and response capacity of communities through risk reduction activities to attain resilience.

### **Risk Reduction Framework**

Dr. Gundran introduced the risk reduction framework by asking the participants the different possible hazards in the room, including both man-made and natural disasters. The discussion of the framework followed the given examples.

He further discussed the risk-reduction framework by identifying the elements involved such as identifying hazards, determining historical perspectives, identifying hazards and components to be addressed, determining level of resilience and risks, determining current standards, milestones, and benchmarks, the needs to next level of resilience, progressing towards new level of resilience and risks, to identify the value and evidence of risk reduction.

Based on the framework, one can do different levels of assessment, as follows:

- Hazards identified – Hazard-risk assessment
- Historical perspectives – Background research
- Hazards to be addressed – Hazard and indicator selection
- Basic societal system (BSS) component to address – Deconstruction of BSS
- Level of resilience (LOR) and risks – Risk and LOR assessment
- Current standards, milestones, and benchmarks – Examination of evidence
- Needs to next level of resilience – Needs identification
- New level of resilience and risks – Application of disaster logic model
- value and evidence of risk reduction - Synthesis

Continuing from the discussion of Dr. Herbosa, Dr. Gundran discussed risk assessment and its components including risk identification, risk analysis, risk evaluation, and risk perception. Risk identification includes identifying sources of risk, areas of impact, events, causes and potential consequences. This generates comprehensive list of risks based on events that might create, enhance, prevent, degrade, accelerate or delay the achievement of objectives. Risk analysis includes establishing indicators against which the relative risks can be evaluated. Criteria used are based on needs, goals, objectives, and context. Risk evaluation is the process by which the levels

of risk are judged to be acceptable or tolerable, by comparing results of risk analysis with the risk criteria.

Dr. Gundran continued the discussion with the Disaster Logic Model which assesses effects, outcomes, impacts, costs and processes, including new level of function and risks. He emphasized the difference between strategic versus operational plan and how strategic plan is translated into operational plans. He further discussed changes in level of function. To exemplify, when impact is greater, a 150-bed capacity hospital will require additional resources and needs to cater to the influx of 800 patients during a mass casualty incident.

Dr. Manuta closed the morning session. In the synopsis, he emphasized the need for evidence for policy, response and reduction of risk. This is the gap which needs to be addressed. The Philippines is already a middle-income country, and the government has the capacity to fund research. They are capacitating and training institutions and individuals to focus on disaster research focusing on epidemiologic, analytic, descriptive, health systems, and food security. For them to support development, (first phase in MIMAROPA) the whole process begins with this training. There will be proposal formulation, implement research in respective areas, present findings in conference and publications. This constitute capacity-building.

### **Interventional Disaster Research and Disaster Logic Model**

Dr. Herbosa

The presentation discussed the scope of interventional disaster research and the frameworks used in this research. Dr. Herbosa emphasized that there are very few interventional research for disaster research, only comprising 20.3%, compared to epidemiological researches which comprised 50.5%. Interventional disaster studies are evaluations of disaster-related interventions, provided to change the current status. There is a need to put value in interventions – effects, outputs, outcomes, costs, impact, benefits, and process used for interventions and responses, including effectiveness, efficacy, efficiency, cost-benefit and cost-effectiveness analysis.

He further emphasized that among the interventional studies, 74.8% focused on risk reduction, 23.2% for relief, and only 2% focused on recovery. Currently, interventional disaster research comprised of very few studies in peer-reviewed literature; there is no outcomes, impacts, benefits, costs, among other areas of analysis; most use Achievement Indices as outcome; risk-reduction (education/training) is most common; no studies on recovery; no common structure or terminology; difficult to compare; unable to determine effectiveness; unable to define best practices; unable to develop standards; and unable to define competencies. He further pointed out that those interested in doing interventional researches can do the following research designs: descriptive, audit, before-after, comparative-experimental, and randomized controlled trials. He ended by synthesizing the discussion in relation to the disaster logic model, which provides structure for evaluation of interventional studies.

## **Presentation of Research Proposals**

The presentation of research proposals was facilitated by Dr. Manuta.

### **1. Amelia Nicolas**

Central Bicol State University of Agriculture (CBSUA)

CBSUA's research proposal is entitled, Resiliency Level of Mt. Mayon and Mt. Bulusan Settlers to Volcanic Eruption. Specifically, it seeks to (1) determine the socio-demographic profile of Mt. Mayon and Mt. Bulusan settlers; (2) compare the level of resiliency to volcanic eruption Mt. Mayon and Mt. Bulusan settlers in terms of absorptive capacity, buffering capacity, and response capacity; (3) identify the key factors that affect the level of resiliency among Mt. Mayon and Mt. Bulusan settlers; and, (4) document the best practices of Mt. Mayon and Mt. Bulusan settlers during pre- and post-volcanic eruption. They intend to do survey, and both primary and secondary data will be gathered. Primary Data includes the socio-demographic profile of respondents; level of awareness; and pre- and post DRRM-related activities conducted by the respondents. Secondary Data will include mortality rate during volcanic events; number of people injured; incidence of diseases; extent of damage to property; DRRM efforts done by public/private agencies and other NGOs; and funding allocated to DRRM.

Dr. Ronald Law clarified on the focus of the study. Is the study about determining indicators of resilience or level of resilience?

Ms. Nicolas answered that they will focus on determinants of resilience.

Continuing, Dr. Ronald Law provided practical recommendation in that they should document first good practices of Mt. Mayon settlers, and later on identify indicators. This will further identify undocumented good practices of Mayon settlers.

Prof. Virginia Murray commented that they should look for similar pieces of work and make it applicable to the Philippines. Look for STREVA research program. Published literature should be explored because determining best practices is not advised anymore.

Dr. Teodoro Herbosa commented that given the research problem, "could educational and political interventions be directly linked to increased resiliency level of Mt. Mayon and Mt. Bulusan settlers?" there can be 2 to 3 studies out of these areas. Educational interventions may be different from political interventions also, so there is a need to focus only on a particular research topic. They should also use the term, leadership and governance, instead of "political."

Dr. Ofelia Sanieel stated that Objective 1 and 2 are descriptive, while 3 and 4 are analytic. First, they should have indicators of resiliency, screen out from so many other factors. These become the independent variables. They cannot have a long list of indicators and they do not have enough resources so they have to screen out and select, as this will have implications in sample size.

## **2. Department of Social Welfare and Development, Field Office IV-MIMAROPA**

DSWD presented a research entitled, Level of Readiness of Social Workers in Facilitating Mental Health and Psychosocial Support and Processing to the Internally Displaced Persons (IDP) in Palawan. Specifically, it seeks to determine the profile of the social workers in Palawan; the level of readiness of the social workers in facilitating Mental Health and Psychosocial Support and Processing; the process on the social workers facilitate mental health and psychosocial support processing to IDPs; and determine significant relationship between the profile of the social workers of Palawan and their level of readiness in providing mental health and psychosocial support processing to IDPs. It is a cross-sectional research design with an estimated 75 social workers as the study population.

Dr. Herbosa asked that out of the 75 registered social workers, how many have trained for critical incidence stress debriefing? How about frontline social workers? How many of them have undergone training?

The presenter answered that the seniors have training, but they are busy in doing relief operations.

Dr. Herbosa advised to include in the study how many have been trained, how many have experience, and how many are new. The parameter is how many have been trained.

The presenter stated that in reality, CISB is no longer conducted by social workers during disasters, because they are busy with relief operations and distributions, yet this is one of the functions of the social worker, to conduct psychosocial support. They can only identify them and refer to Department of Health.

Dr. Law commented that after Yolanda, study on UNICEF about the need to support the needs in evacuation centers. The mandate of DSWD is to support the needs of people in the evacuation centers. Intervention is to do the psychosocial support processing. But the level of readiness, even if we train them, the problem is that they do not have time to conduct the psychosocial support, yet the outcome of the study is about level of readiness. The study has to be properly framed.

Dr. Law further explained that in regions that were trained, they are trained but they are not able to do it, such that they do not prioritize it but rather prioritize food and relief. Confidence level among the social workers is also the problem. They should focus on DSWD mandate such as forming the community and family support groups. If you go for PSP, it should be referred to experts already. What they want is that social workers to screen patients and referral would come after, so experts on mental health can manage high-risk patients. It goes against the recommendation of WHO to veer away from debriefing because some interventions should be referred to experts for proper conduct. There might be a problem with what might have to be delivered with what you may be doing.

Dr. Saniel asked if the study is explaining an intervention; or if they are not ready, training will be given. The presenter concurred on the latter. Dr. Saniel confirmed that it is not the intervention, but the study is more on the profiling of social workers in readiness. She emphasized that training is not equal to readiness. There is a need to define level of readiness because it is a complex variable.

Prof. Virginia Murray: Focus on social workers is often forgotten in disaster risk reduction and management. There is a strong group on social workers on disaster risk reduction in UK. Prof. Murray is willing to connect them with these groups as there will be a world conference about the roles of social workers in disaster risk reduction.

### **3. Ms. Beneden Morong, Marinduque State College**

The proposal is entitled, Centralized food supply monitoring system: A mechanism for food sufficiency assessment in Marinduque.

The objective of the study is to generate a localized model for agricultural productivity in support to food resiliency in the province of Marinduque. Specifically, this project aims to establish baseline data on agricultural activity and available technology used; develop a systematic monitoring mechanism for food availability; provide supply capacity information of food for the locals in the province of Marinduque. The study will employ a descriptive method of research utilizing intervention approach. Secondary data will be sourced out from different agencies like Department of Agriculture. It will further include assessment of food production activities; unstructured interview with the key players such as farmers, processors, traders and local authorities of food supply chain will be conducted. Prototyping model will be followed for the system development. This is a proposal of an application or an online system, which they can access the map where they can locate sources of food in Marinduque. Once funded, they will further propose a system which can analyze further how many yields will there be for a certain period of time, so to have advanced harvesting and yield will not be lost.

Dr. Herbosa lauded the use of IT to prepare stockpiles of food for the island of Marinduque. He recommended to answer the following questions in the research: 1. How long food supply will last in Marinduque without any delivery of ships in a given time? 2. What is the impact of hazard – how long will they be back by identifying how long will it take to stock food. 3. What will be the length of time you need to store and stock piles of food?

Prof. Virginia Murray advised to look at resources from Baltimore, US, by identifying soil to fork, to describe the food chain, and about food research program before you embark on this project. This is hugely costly in principle, and the proponents need advice before you embark on this project.

Dr. Law commented that they include food safety. To make it more health, include food safety and not just on food security. When there is food security problem, main food is not available and they resort to something else, but still food safety is important in health, especially that they have

cases of diarrhea during disasters. They should also focus on nutrition which is essential during disaster management.

**4. Polemer M. Cuarto**, Mindoro State College of Agriculture and Technology (MINS CAT)

Mr. Cuarto presented the proposal entitled, Discriminant Analysis of Vulnerability to Post-Disaster Diseases: Evidence from the Typhoon Nona which Struck Oriental Mindoro in December 2015. This study aims to use discriminant analysis techniques to analyze significant factors of vulnerability to post-disaster diseases in an attempt to characterize population who are susceptible to these kinds of diseases. Specifically, it seeks to determine the most common post-disaster diseases after typhoon Nona which hit Oriental Mindoro last December 2015; identify population groups who are affected by the post-disaster diseases; and model vulnerability to post-disaster diseases using discriminant analysis. The model will predict the vulnerability of population to post-disaster diseases. Thus, the government can better analyze the risks and formulate priority measures that are necessary to reduce the impact of communicable diseases following natural disasters to protect the health of disaster-affected populations. This study will use both descriptive and analytic epidemiological research design specifically cross-sectional design. Data mining techniques through PDRRMO and PHO will be utilized in gathering data of the reported cases of post-disaster diseases due to typhoon Nona. Subjects will be interviewed further to validate and gather additional data relevant to the study. Multivariate analyses will be used in the statistical treatment of data. With the discriminant analysis, mathematical model will be formulated.

**5. Salcedo B. Tanguid, Jr. ,** Mindoro State College of Agriculture and Technology (MINS CAT)

The proposal is entitled, Natural disaster upshot in Oriental Mindoro: Basis for risk reduction management plan. This study aims to determine the elements to be used in formulating disaster risk reduction management plan in Oriental Mindoro. Specifically, it seeks to identify what are the natural disasters that occur in the province of Oriental Mindoro; the rate of impact of the natural disasters that occur in the province of Oriental Mindoro; measures adopted against disaster and their degree of effectiveness as proactive and reactive measures. The study will use descriptive epidemiological research design. The researchers will make use of questionnaires and structured interview in gathering data.

Dr. Sanial advised to define the rate of impact. The first objective is a review of records but the second objective is vague. The proponent will assess the extent of damage, which seems to be the operational definition of the rate of impact.

Dr. Sanial continued by asking what is meant by proactive measures. Provide definition of terms for proactive and reactive measures.

The proponent described proactive measures as those that are being implemented or the existing risk reduction strategies of the province that will mitigate occurrence of disasters.

Prof. Murray commented that what they are asking for is what SENDAI framework is about. . There's a lot of concern on how to do the research, but developing a system on documenting these events will be really helpful. There are many suggestions of systems that might be of help, but the Philippines is already looking at it as part of their open data work.

Dr. Herbosa advised to study parts of the picture from the framework; their contribution is small facets of the building blocks. They should focus and define what they really want to research based on the different frameworks presented.

Dr. Herbosa advised to focus on the research topic because there is a wide array of communicable diseases , such as respiratory diseases and leptospirosis. He suggested that they focus on only one infectious disease, and do the discriminant analysis modelling, because each infectious disease have different infectivity rate, progression rate, and other factors, so models will be different for each disease.

The proponent has not focused on a particular disease because they still do not have the data.

Prof. Murray said that leptospirosis is fatal and this should be investigated. She concurred with Dr. Herbosa to focus on one single disease and get their case definition as sharp as possible. She has been in Malaysia and they have done significant work in leptospirosis. She advised to get in touch them and probably help them in the model they will apply here in the Philippines.

Dr. Jody Dalmacion, from the audience, commented that one of the problems in the country is communicable diseases, and if they are looking on a perspective post-disaster, they might be missing the point that they are already existing in the community. Infectious disease model is complicated if you will be using leptospirosis as the disease of interest, because it is neither unidirectional nor bidirectional; it is multiple model. Start looking for baseline information on the areas with or without leptospirosis, such as clustering of the disease in the area.

Dr. Sanial advised to first identify what the independent variables are. Even if there are identified factors affecting risk of the disease, the question is where will they get this data and the availability of the data. This is post-disaster and getting the realities of the data might be difficult. In discriminant analysis, they should identify groups and identify what makes them different. They have to specify right away which are independent discriminators or whether these factors will develop the disease or not, what kind of model and what variables will be included.

Dr. Ronald Law commented that the biggest leptospirosis outbreak was in post-Ondoy. There are already studies which described the clinical profile, differences in complications, and looking at vulnerability factors, such as middle-aged males, who have very special exposure. They can look at this in developing the model.



## **6. Mr. Jezreel A. Sarabia, Occidental Mindoro State College**

Mr. Sarabia presented the research proposal entitled, Epidemiological Survey of Common Diseases after Flooding in San Jose, Occidental Mindoro. The primary objective of this study is to determine the common diseases that occur after flooding in San Jose, Occidental Mindoro. Specifically, it will determine the common diseases after flooding in terms of age group, sex, geographical location, and length of residence. It will also determine the common diseases associated with educational attainment, personal hygiene, family income, beliefs and attitudes. It is a cross-sectional, epidemiological study.

Dr. Saniel advised to define and identify what diseases are, make a short list. It is difficult to ask for many diseases since there are already a lot of studies about diseases that occur after flood. They can also review records of health centers and see the common consultations that occur after these events. This will help them narrow diseases of interest. If they will go to households to determine diseases and conduct survey, the researchers cannot let them recall for a longer period of time. The diagram is a chronology of steps in doing the research, there is a need is to identify variables and the relationship of these variables, and develop conceptual or theoretical framework.

Dr. Law asked if they are limiting to a single event or multiple flooding events. There is a difference if they are going to describe the disease profile from multiple flooding events. They should be very specific in the events that they will consider. They can also consider non-communicable diseases after these events.

Dr. Gundran clarified that the researcher wants to determine relationship of certain beliefs with certain illness. He asked if they have in mind a cultural behaviour or beliefs.

The proponent answered that there are communities, indigenous people have beliefs about disease process. Dr. Gundran advised to focus on a specific topic.

Dr. Jody Dalmacion presented a pedagogical comment. There is a difference between a research idea and research question. Given the flooding event, the community would have generated a salient research question or hypothesis. As a member of the academe and the community, they can generate certain research questions and not research ideas. If they want to identify what are the common diseases, they are already available as statistics in the area.

Dr. Emmanuel Baja, from the audience, advised to focus on several types of diseases. Look at log effects, focus on admissions on hospitals, and look at mortality and time series, or even look at records and the effects of this typhoon or flooding with certain illnesses.

## **7. Mr. Kerr Hernandez, Ospital ng Palawan**

The proposal is entitled, Preparedness of Ospital ng Palawan in attending to disaster victims of hazard. The study aims to evaluate the preparedness of the Ospital ng Palawan as an end referral secondary health care institution in catering victims of possible hazards transpired in Palawan.

This study is mainly guided by the principle of Health Emergency Management (HEM) in providing crisis attention. This epidemiologic descriptive study mainly aims to answer how prepared ONP in attending the needs of the victims of disaster.

Dr. Gundran compared the proposal to their study in Manila about the knowledge, attitudes and practices of staff, their knowledge on disaster plan. The proposal looks at disaster plan as a whole. They can refer to the study as reference.

Prof. Murray advised to try it a high level by trying to tie this with the WHO safe hospitals initiatives. There are lots of studies that have happened, but what is needed is a baseline on what they know and what they do in reality. They should seek ethical approval also in advance.

Dr. Law commented that this is related to M&E, they have already established standards for government hospitals and these are well-embedded in DOH policies. The good starting point is that there are already existing tools based on global standards. . Relate to different big parameters, one is structural, second is to establish general preparedness such as human resources and other resources. Since this research wants to look at program implementation, it is within the realm and consider context of monitoring and evaluation.

Dr. Herbosa commented that since the drills are attuned to the plan, test the plan and evaluate the drills so they can revise it accordingly.

## **8. Palawan Council for Sustainable Development**

The proposal is entitled, Vulnerability assessment of the Batak indigenous cultural community in Sitio Kalakwasan, Brgy. Tagnaya, PPC taking into consideration their indigenous knowledge systems and practices (IKSP) in improving their emergency preparedness. The objectives of the study are to determine the vulnerability status of the Batak ICC in Sitio Kalakwasan, Brgy Tanabag, Puerto Princesa City; to turn the Batak ICC into a well-prepared community while taking into consideration their IKSP when improving their emergency preparedness; to make the Sitio Kalakwasan, Brgy Tanabag, Puerto Princesa City an ideal model of an emergency prepared ICC; and; to establish a basis for policy formulation when dealing with the issue of emergency preparedness of the indigenous cultural communities in the province of Palawan.

Dr. Sanial stated that the study is interesting because they are studying a very special population, and it is not common for this population to be studied. The concern is the definition of vulnerability and the indicators to be used to measure vulnerability. There is a need to define what vulnerability and the indicators to be used. Dr. Sanial further asked if this research will include intervention.

The proponent replied that this will be an interventional research because this will be needed to formulate policies using the community as a model community for the entire Palawan.

Dr. Saniel agreed that it is not just a simple research because there is also an intervention involved in the study.

Dr. Manuta said that the study is moving towards preparation of a disaster plan for these indigenous groups based on vulnerability assessment.

The researchers are looking at social aspect and beliefs as considerations on the vulnerability assessment, which will intertwine and serve as middle-ground for emergency preparedness and preservation of culture.

Dr. Ronald Law emphasized that MIMAROPA is a GIDA region generally, and this reflects the complexity of doing emergency preparedness in a GIDA region. There is an established service delivery network in GIDA areas, but in the study, there is another layer of complexity which is the consideration of indigenous people (IPs). The researchers can explore other determinants aside from social determinants of health. They can consider social determinants of health in the GIDA areas to scale it up in other regions. DOH still does not have policies yet in on how to delivery services to IPs in GIDA areas.

Dr. Herbosa described a situation of Aetas of Mt. Pinatubo who developed depression in evacuation centers. Aetas fish for their own food. Their depression emerged because people in Manila are giving them sardines, instead of allowing them to fish for their own food. There has been a change in their culture. Similar to this research, the research will highlight cultural and social aspects in disaster and emergency preparedness.

## **9. Western Philippines University**

Assessment of Disaster Risk Reduction and Management Program of the Western Philippines University. The objectives of the study is to determine whether the disaster plan is implemented among the faculty, staff, and students in Western Philippines University.

Dr. Law mentioned that schools are critical infrastructures but DepEd has safe schools campaign. They have safe schools checklist that schools will have to follow. Though CHED regulates universities, they can look at the checklist for the safe schools initiative as reference. Dr. Law asked if they are limiting the assessment of the level of preparedness to human resources or the organizational as a whole.

The presenter only wants to focus on the human resources of the university.

Dr. Manuta pointed out that if the intention will feed into the preparation of the DRR operations manual, it is important to look at the entire system of the university. If it is a manual, they have to look at the structures, operations, financial and other stakeholders of the university. Maybe they can phase the study, but it should be holistic in the development of the DRR plan. Accreditation is also used in this dimension.

## **10. Palawan State University**

The proposal is entitled, Vulnerability of coastal area settlers/residents of Barangay San Pedro, Puerto Princesa to a Tsunami. The objectives include determination of the demographic profile of the affected residents; identification of specific groups of residents of the coastal area of barangay San Pedro, Puerto Princesa that are vulnerable to Tsunami; examination of the possible socio-economic consequences of the Tsunami disaster to the residents in the coastal area of barangay San Pedro, Puerto Princesa City; and identification of the counter measures and response strategies that may be required against the vulnerability of the people living in the coastal area of barangay San Pedro, Puerto Princesa City.

Dr. Saniel suggested that they should have a definition of what affected residents are. They should identify specific groups of affected areas that are vulnerable to tsunami. Objectives 1 and 2 will require also different population groups. For objective 2, they need to come up with a bigger population in determining who among them are vulnerable based on the definition of vulnerability. Come up with vulnerability scores, identify them and rank them according to order. If they include more barangays, generalizability is better, but if you want to characterize the percent of the population that is vulnerable, there will be a different consideration. The sample size, or the number of barangays is also dependent on the budget.

The proponent will use secondary data, but Dr. Saniel advised to revisit the methodology involved in answering the objectives. Dr. Saniel asked if the fourth objective is part of the research or a utility of the research. It is deemed that objective 4 is part of planning and may not be included in the objectives, but rather as a justification of doing the study.

## **11. Iligan Medical Center**

The proposal is entitled, Building Capacities of High-Risk Communities Using the Framework of Barangay Disaster Risk-Sensitive Shelter Planning. The objective of the study is to be able to train community members on Barangay Disaster Risk-Sensitive Shelter Planning among high risk communities. Specifically, it seeks to capacitate members of high-risk communities on culture-sensitive shelter planning through the use of participatory situational analysis; mitigate, reduce the vulnerability, and improve the absorptive capacity of the community to geological and/or climatological hazards that pose risks to lives, properties and economic survival of HHs; respond to the housing related needs of high-risk households based on their exposure to natural and man-made hazards which aggravate their exposure to risks; identify and address the needs for basic services and propose poverty alleviation measures of the communities, more specially its vulnerable households to improve their capability for adaptation and resilience in facing the risks during disasters and emergency situations; install monitoring and evaluation of BDRSSP process, and ensure that project proposals are submitted to partner agencies for project implementation and support; and come up, revisit, critic and finalize hazard maps; identify hazards clusters, and review proposed interventions, strategies, and project briefs for submission to BLGU, CDC for policy support, and to CPDO for land use planning, and inclusion of the BDRSSP to the Annual Investment Plan and to the BUB.

With the goal of coming up with a comprehensive BDRSSP, local participants shall undertake series of capacity-building workshops in order to enhance and develop further their knowledge and expertise on shelter planning through learning visits and capacity enhancement trainings. Tools on participatory situational analysis (PSA) will be employed which will enable community volunteers obtain relevant information in drafting necessary strategies and interventions to help the community improve their adaptation; equip and mobilize them to respond to hazards, risks and emergencies; prepare them for housing programs; improve their resiliency, and look for necessary means of support.

Dr. Law commented that the presentation is already a project proposal. Dr. Law appreciate the methodology, but what they want to establish is to build evidence on the strategies they will have to do. The objectives presented are already program objectives because they are already dealing with interventions. Research in disaster is to have inquiry on what possible strategies is applicable guided by evidence, and purpose then is to generate evidence. They should move backwards, by engaging in research to build evidence as basis in formulating program and planning.

Dr. Manuta commented that they are in the position not to do programming. They need to backtrack given the context of the seminar and advised to identify what evidences will lead them to propose these interventions. A good review of literature might be helpful, where those interventions are backed up by evidences. It is commendable in terms of scope and empowering the barangay but there is a need to back it up with evidences. He encouraged the researchers to identify gaps which will serve the purpose of the project.

### **Insights from Resource Persons:**

**Dr. Ofelia Saniel** provided an over-all impression and assessment of the outputs of the activity. She is glad to identify participants who are interested in DRR. This activity provided more rational basis for the conduct of DRR researches. There is a need to hone the capacity of the researchers, and the activity is part of building capacity.

#### **Prof. Virginia Murray**

Consultant in Global Disaster Risk Reduction

Vice-Chair, United Nations International Strategy for Disaster Reduction (UNISDR) Science and Technology Advisory Group Wellington House

Prof. Murray emphasized that we do not know how to count disasters properly. We do not know how it begins and how it stops. There is a huge number of issues regarding disasters, and climate change has created a huge contribution in these issues.

During the presentations, a lot have included flood and vector-borne diseases, but very few have accounted for other disaster impact such as drowning from flood and electrocution from flood are rarely accounted for. This includes mental health and risk for suicide. This is an example on why we need to improve the data collection.

She also discussed some of the elements of the SENDAI FRAMEWORK, which links to all UN relationships. Yet, the problem is the lack of common indicators which posed problems for each country.

By 2030, we will have substantial reduction in lives, livelihood and health. Health is critical in the core of the Sendai Framework. The mandate is to enhance the scientific and technical work on disaster risk reduction and its mobilization through the coordination of networks and institutions in all regions. Yet, the Philippines does not publish enough what the country does in DRR. She encouraged the participants to do more research. There is a need for evidence, yet what is presented is more descriptive, and less analytic, which is not enough in building evidences. There is a need for meta analysis and strong systemic reviews. We should promote scientific research of disaster patterns, causes and effects, disseminate risk information such as national risk assessment that helps guide policies. There is a need to use post-disaster review but prior to it, ethics approval is required to know what needs to be reviewed during disaster. In the US, they began publishing materials with ethical approval so it will be useful for other researchers as well.

She shared funding resources such as Global Challenges Research Fund – Building resilience. The closing date is on September 6, 2016. The Newton Fund also provides funding, with special link of the Philippines with the UK, with partnerships of DOST and CHED to deliver important projects in the UK. There is also the World Bank which will be formally announced tomorrow. The 2015 calls that came out are Flood Risk identification and Visualization using Twitter. She shared some of her works and research programs such as the systematic reviews of the participation of women and girls in community early warning systems to reduce health impacts in natural hazard associated disasters; youth disaster education in five countries using systematic review; and family emergency disaster kits in 5 countries.

In summary, she stated that Philippines has one of the highest number of recorded disasters, perhaps it is the best country to teach the world about disaster. She encouraged Filipinos to fill in the gaps on DRR research. She provided opportunity for internship with Public Health England to help support newly emerging Philippine Disaster Hub.

**Dr. Ronald Law**

Chief of Preparedness Division  
Health Emergency Management Bureau  
Department of Health

Dr. Law presented DRR and DRM in the context of the Department of Health.

He emphasized that there is already a shift from preparedness and response to disaster risk reduction, in congruence with the mandate of the Sendai Framework. He introduced the importance of research in what the DOH does in policy formulation.

He emphasized that they are already aligning existing policies with global developments, brought about by the incident of Yolanda. They gave a lot of inputs also in the development of DRM-H framework in the Asia-Pacific. These developments in the Philippines are aligned with the Sendai Framework, WHO, DRM-H Framework, International Health regulation, and following SDGs. They are now in the process of providing evidence-based indicators that will relate to disasters in the sustainable development goals in the Philippines. These should be present in the LGUs, but they need evidences for this.

The important role of research is to strengthen evidence for policies and programs, up to the implementation of policy into practice.

He encouraged the Philippine advocates to publish and contribute to the global literature.

The biggest gap seems to be translational research, bridging science and practice. M&E should also be integrated with the research. We are also poor in documentation, which affects the production of research.

The biggest challenge is the linkage of researchers, policy-makers, practitioners. Way forward, we should really do the research agenda and be part of the National Unified Health Research Agenda. Research capacity-building is also important as future directions of DRR research.

## **Synthesis**

Dr. Saniel synthesized the session. The next steps of this forum will be about ethics in disasters. Training workshop on disaster frameworks will be the first phase. The second phase would be proposal development and possible funding. The third phase will be the implementation of the researches. There will still be trainers and mentors to guide the researchers. The fourth phase is publication and dissemination of research results.

Dr. Saniel introduced Dr. Herbosa's recommendation which is about a research summit on disaster health research, which will start at the regional level. Those in the regional level will further present in the national level.

## **2. PNHRs Monitoring System Meeting**

In the meeting, regional consortia chairs and their representatives discussed the planned institutionalized implementation of the monitoring tool to assess the performance of the PNHRs.

Dr. Juan Ma. Pablo Nañagas started the session with the report of the System. He introduced the on-going monitoring system which was already pretested in three regions. The monitoring tools consisted of forms to be answered by the stakeholders to measure the state of the System. He presented the strategy map of the PNHRs and the performance measures indicators which were

refined by Dr. Ofelia Saniel. He said that the System will try a positive approach and give incentives to those who will comply. For the System to improve, Dr. Nanagas emphasized the need to develop baseline data.

For easier submission of report, Dr. Nañagas said that they will develop a PNHRs reporting system.

### **Results of the project, “Assessment of the Capacity of Health Researchers, Research Institutions and Regional Research Consortia in the Philippines”**

Dr. Jesus N. Sarol, Jr. presented the results of the project entitled, *“Assessment of the Capacity of Health Researchers, Research Institutions and Regional Research Consortia in the Philippines.”* To develop tools to assess health research capacities, Dr. Sarol explained that there’s a need to strengthen the regional research capabilities outside NCR and develop a critical mass of available qualified researchers throughout the country. These assessments will facilitate the designing of interventions that will be specific to the research capacity needs of the regional consortium.

Dr. Sarol explained the three data collection tools developed and the characteristics of the survey population. He also presented the findings of the study that helped in drafting the recommendations to improve the capacity of health researchers.

#### **Outline: PNHRs system**

Dr. Ofelia P. Saniel emphasized the significance of monitoring and evaluation tool for the System. She said that the monitoring and evaluation tools will help the initiatives of the System to be more responsive and inclusive. Then, she provided the rationale of the data collection tools and presented the group with the developed forms. She explained that these Forms were already on their 29<sup>th</sup> version and these forms will be provided with manuals. From the results of pre-testing, Dr. Saniel said that the challenge is to identify reasons for blank responses and determine if the forms are inappropriate for some institutions.

#### **The online monitoring tool**

Mr. Renante Bahala presented the online monitoring tools for Forms 3 and 4 (For Researchers and their Research Projects). He oriented the group on how to use and fill out the monitoring tools fields.

#### **Development of Guidelines and Processes**

Dr. Ofelia Saniel presented the Development of Guidelines and Processes for MMHRDC Committees. MMHRDC has six working committees under the supervision of the steering committee. The MMHRDC conducted a Strategic Planning Meeting on March 2016 and they decided to update their guidelines to reflect the current situation and needs of the consortium. The highlights during their consultative meetings were the following: (1) Strategic Plan for entire MMHRDC, (2) RUHRA Agenda Setting, (3) Monitoring and Evaluation activities, (4) Collaboration



by MMHRDC committees with each other institutions/agencies and (5) How important the role of the MMHRDC Secretariat is. She then presented a revised action plan for selected MMHRDC Committees based on their Strategic Objectives. The next steps for MMHRDC is to finish their consultations with remaining committees and finalize the guidelines to present it to all MMHRDC committees.

### **Open Forum**

Dr. Nanagas asked Dr. Sarol if it is better to monitor the information on number of researchers per consortium since the methods used before by PNHRs was to look at a piece of data on number of researchers per hundred thousand populations. Dr. Sarol answered that that type of information is for another data. Data gathered was for the capacity of the researcher, the number of researchers per region to population was not considered as an indicator. Dr. Saniel added that if we get good data from different regions, then we may be able to compute the number of researchers to 100000 populations. If number is very high for urban area, then there is a need for research development in other areas as well. Dr. Sarol also added that a possible use for another indicator would be to determine what the needs are for each researcher.

Dr. Warlito Vicente, the Chair of RHRDC XI, stated that the problem in research community is that it is not financially rewarding for the people to encourage research. To continue to encourage research, you have to put value where your mouth is. It is either you love to do the things you do or you should love the things you do. There is no sense reinventing the wheel. He suggests that what is done in MMHRDC should be shared to all the consortia as well. If they give their outputs then their region will also give their outputs. Ms. Carina Rebulanan, IDD Chief of PCHRD, commented that the idea right now is to replicate per region.

Dr. Rommel Salazar of Region IV-A expressed his concerns regarding the results of Dr. Sarol's paper, a major recommendation is to harness the potential of the consortium to pool resources and the capacities through clustering. He then asks how to propose the clustering of each consortium, if it should be done by the cultural dynamics of each consortium or by its demographic locations. Dr. Sarol answered that some regions have strengths in qualitative research. He said that everyone should share expertise, since not all consortia are self-sufficient. Numbers of consortia are already advanced, maybe because they were developed early. This clustering could be identified geographically or by finding the expertise from other consortia and talk about collaborative projects.

Grace Fernando of DOH, asked about Dr. Saniel's presentation regarding the monitoring system, she asked why the PNHRs services are only through PCHRD. She also asked if there is a difference between PNHRs and PCHRD and if DOH has a role in the consortium. Dr. Saniel answered that it was the identified services available, since PCHRD is the secretariat of the implementing agencies, and acts as the clearing house of activities. There is an assumption that PCHRD is the one who traffic the information and the other services. In addition, Ms. Merlita Opena, RICUD Chief of PCHRD, stated that the PCHRD services was highlighted because it is the secretariat and the focal point of the PNHRs. She explained that the PNHRs monitoring system was presented to the

PNHRS Governing Council and was approved; a meeting with CHED was also conducted to discuss the coordination of the PNHRS monitoring system, since the institutions will be the ones to adopt the System. The PNHRS monitoring system will then reside with the research organization.

Dr. Jose Orosa III of Region I, stated that the problem was with the release of the funds. Funds can't be released to private institutions. Institutions are willing to collaborate, but have problems with the funding. Another concern is that we are not developing researchers in the country. Active researchers in the region are doing planning, and those who want to research are the research managers. If they would conduct research it would cause ethical problems. He also stated his concerns on the monitoring system, saying that the consortium is unclear of what their target is. He suggested that they should assess and evaluate the consortium by output. Dr. Saniel replied that they should evaluate the activities of each consortium and that the consortium should have their own plans, but must be aligned with PNHRS road map. It is hard for the SOME to dictate since the regions are the ones who know their capacity and they must develop strategic plans.

Dr. Queddeng of Region 1 recalled how the first versions of the PNHRS monitoring tools were disseminated, and that the data collection was put on hold. She asked about the time scale of the PNHRS monitoring system data collection and reminded that answering the monitoring tools is not their only responsibility. She asked what the target time for the PNHRS monitoring tools are and what the focus on population is. She suggested that they assess on the quality of health research or the health research project instead. She stated that they need a strong voice from CHED; for the implementation of the PNHRS Monitoring tools, there has to be a CHED Memorandum Order (CMO) so that Higher Education Institutions (HEIs) will comply. With the help of the CMO it will be easier for immediate compliance.

### **Closing remarks**

In closing, Prof. Teresita De Guzman said that there is a need to recognize the problems to be solved and the monitoring and evaluation tool is a good method to start with. She encouraged all regional consortia to comply. In the end, she thanked the members of the different consortia for their active participation.

The PNHRS Monitoring System should not be seen as an added burden for researchers, institution, consortia and the research community in general. Providing the data based on the performance measure gives us the baseline and the basis for our continual improvement in terms of the services offered as well as the overall management of the system.

It is highly recommended to participate in the PNHRS Monitoring activities especially once the online version is deployed. The information not only serves the entire health research community but also could be used to track the progress of the consortium, institution and researchers.

### **3. Workshop for the Regional Strengthening of Researchers on Aging**

#### **State of the Art of Researches on Aging in the Philippines**

Dr. Shelley de la Vega presented the Summary of the PCHRD-funded project entitled: ***“State of the Art of Researches on Aging in the Philippines.”***

- The study aims to shape the research agenda for older persons by consolidating findings of aging literature in the country, identifying research gaps and recommending research directions for this vulnerable population. This is in preparation for the aging population of the Philippines, which is expected to reach 15.3% by 2050
  
- The findings show that while there is growing interest to conduct geriatric research in the Philippines, a number of issues have to be solved in the institutional and national levels.
  
- Good points include:
  - There is a strong network of dedicated librarians making it easier to access abstracts and full text literature.
  - There is a growing number of libraries having electronic databases and many school administrators show great interest in the work
  
- There is a need to improve the databases and/or reporting of researches in geriatrics.
  - The study showed that there are numerous researches that are unpublished, especially theses and dissertations.
  - Many of the studies have no available abstracts, and if they did, either they could not be easily accessed in full text or there is no standard format followed
  - There are results that are not sub-analyzed according to age group (60-70 [young old], 71-85 [middle old], 86 and older [oldest old]). Doing sub-analysis is important considering that there are differences in disability and diseases according to subgroup that need to be taken into consideration when dealing with geriatrics. Sub-classification by gender is also lacking.

Dr. de la Vega also presented a number of recommendations to national and local agencies on how to promote programs on Aging, Geriatrics, and Gerontology, either through offering graduate programs, creating online aging research databases, allocating funds for aging researches, formulating the national research agenda on aging, among others

#### **Updates on PHREB Guidelines on Researches in Older Persons**

Dr. Shelley de la Vega presented updates on the PHREB Guidelines on researchers in older persons. According to Dr. de la Vega the guidelines are currently being revised including the following provisions:

- There should be guidelines on conducting mental status examination to determine if the patient has any problem on obtaining informed consent and guidelines on informing patients that they are being recruited to a study which doesn't promise therapeutic outcome.
- Researchers may determine the capacity of the subject to consent but there should be a checklist to determine capacity before the subject sign the informed consent. The items were concluded as follows:
  - 1) Functionally independent
  - 2) No subjective memory complaints
  - 3) No reported memory complaints
- Remuneration should also be provided to the companion of the participants.
- For consistency, the terms "*researcher*" and "*participant*" will be used.
- Breaks should be provided. The importance of having a comfortable venue on the study site where the participants can relax or lie should also be specified.
- The provision of priority lanes for the elderly was also agreed upon.

## Open Forum

### Q&A 1

Dr. Rommel Salazar of the De LaSalle Health Sciences Institute said that emphasis should be given that an ethical clearance is needed for studies involving human participants, most especially the elderly which belongs to the vulnerable population.

- Dr. de la Vega discussed that this is also one of the limitations of earlier studies on Aging. This is also one of the requirements for a study to be published.

Dr. Elvira Sinoro of the Western Visayas Sanitarium Iloilo asked if there are specific government agencies or NGOs that take care of the elderly.

- Dr. de la Vega shared that their team was able to find researches on older persons in nursing homes.
- There are nursing homes that are recognized by DSWD
- DOH has also started making the standards and classifications of nursing homes, hospitals, and custodial care centers

Dr. Nimfa Baria of Cardinal Santos Medical Center underscored the importance of conducting ethics review of researches involving the elderly population being a vulnerable group.

## Q&A 2

TJ Robinson Moncatar of the Zuellig Family Foundation asked regarding the research gaps to fill in, considering that the study has started laying the foundation in identifying the burden of disease in the elderly population and the programs and interventions that may be developed.

- Dr. de la Vega discussed that the NUHRA really needs to include the research agenda on Aging so programs may be backed up by research.
- Research will give insight on whether the programs improve the quality of life of the elderly.
- Possible researches include those that measure the satisfaction of the elderly with the advent of PhilHealth and other government and NGO programs)

## 4. Meeting of Health Research Communicators

### Introduction

Ms. Ulyann Garcia stated that low appreciation and awareness of health research among stakeholders has led the PCHRD into convening a meeting of health research communicators to help improve dissemination of research results. These health research communicators will help in advocating the cause of health research, communicating local and national initiatives, and engaging stakeholders in improving the status of health and health research in the country.

### Building a #healthierPH, one story at a time

PCHRD invited Dir. Rhodora Palomar-Fresnedi, Executive Director of UNILAB Foundation to share UNILAB's experience in convening a community of volunteers for their programs. Director Fresnedi cites three effective steps in bringing together a community of volunteers that helps them in communicating their visions and implementing their programs effectively to their intended audience – Craft, Curate, and Communicate.

#### CRAFT

Every program should start with a story – a background, Dir. Fresnedi says. Effective messages are those which affects audience the most. This might be something they want to hear or something that they had experienced already. UNILAB's programs are research-based in nature. In that way they can determine which group of people they can stir to communicate their messages. Volunteers come easy when programs are something the target audience can relate too. It is just about getting the right people on track,.

#### CURATE

The next step is curating the message into something that others will want to tell it for you. Dir. Fresnedi mentioned how one should create an experience considering the experience of other

storytellers so that they will be able to communicate them effectively in their perspective. It also must be something that will touch their hearts, and something that they will never forget.

## COMMUNICATE

Finally, once the communication material is perfected, the best communication framework will be identified for your message. There should be a robust communication, foundation, and structure to effectively disseminate research results. Dir. Fresnedi said that it is also important to identify how success will be measured. She also emphasized to communicate only once the story is ready, otherwise, it wouldn't be effective.

### **Open Forum**

Ms. Queddeng asked if they could tap Unilab in helping them translate their research results into something easily understood by the audience, e.g funding, training. Prof. Roberto Pagulayan commented that Unilab should be tapped for the craft and not financial support. Funding can be coursed through other industries. Dir. Fresnedi answered that UNILAB is not a funding organization but they may share the framework that they have and let the committee use them to put up their communicators community. Also, researches that will back-up a specific program are evaluated depending on the objectives of the program.

Prof. Pagulayan was also concerned on how the professional community has a different way of communicating research results, and that it is usually technical, i.e. in the form of research conferences and seminars. Mr. Laurence Garcia of the Western Visayas Health Research and Development Consortium also added that the gap lies on how researchers organize conferences for their fellow researchers and not for their beneficiaries. In that light, Dir. Fresnedi suggested that these events be adjusted as to something that would benefit their audience e.g TEDtalk platform, highly technical topic but is made to be understood by the lay.

Dean Helen Sigua of the Central Luzon Health Research and Development Consortium said that research outcomes should be echoed to reach both the scientific community and the general public. She also suggested communicating messages per advocacy so that it would be more focused, thus effective.

### **Focus Group Discussion**

The second part of the meeting focused on the details on how to create a health communicators community. The RU committee members are aware of the gap between research work and research communication. Zamboanga RU representative, Noemi Edaga, said that it is very difficult to translate technical data especially when you are a communication person, so their RU initiatives are just fixated on identifying the media with not much focus on the message. Prof. Pagulayan proposed that the RU members present in the meeting be the core community who will be in-charge of identifying the people in the community depending on their respective health issues. He also suggested the institutionalization of the health research communicator's community in

every region which will require funding from PCHRD. Ms. Garcia said that this will depend on the output of the day's meeting as this may also be coursed through the regional consortia.

The Research Utilization Committee agreed to come up with a proposal on the health communicator's society. The body agreed to have the proposal submitted before the end of the month.

## **Conclusion**

The PNHRS Research Utilization (RU) Committee realizes the gap between doing research and disseminating research results to their intended audience. PCHRD proposes building a health communicators community that will effectively communicate research results to its beneficiaries. The RU committee signified their commitment to address this gap and help PCHRD bring research results closer to their intended audience.

## **5. Orientation Workshop on Privacy in Research**

The session is meant to orient the participants on the provisions of the Data Privacy Act which will have an effect on health research and get the participants' inputs on the provisions for organizational privacy protocols.

### **Basics of Data Privacy Act 10173**

Prof. Peter Sy discussed the basics of the Data Privacy Act (RA 10173), starting with some definitions and its distinction from the usual confidentiality measures that researchers are more aware of, as well as the principles of privacy. He also discussed research-related provisions of the proposed Health Privacy Code, highlighting how these provisions would affect the way research data is being handled and its implications on the research methods. One important organizational structure change that this Act introduces is the requirement for a Privacy Officer in every organization which generates data (practically each and every existing institution), which should be at least a Vice-President level or equivalent. Finally, Prof. Sy encouraged the participants to give their inputs on the institutional privacy guidelines based on the research-related provisions of the Proposed Health Privacy Code.

### **Open Forum**

Q: (Rogelio Cruz, CEU-Manila) What agency monitors the implementation of this law?

A: National Privacy Commission

Q: Is it already a requirement?

A: Yes, 2016 is supposed to increase awareness about the law, 2017 will focus on training institutions, and 2018 compliance. However, since the law is already in effect, institutions are not

immune to lawsuits even if they are not yet fully aware or fully implement the provisions of the Act.

Q: (Marilyn Crisostomo, UP Manila) What is the penalty in case of data loss?

A: Penalties are discussed in Section 55 of the law. Fines can reach millions of pesos and prison terms could reach up to 6 years.

Q: (Sandy Lasa, BCHRD) Are there plans to conduct awareness trainings?

A: Right now, curriculum is still being developed. But later on, PCHRD or the National Privacy Commission can conduct trainings. Dr. Peter Sy encouraged West Visayas State University to be the Center for Excellence for Privacy and the core training institution for the Visayas Region.

Q: (Marilyn Crisostomo, UP Manila/Anetha Gacutan-Liwag, WVSU Medical Center) What about the enumerators? Would they also be liable? Also the project staff who are employed only for short periods of time, e.g. one year, and with no employer-employee relationship?

A: Enumerators won't have liability as long as they are only following the instructions of the Principal Investigator.

Q: (Mario Jiz, RITM) Are there special considerations for storing data in cloud servers?

A: The concept of data sovereignty applies, meaning the law where the data was stored would be applied. However, there are still gray areas on this. Might be useful to include this in the institutional policies.

Q: Is there a conflict between Privacy Act and Freedom of Information (FOI) AO?

A: No. FOI concerns information related to exercise of public duty, while Privacy Act is about rights to security of personal information.

## **Conclusion**

Realizing the need and the urgency of having Privacy Guidelines instituted in their respective workplaces, the participants clamored for a training program to be provided in their respective institutions, but was advised to wait for the completion of the curriculum being developed by the PHIE group. They were, however, encouraged to inform their colleagues and the management of their institutions on the need to implement the law, and to develop guidelines for their own institutions.

## **Recommendation**

Based on how the session went, very few came up with suggestions or input to the guidelines which was the objective of having a workshop in the first place. For first time attendees to this



workshop, there's seems to be a need to give more background information before they can come up with inputs.

## **6. General Meeting with Regional Consortia, R&D Committees, R&D Coordinators and Project Staff**

Moderator: **Ms. Wilma I. Santos**, Senior Research Specialist, Institution Development Division, Philippine Council for Health Research and Development

### **Dr. Maria Lourdes K. Otayza**

Chair, Region 1 Health Research and Development Consortium and Medical Center Chief II, Mariano Marcos Memorial Hospital and Medical Center

Dr. Otayza gave an update on the preparation being done by the PNHRs Research Agenda Committee (RAC) in the development of the National Unified Health Research Agenda (NUHRA) 2017-2022 which involves a bottom-up approach of consultation and will use the guidelines for health research priority setting being developed by the PNHRs RAC. Dr. Otayza encouraged the regions to participate in the regional consultation and to provide assistance in activities related to the preparation of the regional health research agenda and also encouraged the PNHRs to give incentives to the respondents of the survey. Guidelines for Health Research Priority Settings are being developed to: (1) facilitate the identification of priority health research topics; (2) serve as common reference and guide for the PNHRs stakeholders in defining and updating a relevant health research agenda; (3) to have a set of guidelines that is attuned to local setting (since most of the present guidelines are international); and (4) help build capacities in planning and prioritizing for health research.

### **Dr. Gloria Nenita V. Mae Velasco**

Medical Officer IV,  
Health Research Division, Health Policy Development and Planning Bureau  
Department of Health

Dr. Velasco presented the Guidelines for Health Research Prioritization that the PNHRs RAC is currently working to: (1) describe local and international guidelines on health research priority setting including the methodologies/strategies employed at each step of its development; (2) describe best practices and challenges in health research priority setting encountered by Low- to Middle-Income countries (LMICs) like the Philippines; and (3) develop guidelines on health research priority setting considering the national and regional context of health and health research in the Philippines. During their consultative meetings, Dr. Velasco said that the issue on who will benefit from it is always being raised and that they also received comments to simplify the guidelines and to include a concept map in order for the stakeholders to understand it. Further, she discussed that during the preparatory phase of the priority setting questions on

tasking/stakeholders' participation, funding, monitoring, unavailability of data, identifying and addressing the gaps, and identifying the best methods and channels should be addressed.

Whereas in the implementation phase, generating of initial list from previous research agenda, deciding on criteria (to consider feasibility and cost), and deciding on priorities will be addressed. Lastly, in the post-implementation phase of the priority setting, reporting of process result to address whether there is a need for updating.

**Ms. Carina L. Rebulanan**

Chief, Institution and Development Division  
Philippine Council for Health Research and Development

Ms. Rebulanan presented the revised Guidelines on Regional Research Fund (RRF) Initiative and emphasized that the purpose of RRF is to encourage beginning researchers to be actively involved in health research activities without competing with more experienced researchers. Further, she discussed the three (3) mechanisms of RRF – (1) call for proposals; (2) evaluation of detailed research proposals; and (3) ranking of proposals, and stressed that research proposals should first undergo a technical review before proceeding to the ethics review. Ms. Rebulanan also emphasized that the budget of the proposed projects should not exceed PhP 500,000 and that the proponent should allocate 40% of the budget for Personal Services and 60% of it for Maintenance and Other Operating Expenses (MOOE). Moreover, Ms. Rebulanan promoted other Institution Development programs of DOST-PCHRD such as Ethics, Balik Scientist Program, Awards and Scholarships.

**Open Forum**

*Priority Setting*

Dr. Pura Caisip, Ethics Chair of Cardinal Santos Medical Center, asked whether the PNHRs RAC consulted the people from the grassroots that really needs help. Dr. Velasco responded that the PNHRs RAC consulted various sectors during their consultative meetings but she was not sure if representatives from the regional consortium were present. Dr. Otayza said that in the Union of the Local Authorities of the Philippines (ULAP) joined in one of their meetings but its representative said that it is not part of the organization's mandate and that they could not understand the priority setting. Hence, Dr. Otayza suggested that the researchers should translate in their work that would be understood by the research beneficiaries. Further, she said that each region should come up with their respective Regional Unified Health Research Agenda (RUHRA) that will include the needs of those who do not have voices, notwithstanding the priority of DOST, DOH, NIH, and CHED.

Dr. Caster Palaganas, representative from Cordillera Regional Health Research and Development Consortium (CRHRDC), shared that it took them almost 2 years to reflect the needs of the region

since they take into consideration the needs of the indigenous groups. Further, she commended the CRHRDC members for being participatory especially their research management committee. Dr. Otayza said that the PNHRs RAC knows that there's an assessment on the utilization of the first two (2) NUHRA wherein there was a 30% utilization on the first NUHRA which involved a bottoms-up approach while there was an 80% utilization on the second NUHRA which involved a top-to-bottom approach and this is due to the available funds in the region. Further, she stressed that the end point of a research should be the "common tao" and that researchers should not do researches or make publications for the purpose of promotion. She also pointed out that there are high-performing consortia and that there are also nonperforming agencies, and that the guidelines will help the nonperforming consortium to come up with their priorities. Dr. Velasco said that the guidelines will sustain the knowledge on agenda setting. Ms. Rebulanan clarified that another purpose of the agenda setting practice is to harmonize all the agenda setting practices of the consortia since some RUHRA were developed without consultation.

Dr. Teresita Montaña, representative from the Ateneo de Zamboanga University, suggested conducting a Focus Group Discussion (FGD) rather than Key-informant Interviews in drafting the guidelines. She also proposed to include monitoring and evaluation processes during the post-implementation phase. Dr. Velasco acknowledged the suggestions of Dr. Montaña.

Dr. Rey Rovillos, Chancellor of UP Baguio said that the academe should be involved and responsive to the community needs. He pointed out that publication is of the same relevance as of research utilization and that researchers should produce knowledge and disseminate them for policy formulation.

Dr. Hilton Lam, Project Coordinator of Metro Manila Health Research and Development Consortium (MMHRDC) shared that translational research is necessary but basic research is also needed. He suggested that there should be a combination of bottoms-up and top-down approach in setting priorities. Dr. Edna Oconer, Ethics Review Committee Chair of Health Research and Development Consortium XII (HRDC-XII) said that one of the problems in their university (Mindanao State University General Santos City) is that most of the researchers are doing basic researches and the results of those researches were not being utilized in the community. Hence, she said, that MSU-General Santos City came up with a mechanism that prioritizes proposals they received and that only those included in the final list will be funded. Dr. Velasco said that DOH is exploring ways on how to fund more research.

Mr. Lester Añonuevo, representative from the MIMAROPA Health Research and Development Consortium (MHRDC), said that there is a problem on cascading the research agenda to the units. He cited as example that the DOH hired researchers but these researchers are doing administrative work and not producing researches. He suggested (DOH) central office to come up with policy for health program research that will help with the consortium.

*Regional Research Fund Initiative*

Dr. Danilo Largo, Executive Committee Chair of the Central Visayas Consortium for Health Research and Development (CVCHRD) commented that technical review of proposals should not only include an epidemiologist rather a technical expert on the specific study.

Dr. Enrico Gruet asked PCHRD to clarify with Bureau of Animal Industry (BAI) whether they still need to get a research permit from them even if their institutions already have a BAI-accredited animal laboratory.

Mr. Ricardo Apolinario III, Secretariat of the Zamboanga Consortium for Health Research Development (ZCHRDC), said that the researchers in their region are having difficulty in getting National Commission on Indigenous People (NCIP) clearance and asked the PCHRD on what could they do regarding that matter. Ms. Marie Jeanne Berroya, Senior Research Specialist of PCHRD, said that the Philippine Health Research Ethics Board (PHREB) is currently negotiating with NCIP to establish process on providing NCIP clearance to health researches that will involve indigenous people.

Ms. Rebulanan acknowledged the issues raised by the representatives of the consortium.

## **CONFERENCE PROPER**

### **DAY 1**

#### **Parallel Session 1: Ethical Issues in Health and Health-related Research**

Research Ethics has been a regular and central topic for the Capacity building of the PNHRs. The discussion and training focuses on the long standing general ethical considerations in research. The session includes discussion on data privacy in health research, policies and procedures for Research Ethics Committee (REC) accreditation and recognition by the Philippine Health Research Ethics Board (PHREB), Case studies in ethics review of health social science research, balancing risks and benefits in ethics review, research with older persons, patient and policy engagement, and the PHREB Chair's report.

#### **Opening remarks**

Dr. Jaime C. Montoya shared that the rights, safety, and welfare of human participants must always be central in the conduct of health and health-related research and as the health research landscape progresses, new ethical issues will need to be addressed. As behaviors and social interactions evolve, new vulnerabilities will need to be protected. As know-hows and technologies advance, new risks and harms will have to be prevented.

Dr. Montoya enjoined the group to help in promoting ethics in health research as this cannot be done by PCHRD alone, neither by PHREB nor by the National Ethics Committee. Ethics in health research has always been and will always be a collective and collaborative effort from all stakeholders.

#### **Data Privacy in Health Research and Clinical Practice**

Prof. Peter Sy presented the implications of the Data Privacy Act (DPA) of 2012 which involves the policies protecting the fundamental human right of privacy while ensuring free flow of information to promote innovation and growth.

The health sector is particularly affected by the DPA considering that free flow of health information through research is essential for continued pursuit for solutions and for policy making. Health researches involving human participants have to be careful in processing personal information, ensuring that they are collected for specified and legitimate purposes and are used only for the purpose for which they are collected and processed.

The DPA aims to give research participants the privilege to be informed of the existence, use, and disclosure of their personal information, and amend some information as appropriate. They are to give consent allowing the use of their information.

The difference between an information controller and processor and privacy and confidentiality, and the principle of accountability were also discussed.

### **Panel reactors**

Dr. Fabian Dayrit, Professor, Ateneo de Manila University asked what data should be kept private especially with the advent of numerous genetic information and other big data. There is also a question of how these information can be kept private considering advances in computer technology which makes all data essentially free for all to access.

Atty. Alberto Muyot, Undersecretary for Legal and Legislative Affairs, Department of Education, discussed that personal information has a market. Unknown to people, subscriptions to common services such as credit cards, make personal information available in a database which results to high probability of violations to people's right to privacy. There are legal sanctions to violations in processing personal information.

Dr. Adriano Laudico, Program Director, Philippine Cancer Society – Manila Cancer Registry, expressed concern with regard to the implications of the DPA to registries. In the case of population based cancer registration, it is an essential part of cancer control by knowing if interventions and programs are working. Certain public health researches also need all available data for proper analysis. Incomplete registration and data collection make data analysis flawed. There is also an issue with regard to biobanking.

Prof. Peter Sy responded that there is a move to come up with a health privacy code. This is through the joint efforts of DOST, DOH, PhilHealth, but this can be done with strong foundation in privacy. Authorized bodies shall also have health privacy boards to make it sector specific. Researchers are also called to show that Filipino researches are mature enough for self-regulation.

### **Open Forum**

Dr. Dayrit asked if our law is more stringent than in other countries. Prof. Sy responded that in fact it is and there are actually penalties for non-compliance. Dr. Dayrit remarked that maybe it's time

our legislators revisit the law because it seems that we are having and even pioneering a lot of regulations, which in the long run are found making the lives of the Filipino harder than more systematic.

Dr. Ces Acuin of FNRI inquired about the police power of the state in data collection and if people can now disagree to be part of research activities, regardless of obvious benefits, given the presence of DPA. Atty Muyot responded that the role of the police power is to enact laws and policies to promote common good. It is the power of the state versus individual right.

Dr. Joy Arguillas of the FNRI Research Ethics Committee (REC) expressed concern regarding the DPA as this gives chilling effect to researchers. This is thinking that when the law takes effect, there is a corresponding effect on researches that deal with data mining, secondary data, and longitudinal data. Prof. Sy answered that in the countries in Europe and in Australia, there was also apprehension at first but there was no observable chilling effect. He added that there will definitely be an effect to the conduct of the research but understanding the law is key to knowing how researchers can go about the challenge. There are provisions in the DPA that give proper guidance. The public and experts are actually enjoined to submit position papers regarding the DPA. There is still a possibility that the concerns will be addressed and the recommendations will be followed.

### **PHREB Policies and Procedures**

Dr. Salome Vios, Chair, PHREB Subcommittee on Standards and Accreditation, College Secretary, UP College of Medicine, presented the Philippine Health Research Ethics Board's (PHREB) mandate to formulate and update guidelines for the ethical conduct of human health research, develop guidelines for the establishment and management of Research Ethics Committees (RECs) and standardization of research ethics review, and monitor and evaluate the performance of RECs. One of PHREB's programs involves the recognition and accreditation of RECs to ensure the conduct of quality scientific and ethical review of research protocols. PHREB accreditation is a requirement for all RECs. The accreditation level and criteria were presented.

Dr. Vios also discussed the differences in the accreditation policies in 2015 and 2016. These are: RECs are automatically registered once they apply for accreditation, there is now a probationary accreditation of 1 year if applicable and sanctions for REC non-compliance.

### **Case Studies in Ethics Review of Health Social Science Research**

Dr. Leonardo de Castro, Chair, Philippine Health Research Ethics Board, presented case studies and possible solutions that RECs may recommend to resolve ethics issues in health researches.

Dr. de Castro highlighted the points that need to be considered when reviewing protocols. These are: informed consent and respect to culture.

The case studies highlighted: (1) the Helsinki declaration that states that the well-being of the research participants must take precedence before the interest of the researchers, (2) caution in

the use of deception as a means to acquire research results, (3) the need for parental consent in studies involving vulnerable populations, and (4) the UNESCO Ethical Guidelines for Social Science Research which states that the research should avoid undue intrusion into the lives of the individuals or communities under study.

The researchers should always be aware of any potential harmful effects of research methodologies to participants. Chosen methods, especially those that have no alternatives, may only be used after careful consultation with colleagues and other experts.

### **Balancing Risks and Benefits in Ethics Review**

Dr. Sonia Bongala, Co-chair, PHREB Subcommittee on Standards and Accreditation, presented the concept of risk and potential benefits in ethics review.

Dr. Bongala remarked that much research offers little or no direct benefit to participants. In most research, the primary benefits produced are for society and for the advancement of knowledge.

The difference between risk and harm was also discussed. Risk is a function of the magnitude or seriousness of the harm, and the probability or likelihood that it will occur, whether to participants or to third parties while harm is anything that has a negative effect on the welfare of participants, and the nature of the harm can be physical, psychological, social and economic.

Risks are also classified according to type and category. Risk levels are assessed by the REC.

Meanwhile, benefits of a research intervention might be enhanced by providing research participants with results of the intervention that are relevant to their clinical care.

If uncertainty in risk judgments exists, decisions may be made by the REC by asking themselves whether he/she or a family member would want to participate in the project.

### **Research with Older Persons**

Dr. Grace Orteza, Adult Neurologist, The Medical City, presented the suggested revisions in the chapter on ethical guidelines on research in older persons in the National Ethical Guidelines for Health Research.

The inclusion of this chapter in the guidelines is deemed necessary considering the growing population of the elderly in the country and their apparent minimal representation in research.

The variability of health status and functional capacity between young old, middle old, oldest old was discussed. Understanding this gives researchers the guidance on what strategy to use to get proper consent from older person who can be research participants. This also boils down to the fact that elderly patients can still decide for themselves but decision-making and informed consent taking need to be done in such a way that they are given the opportunity to adequately express what they want to express. Due diligence on the part of the researcher must be exercised.

Decision making capacity and decisional capacity were also differentiated. The idea is that decision-making on a day to day basis is different from when a person is thinking about joining in research. There are procedures for assessing decision making capacity.

The applicability of the Mini mental state examination in researches in Aging was also discussed.

### **Patient and Family Engagement**

Ms. Carmen V. Auste, Managing Director, Cancer Warriors Foundation Philippines, presented on behalf of the PHREB Subcommittee on Patient and Family Engagement. Formerly known as Patient Empowerment, the subcommittee is advocating not only for the participation and involvement of patients in the decision making in research, but also engagement which encompass basic interaction, bringing forward not only concerns but solutions to challenges.

The principle of respect was discussed, bringing in the idea of people-centered healthcare. That is, giving the patient and the family the right to decide on the intervention / treatment they deem appropriate for their condition whilst being guided and informed by a healthcare expert.

Patient-oriented research, on the other hand, is engaging the patients as partners in the study such that the outcomes are not only beneficial to the researcher but most especially to the patient and his/her family. This is having a shared sense of purpose to ensure efforts are translated into useful action

The framework of integrated people centered approach was also presented.

### **Synthesis**

Dr. Fe Esperanza Espino, Head, Parasitology Department, Research Institute for Tropical Medicine provided the synthesis of the day's discussions

### **PHREB Accomplishments**

Dr. Leonardo de Castro presented the accomplishments of PHREB from August 2015 to August 2016. These include the accomplishments in the accreditation of RECs and training of researchers on ethics review. Dr. de Castro also presented the names of the new members of the PHREB and its subcommittees.

### **Open Forum**

Prof. Edlyn Jimenez of UP-NIH asked about the best ways to engage older persons in research. Dr. Orteza answered that it is the way the questions are asked and the way tests are administered and objectives are explained that make the participants comfortable about joining any research.

Dr. Vios inquired if it is possible to add in the revisions in the ethics guidelines for older persons an informed consent template as guide for other researchers. This may also already include the tests and instructions on how they should be administered to the patients. Dr. Orteza agreed that it is a very good idea but there is still the underlying contention that informed consents for studies



of this kind are very long and hard to simplify. It is better that there is no sample instrument at all rather than giving a template that is simplified but gives false sense of security. Dr. Orteza, however, still supports the idea but suggested the use of computers and making a form that is available online.

Dr. de Castro asked regarding cases when there is a conflict in the family due to differing opinions with regard to participation in research. He added that there are times when the patient agrees to take part in the study but the family disagrees. Dr. Auste answered that it helps when there are support groups composed of members of different families experiencing the same challenges explaining why the research could be beneficial or not. Dr. Bongala shared that in cases when the participant is a child, consent has to be acquired from either of the parents as required by the law. Dr. Orteza added that for the elderly, as long as the elderly is capable to decide on their own, he/she has to be empowered.

### **Conclusion**

Ethics is very important in health research. While RECs and other ethics governing boards are responsible in ensuring that the welfare and dignity of human participants in research, patient, family, and public engagement are necessary to improve the overall system and ultimately, to realize the real essence of research, that is making research results beneficial not only to the researchers in advancing their career but most importantly to the general population, regardless of age, disease, etc.

### **Parallel Session 2: Student Research Competition**

The session served as an avenue for student-researchers from across the country to share their research studies and innovations that may further contribute to the development of the Philippine National Health Research System.

### **Welcome remarks**

Dr. Ronald Ona, Deputy Director for Research of the Palawan State University, welcomed the participants on behalf of Dr. Micahel Pido.

### **Introduction of Judges**

Dr. Patrick Regoniel, Research Director of the Palawan State University introduced the panel of judges for both student oral and poster presentations as follows:

#### *ORAL PRESENTATION*

Dr. Erlinda Palaganas (Chair), Editor-In-Chief, Philippine Journal of Nursing  
Dr. Ronald Densen, Medical Officer III, Ospital ng Palawan  
Engr. Medrono Cabrastante, Division Head, Palawan Council for Sustainable Development

## POSTER PRESENTATIONS

Dr. Jesus Sarol, Jr. (Chair), Professor V, University of the Philippines – Manila  
Prof. Marilyn Crisostomo, Consultant, MEC Health Research Statistics Consultancy  
Dr. Julieta P. Wy, Dean, College of Nursing, Palawan State University

### **Anti-Hyperglycemic Effect of *Serpentina* (*Andrographis paniculata*) Leaf Extract in Alloxan-induced Diabetic Mice**

Ms. Michelle Ann Bunagan of the Cagayan Valley Health Research Development and Consortium (CVHRDC) presented the study. The study evaluates the effects of *Serpentina* leaf extract in alloxan-induced diabetic mice. The study aimed to determine if there would be a significant difference in the blood sugar level of diabetic mice when subjected to the test drug and the control. The *Serpentina* leaf extract was administered in different doses and Metformin was used for positive control. The effect was monitored after 3 hours and 24 hours after oral medication with the test drug and control. The study revealed that the *Serpentina* leaf extract with 28.2 ml/kg dose showed a more significant reduction of blood sugar levels compared to other doses. The effect of the *Serpentina* plant may be attributed to andrographolide which enhances the surface uptake of glucose by adipose tissues and inhibit glucose absorption from intestine and glucose production from liver.

### **In Vitro Anti-Profliferative Effects of Bee (*Apis mellifera*) Venom in HCT116 Colon Cancer Cell Lines**

Mr. Joner Bangero of the Western State University, College of Medicine representing Western Visayas Health Research and Development Consortium, presented the result of their research entitled, "*In Vitro Anti-Profliferative Effects of Bee (*Apis mellifera*) Venom in HCT116 Colon Cancer Cell Lines.*" *The study aimed to look into the effects of bee (*Apis mellifera*) venom in colorectal cancer, the 4th most common cancer in the world. Outsourced bee venom powder was used to treat laboratory-grown colon cancer cells, comparing it to the effects of cells treated with Doxorubicin (positive control) and . Bee venom showed positive effects in reducing colon cancer cells, as the concentration increased, cell number decreased. The most effective concentration is at 1.937 $\mu$ /mL*

### **The Potential Angiosuppressive Activity of the Ethanolic Extract from the Leaves of *Uray* (*Amaranthus spinosus* Linn, Family Amaranthaceae) using Chorioallantoic Membrane (CAM) Method**

Ms. Ma. Jatrice J. Aguihap, University of Perpetual Help System Laguna, presented the study entitled, "The Potential Angiosuppressive Activity of the Ethanolic Extract from the Leaves of *Uray* (*Amaranthus spinosus* Linn, Family Amaranthaceae) using Chorioallantoic Membrane (CAM) Method." The study aimed to investigate potential angiosuppressive effect of leaf extracts of different concentrations of *Amaranthus spinosus* also called as 'Uray' (local weed). The study showed how they could utilize the *Uray* leaf extract as a treatment. The study aimed to determine which dose of the *Uray* would exhibit the highest angiosuppressive activity and was compared to

tamoxifen which also demonstrates angiosuppressive activity. One way ANOVA (Analysis of Variance) and T-test were used as a comparison in the analysis of the study. The study was limited to only the leaves of the Uray, no other parts were used. No toxicity testing was conducted and the only test animals used were the duck eggs. The results showed that using 50% of the Uray extract resulted in higher significant number of branching compared to other extract concentrations. The study concluded that the Uray leaves may become a possible source of a therapeutic agent for preventing or treating cancer. Extensive studies are required to further to confirm these promising findings.

### **Screening for Intestinal Anti-inflammatory Activity of *Alpinia galanga* (Zingiberaceae) Extract against Acetic acid-induced colitis in mice (*Mus musculus*)**

Mr. Diomerl Edward Baldo of the Biology Department, College of Science, Bicol University representing Bicol Consortium for Health Research and Development reported on the study entitled, "Screening for Intestinal Anti-inflammatory Activity of *Alpinia galanga* (Zingiberaceae) Extract against Acetic acid-induced colitis in mice (*Mus musculus*)." The study wanted to prove the effectivity of ginger (*Alpinia galanga*) in treating colitis. Acetic acid was injected in the laboratory mice to induce colitis. The ginger extract was injected into the colitis-induced mice at different concentrations. After a seven-day observation period, results showed that the ginger extract with a concentration of 75% was most effective in treating colitis in mice.

### **Tomato Paste Lycopene as an Anticoagulant**

Mr. Mark Elcyn P. Ramos of St. Louis University representing the Cordillera Region Health Research and Development Consortium (CRHRDC) presented the results of research. The study aimed to prove that tomato can be an alternative anticoagulant. Two varieties of tomatoes were used to compare their phytochemical composition specifically lycopene which can cause the anticoagulation. The tomatoes used were Cherry Tomato and Roma Tomato. The goal was to determine the significant difference in lycopene anticoagulation properties of the two tomatoes. The Lee-White Clotting method was used to observe the characteristics of the tomatoes in relation to their anticoagulation potential. The results showed that Cherry Tomato contains more lycopene than Roma Tomato and that only small amount of lycopene was needed from the two tomato varieties to exhibit anticoagulant effect. Further studies on purified lycopene are needed and other methods of coagulation should be done to affirm the results of the study.

### **Open Forum**

The first round of the forum was for the first three presenters.

Dir. Edgar Garcia of the Technology Application and Promotions Institute, asked all the researchers what were the innovations that they adapted that warranted the process of innovation of their research? Since the presenters could not give a definite answer, Dir. Garcia advised the presenters to consult PCHRD.

CAR asked Mr. Bangero (2nd researcher) about the ethical norms of using animals. He then addressed Ms. Aguihap (3rd researcher) if they have done a toxicity test on their study.

Mr. Bangero said that they did not extract live bee venom, instead, they outsourced from Sweden, and those extracts were intended for research.

Ma Jatrice Aguihap said that no toxicity testing was done in their research, they decided using the 25%, since it is a crude extract.

Dr. Ronald Densen, Medical Officer III of Ospital ng Palawan, asked Ms. Bunagan (1st researcher) why they used T-test instead of the ANOVA. He then commended Mr. Bangero's group for comparing venom extracts. He also asked Ms. Aguihap why there was more branching with 50% dose compared to the 75%.

Ms. Bunaga answered that it was more appropriate to use T-test for their study, and that it was also advised by their statistician. Ms. Aguihap said that their research was Dose-independent, and that 50% was the most comparable to the tamoxifen.

Dr. Densen asked Ms. Bunaga if there was an ethics approval for their study. He added that if the group would do a soil analysis from where they got the plants, would it have a bearing on their study? He then asked Mr. Bangero's group to add recommendations for the study. He also asked Ms. Aguihap if they have a literature on what best part of the plant to use.

Mr. Bangero said that they will have to research further to affirm the results. Ms. Bunaga said that they did not include soil analysis in their scope but will include it in their recommendations. Ms. Aguihap answered that they used leaves because it has more yield compared to the other parts of the Uray plant. Also, there are already existing studies on the anti-oxidant and anti-tumor properties of the Uray. The plant is also readily available in Philippines and is easier to find.

The second part of the forum was for the last two presenters.

Dir. Edgar Garcia of the Technology Application and Promotions Institute asked Mr. Baldo if he recorded the temperature of the water used when obtaining ginger extract. He also asked how many times the ginger residue can be used to reap an effective extract. He mentioned that the answers to these questions are vital in terms of technology transfer.

Mr. Baldo answered that he was not able to record the temperature of the tap water used for extraction. However, he thinks that results were independent to the water temperature. As for the residue, he said that the extraction done was already good for seven days. The extract was stored in the fridge to keep its freshness. Such was done to eliminate bias that may arise in preparing the extract at different periods.

Dr. Garcia proceeded to ask Mr. Ramos if the tomato paste used in the study was freshly-prepared. The lycopene content of the tomatoes was not mentioned per Dr. Garcia.

Mr. Baldo said that the paste used were freshly-prepared during time of research. The researchers also made use of photosensitive materials to store the tomato paste since lycopene reacts when directed to light.

Dr. Palaganas asked Mr. Baldo if they had sought ethics approval since they used a living organism in their study. Mr. Baldo said that mice used in the research were bought from the Bureau of Animal Industry (BAI). BAI issued them a certificate of laboratory diagnostics provided that they disclose their research methodology.

Dr. Palaganas asked Mr. Ramos how they ensured that the tomatoes they used were organic. The researcher said that they directly went to the farmers to ask if they used enhancers in their produce. Dr. Palaganas that this was not reliable as the farmers may claim that they employ organic farming when in fact they use enhancers. Organic tomatoes can only be grown in a specific environment, she added. A certification of organic farming should have been obtained to verify this.

Dr. Densen commended the student researchers for their hard work. He then suggested that researchers may already eliminate percentages that showed insignificant results to focus more on the significant data.

The researchers noted the suggestion of Dr. Densen.

List of winners:

1st Prize: In Vitro Anti-Proflerative Effects of Bee (*Apis mellifera*) Venom in HCT116 Colon Cancer Cell Lines

Joner Bangero, Western State University, College of Medicine, WVHRDC

2nd Prize: Tomato Paste Lycopene as an Anticoagulant

Mark Elcyn P. Ramos, St. Louis University, CRHRDC

3rd Prize: Screening for Intestinal Antiinflammatory Activity of *Alpinia galanga* (Zingiberaceae) Extract against Acetic acid-induced colitis in mice (*Mus musculus*) Diomerl Edward B. Baldo, Biology Department College and Science, Bicol University, BCHRD

### **Recommendation**

A popularized version of the conference is suggested so student-researchers already learn how to translate their data into a material that their target beneficiary could understand.

### **Parallel Session 3: Climate Change Hazard Adaptation Strategies for Health**

In this session, the country's response and efforts towards building a climate change-resilient country will be highlighted in terms of sustainable ecological agriculture and greater provisions of clinical care and public health services to populations diseases caused by the phenomenon of climate change.

### **Climate Change Hazard Adaptation Strategies for Health**

Ms. Ayesa Enrile  
Safer Chemicals Campaign Associate  
Healthcare Without Harm

Climate change is the biggest global health threat of the 21st century.

Ms. Enrile presented strategies and studies on climate change such as the (1) UN Framework Convention on Climate Change, (2) Lancet Commission's Findings on Various Health impacts of climate change, (3) Atlas of Health and Climate – National Framework on Climate Change, and (4) Climate Resilient Health System. A Climate Resilient Health System is a system that is capable of anticipating, responding to, coping with, recovering from and adapting to climate-related shocks and stress, so as to bring sustained improvements in population health, despite an unstable climate.

Ms. Enrile mentioned that they (Healthcare Without Harm) envisioned a future where hospitals can not only sustain life and health, but also repair and restore what has been degraded or lost. They were able to promote good practices of global green and healthy hospitals through the (10) agenda goals on leadership, chemicals, waste, energy, water, transportation, food, pharmaceuticals, building and purchasing.

Likewise, Healthcare Without Harm advocates the use of renewable energy to help address climate change. They believe that when it comes to coming up with strategies for health, we should think about "What good does it do to treat people's illnesses, only to send them back to the conditions that made them sick?"

She also discussed that part of their health energy initiative, from health impacts to health sector impacts, the following needs to be done:

- Educate and dialogue within industry and communities
- Participate in and advocate for Health Impact Assessment (HIA) and health economic evaluations
- Call on policymakers to phase out fossil fuels and prioritize clean, renewable, healthy energy.

### **Open Forum**

Question: Dr. Johnny Nanagas, Asian Eye Institute

What is the attitude of the present administration to the coal power plants? Is the Philippines willing to sacrifice energy investments, where countries like Germany found that this is not cost-efficient?

Answer (Ms. Enrile): Actually it is for industrialization, more industries will come in. This is why we are calling the help of the present administration, and I think we should educate him more and I think he will listen. We have an environmental champion in the form of our DENR Secretary so we are hopeful that if we present more evidence we can convince him (President) the importance of our advocacies.

There are limitations in investing in renewable energy. A big capital outlay is needed, but with a good financing scheme it could work. And I believe the use of renewable energy is still more cost-efficient.

Comment: Dr. Jean Suzanne Lindo, Davao Medical School Foundation

We are in conflict as far as coal is concern. But we should also note that Davao is Nuclear Free and we are only the city with this ordinance. Maybe, we can reposition the idea of coal, in his anti-imperialism stance.

Question: Dr. Louie Ocampo, Ospital ng Palawan

Based on our experience, some hospitals do not adhere to proper waste disposal. What is the DOH's efforts on this?

Answer (Ms. Enrile): We are hoping that Secretary Ubial of DOH will be receptive of our advocacies. We want to rekindle our relationship with DOH and hospitals. If we give the narrative Waste to Energy (i.e. mercury removals in thermometers), it would be possible. In the DOH hospital manual, there is a provision on waste disposal. We just need to educate them on waste segregation and show them models. Maybe part of the problem is the lack of workforce.

Moderator: We practice segregation, but in terms of collection then all our efforts are disregarded.

Answer (Ms. Enrile): There are efforts from DENR for waste disposal. Right now there is a joint AO on this but the responsibility is a gray area.

Question: Albert Rebong, Pollution Control Officer, Dagupan Electric Cooperative and Pangasinan State University Faculty Member

DENR is very active in Region 1 in waste disposal, they are strict and there is pollution control officer in charge and there is huge penalty that's why the implementation is easy.

#### **PARALLEL SESSION 4. Developing a National Research Program on Disaster Risk Reduction**

**Moderator:** Dr. Merian C. Mani, President, Marinduque State College

This session aims to identify research and innovation needs to improve health outcomes in disaster risk reduction efforts based on the Sendai Framework on Disaster Risk Reduction 2015-2030.

Dr. Merian C. Mani opened the session through a recital of a poem, entitled, "This is Mother Earth," a description of what earth was and what it is now, and how it has completely changed over circumstances, with climate change as the greatest global health risk of the century. It is threatened by many natural and man-made disasters, with occurrence of infectious diseases. The changing patterns of diseases and the recurrence of diseases once controlled have also posed more challenges in public health.

She described also how the earth was threatened with water and food security which poses food shortage for the next generation to come. She continued by delineating how the earth now experiences extreme climatic events and extreme population growth. We have to face these challenges that threaten the global populace. She then encouraged efforts to reduce greenhouse emissions such as through increasing biosequestration through reforestation and agricultural practices.

Dr. Mani, after introducing the current status quo, welcomed the participants in the parallel session, and led a prayer before introducing all the guest speakers.

### **The Sendai Framework: The Role of Science and Technology in Disaster Risk Reduction**

#### **Prof. Virginia Murray**

Consultant in Global Disaster Risk Reduction

Vice-Chair, United Nations International Strategy for Disaster Reduction (UNISDR) Science and Technology Advisory Group Wellington House

Dr. Murray stated that in the last 30 years, the climate has changed, but everyone is aware that the impact is massive. A couple of weeks ago, she was in Malaysia for a meeting, in the Forum on Advancing Science and Technology, where they realized the long-term climate risk index. The Philippines has the most number of documented risks. The Philippines is very vulnerable.

Dr. Murray presented the Sendai Framework and why it matters so much. Historically, there was a long period of negotiation by the UN member states and across the world. It took 4 years to finalize the framework in Sendai. It is now being endorsed by the UN and was globally agreed in June last year. The Sendai framework aims to have substantial reduction of disaster risk and losses of lives. There are four priorities: (1) Understanding disaster risk; (2) Strengthening disaster risk governance to manage disaster risk; (3) Investing in disaster risk reduction for resilience; and (4) Enhancing disaster preparedness for effective response and to build back better in recovery, rehabilitation and reconstruction. Participants have learned about the seven global targets: (1) Substantially reduce global disaster mortality; (2) Substantially reduce the number of affected



people; (3) Reduce direct disaster economic loss in relation to global gross domestic product by 2030; (4) Substantially reduce disaster damage to critical infrastructure and disruptions of basic services among them, health and educational facilities; (5) Substantially increase the number of countries with national and local disaster risk reduction strategies by 2020; (6) Substantially enhance international cooperation to developing countries thru adequate & sustainable support to complement their national actions for the implementation of the framework by 2030; (7) Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to the people by 2030.

According to Dr. Murray, Sendai addresses all of the hazards. Thus, there is a need to improve and strengthen evidence-based, promote scientific research of disaster risk patterns, causes and effects, and disseminate risk information, among others. To move forward, she advised to support integrated and holistic approaches.

As she emphasized, the Sendai framework provides a method to build research outputs, enhance capabilities to plan and prepare for, and offers opportunity to engage global levels.

She emphasized that there are many sciences involved in disaster risk reduction, but one of the most important is medical and health care science. There is a need to enhance medical health systems, establish mechanisms of case registry and database of mortality, to improve the prevention of morbidity and mortality. The importance of psychosocial support and mental health services in the occurrence of disasters was also highlighted.

There is S&T roadmap for disaster risk reduction (DRR). In the roadmap, the aim is to establish global database of existing hazards, and promote scientific focus on disaster risk factors and scenarios. For future directions, there is a need to support integrated and holistic approaches to the use of S&T for DRR, and the need for formal national DRR science-policy councils and platforms, with management plans identified.

The Sendai framework offers method to build research outputs, enhance capabilities to plan and prepare for, respond to, and recover for disaster and other public health emergencies, and the opportunity to engage with global partners and stakeholders.

## **Health and Disaster Risk Reduction Program: Coming Up with a National Research Agenda Dr. Carlos Primero Gundran**

Professor

University of the Philippines Manila – College of Medicine

Dr. Carlos Primero Gundran talked about Health and Disaster Risk Reduction Program: Coming Up with a National Research Agenda. Dr. Gundran stated that the Philippines is disaster-prone but disaster research related to health is not present, nor a priority in the National Research Agenda, which is now deemed a problem. He shared and discussed Dr. Marvin L. Birnbaum's Disaster Frameworks for research in health, to wit, conceptual, temporal, and societal frameworks.

He provided a discourse on the conceptual framework in health during disasters, pointing out that if needs are not met, it results to disasters.

For the temporal framework, there is a time frame for the disaster cycle, analysing the conceptual framework based on time to have better comparison in research output. It is progressive and chronological, focusing on characteristics of the phases of the disaster cycle.

For the societal, conceptual and temporal framework is applied to understand the functional systems of a community, indicating that everything is interrelated. We have to find the specific cause in the societal systems.

Given all these premises, these frameworks should be applied to have translational research in the future.

He introduced the purpose of developing a National Research Agenda and have rudimentarily defined the research agenda through different panel discussants.

## **Defining the Research Agenda on Health and Disaster Risk Reduction**

### **Prof. Shinichi Egawa**

Professor

Tohoku University, Japan

Prof. Egawa talked about defining research agenda on Health and Disaster Risk Reduction, citing the Tsunami event in Japan in March of 2011 that caused the great East Japan earthquake. Prof. Egawa presented animation of tsunami that posed movement of the Pacific Ocean and caused significant earthquakes in Japan. To reduce risks, Prof. Egawa defined the formula of risk as:  $\text{Risk} = \text{Hazard} \times \text{Vulnerability} / \text{Capacities}$ . In this incident, the Japanese Disaster Risk Reduction decreased the number of deaths caused by the collapse of the buildings, however not the tsunami that killed more than 20,000 people. As a result, Tohoku University established International Research Institute for Disaster Science, a multidisciplinary, comprehensive, and practical Disaster Risk Reduction composed of seven divisions that include Disaster Medical Science. He emphasized that they, in the disaster medical science, work with other divisions to manage disasters.

He discussed the correlation of Life Expectancy and Disaster Risk highlighting the reduction of disaster risk by decreasing exposure to the hazard, vulnerabilities, and increasing coping capacities. He also mentioned that, supporting claims of other frameworks such as the Sendai Framework, Disaster Risk Reduction tells one to know and reduce risk, and be prepared to act.

Since there is a strong correlation between life expectancy and disaster risk, he emphasized that we should know our risk, reduce our risk, and prepare to act. To end his presentation, Prof. Egawa emphasized the importance of being scientific and evidence-based in dealing with disaster science through writing researches which is the goal of the session. He quoted Schultz to encourage everyone to stop using "lessons learned" which has become a disaster medical lexicon.

This is because knowledge is not a lesson learned or otherwise. It is an established fact that is identified and recorded for all to acquire. It represents scientific advancement and information that should be incorporated into a growing body of knowledge. Hence, an evidence-based practice is needed.

**Mr. Renato Solidum**

Executive Director

Philippine Institute of Volcanology and Seismology

Mr. Solidum described that the Philippines is prone to many hazards so we have to understand their nature and characteristics. His presentation highlights that understanding hazards and risks is the key to living safely with natural perils. According to him, the lack of preparation leads to a huge number of risks and casualties. He emphasized that many people died because many are not prepared. He presented reasons why people are affected by hazards giving us a reason why we need to identify hazards. He emphasized three key actions for DRR: Know hazards, monitor, warn and disseminate information, respond properly and timely.

He also introduced disaster imagination as a step by step process of identifying hazards within the immediate community and beyond saying that through effective disaster imagination, proper preparation, and advanced planning, one can respond faster and recover faster.

The significance of science and technology was also stressed by Mr. Solidum in knowing the hazards and risks, monitoring, communicating, and developing tools and guidance in order to respond properly and timely. He also presented some applications we can use in disaster imagination. One application they developed in PHIVOLCS is the FaultFinder, a web application created by PHIVOLCS DOST that tells a user the distance of the nearest fault. These are just one of the tools to imagine the hazards in potential disasters. There are several tools available, such as risk assessment tool, with hazard assessment module, exposure database module, and impact assessment module, and others that simulate earthquakes and tsunamis—tools which can be accessed and shared by everybody.

In synopsis, he stressed that the key to DRR is the appreciation of hazard and risk scenarios by various stakeholders, that communities can help monitor hazards and risks, and partnership between local, national and international agencies leads to significant gains in understanding, monitoring and managing disaster risks.

**Dr. Fernando Siringan**

Professor, Director

University of the Philippines Marine Science Institute

Member of National Panel of Technical Experts

Climate Change Commission

Dr. Siringan commenced his talk by presenting a map that shows the average rate of sea level rise around the Philippines from 1993 to 2009. According to him, from 2000- 2015, the average sea level rise in the Philippines is more than 1 cm per year, one of the fastest in the world. He discussed the consequence of sea level rise, such as permanent marine inundation, increase in frequency, magnitude, duration, and coverage of coastal flooding, contamination of coastal aquifers, greater wave inundation and coastal erosion. However, he also emphasized that the upshots of sea level rise like floods also have effects on health. Supported by the data gathered from the World Health Organization, he enumerated possible health consequences such as water-borne diseases that include typhoid fever, cholera, leptospirosis and hepatitis, and vector- borne diseases, such as malaria, dengue and dengue haemorrhagic fever. He added that because of the contamination of ground water, diarrhea could also have greater occurrence. It is also documented that there is increase in frequency of jellyfish blooms, global increase in frequency and distribution of harmful algal blooms or red tide which are attributed to eutrophication and warming of seas. He provided us discourse on the consequences of further warming of seas and its health implications.

Dr. Fernando P. Siringan challenged the participants, particularly the health practitioners, to consider the different venues for research in relation to the gradual changes that occur in the environment due to climate change, as well as to embrace a sense of responsibility by documenting and publishing results of any work done regarding this particular area to help other individuals who want to gather information and knowledge about the topic. He encouraged us to document and publish all our works for use of future researchers.

**Dr. Jessie Manuta**

Consultant, Tropical Institute for Climate Studies  
Ateneo de Davao University

Dr. Manuta emphasized the challenges based on the experiences in Mindanao due to changing climate and issues in building resilience and adaptive capacity. He introduced some resilience building initiatives they are engaged in, such as Project EMBRACE, Project BRAVE, and Agusan Marsh Climate Adaptation Program.

He shared that they are going to communities to mainstream disaster. Addressing risk is very challenging especially in the barangay level. To address multi-hazard, there is a need to capacitate. Dr. Manuta presented challenges for a resilient and adaptive future. First is understanding, communicating and monitoring disaster/climate change. We are also challenged with holistic on-going process of risk analysis that supports community knowledge, and indigenous knowledge and practices. The third challenge is the difficulty of transitioning in imagining disaster patterns, such as changes in precipitation patterns, rising mean temperature, among others. Scenario-building is thus significant.

There is no documentation analysis on adaptation capacities of communities and this is the gap we need to fill. Dr. Manuta also encouraged us to develop instruments and mechanisms for risk

reduction and climate change adaptation for decision-making in different sectors, such as weather-based insurance for crops and social protection programs.

**Dr. Mahar Lagmay**

Executive Director

Project NOAH

Department of Science and Technology

Dr. Lagmay talked about Project NOAH. At present, they have installed 1500 sensors, high resolution digital landscape, high resolution flood hazard maps and IEC campaigns in different media platforms, inventory of 12,592, landslides from 2003-2016, identified, 1,152 alluvial fans, high resolution debris flow hazard simulations, rainfall measurements using Doppler, probabilistic storm surge hazard maps, and identified most vulnerable provinces to storm surges. With these, they are able to avert floods up to 7 to 10 meters, with averted disasters leading to zero casualties.

Furthermore, it was mentioned that since the creation of Project NOAH after two (2) years of the passing of the bill known as RA 101, the disaster law of the Philippines, and with the cooperation of concerned government agencies and right response of the people in the community, there were almost 15 averted disasters from severe events compared to previous experiences before the project was created.

The data are displayed in the NOAH website to empower people with the use of data, and providing people with hazard-specific, area-focused and time-bound warning. He further emphasized that what we need is a national standardized program for climate change adaptation and disaster risk reduction to cascade the available information or data done in the entire Philippines from the top agencies down to community level. Moreover, he encouraged everyone to translate researches available in the NOAH website to plot health facilities.

He concluded that the two important elements to avert disaster is to warn and to respond.

**Dr. Ronald Law**

Chief of Preparedness Division

Health Emergency Management Bureau

Department of Health

Dr. Law stated that one of the prime considerations in developing the research agenda is to go back to what is written in the NUHRA 2011-2016 as far as disaster and health is concerned. We need to align CCA-DRR and health research with different frameworks such as Sendai Framework, SDGs, National Objectives for Health, National Disaster Risk Reduction and Management Program. We are guided with experiences, practices, lessons learned, and gaps identified in developing research agenda as well.

He emphasized that in the NUHRA, in the category of socio-environmental health concerns, disaster was not made part of the research agenda, though climate change is one of the research

area or priority. Yet, these are inadequate in facing the challenges we have right now for CCA-DRR. He encouraged that CCA-DRR should have specific sections in the NUHRA.

The proposed research areas in the research agenda are based on the elements of health systems: governance and leadership, health human resources, financing, technology and logistics, information management, and service delivery. Possible research topics are also identified. Among the possible important topics are: (1) cost-effective technologies to prevent/control or monitor environment pollution; (2) development of integrated interventional models to reduce prevalence of infectious diseases affected by changes in the environment; (3) reduction of prevalence of water and sanitation-related diseases; (4) health social science approach in health research and community development to address emerging concerns/issues on sexual and reproductive health, childhood illnesses, chronic illnesses and mental health; (5) barriers and facilitating factors for building resilience in communities, impact of policies and programs, linkage of CCA in health, strengthening regional and local health systems for preparedness and response; (6) cost effectiveness of trainings, impact evaluation of trainings, models of deployment of teams (local and international); quantification of disaster risks and losses in disasters for planning purposes, health financing packages; (8) use of ICT in capacity building and response, logistic urgent system; (9) surveillance system, early warning alert and response system (EWARS), heart-related events, pre-disaster information system; and (10) GIDA service delivery model in emergencies and disasters.

In conclusion, Dr. Law said that the link between climate change, disasters & health is already well-established and that the cost of not acting urgently and resolute is too high for the health sector. He stated that science and epidemiology should still point us to specific mechanisms. Good practices must come to fore and be adopted by most to have real-world significance. We must build our evidence and knowledge base.

Further, he emphasized that there is a need for public health movement wherein people representing different sectors, communities and disciplines to work together towards solutions for Disaster Risk Reduction (DRR) and Climate Change Adaptation (CCA).

**Atty. Ofelia Abueg-Sta. Maria**

Chairman

Philippine National Red Cross – Palawan Chapter

The role of the Philippine Red Cross in Disaster Risk Reduction and the organization's efforts in increasing and strengthening capacities of communities on disasters and risk reduction were the points that Atty. Sta. Maria presented. As an example, she reported the actions done by the Philippine Red Cross Palawan Chapter when Typhoon Yolanda hit Northern Palawan in March, 2013. The Philippine Red Cross provided immediate relief goods such as food, hygiene kits and medicine, clothing, and shelter materials to the affected families and individuals. Atty. Sta. Maria also affirmed the organization's disaster preparedness program, which is guided by the Philippine Red Cross's principle of predict, plan, cope, mitigate, relief, rehabilitate, and resurrect.

She also mentioned the continuous efforts of the Philippine Red Cross to ensure the health and safety of the people by holding skills trainings for volunteers to be equipped in providing first aid, basic life support, cardio-pulmonary resuscitation, water safety, swimming and accident prevention, and ambulance services. According to her, these volunteers are trained to be always first, always ready, and always there, as the mantra of their agency. Along with these is the constant drive of the Philippine Red Cross to pursue its bloodletting and campaign for blood donors.

The challenges that the Philippine Red Cross encounter such as “financial disaster” or lack of funding, as the Philippine Red Cross thrives only through voluntary donations, and the need for further study and evaluation of the Philippine Red Cross’s Health Service Program were raised by Atty. Sta. Maria upon ending her talk.

She advise the need of the following: relief, mitigate and resurrect; effective and compassionate relief programs; link with LGUs to spread information; facilitating human resources; and include the needs of Red Cross in NUHRA. In times of disaster, we can tap Red Cross with their mantra, Always first, always ready, and always there.

**Ms. Shiela Marie Reyes**

Civil Defense Officer 2  
Field Officer for Palawan

Representative of:

Director Eugene Cabrera  
Director

Regional Disaster Risk Reduction and Management Council – MIMAROPA  
Office of the Civil Defense- MIMAROPA

It was emphasized that during mega-disaster in the region, the command and control is assumed by the DOH Central Office and other non-affected regional health offices. Aside from DOH, agencies for the response cluster include DSWD, Office of Civil Defense, AFP, DILG, PNP, BFP, and DepEd.

Ms. Reyes presented the role of different regional offices in MIMAROPA during disasters. Roles and responsibilities were laid out during pre-disaster, during disaster, and post-disaster phases. The Health Cluster in the Emergency Response Plan is comprised of the Health Services, Water, Sanitation and Hygiene (WASH), Nutrition, and Mental Health and Psychosocial Support (MHPSS). As sub-clusters of the DOH, these aim to provide support for the delivery of appropriate and timely health services to the affected population to save lives and decrease preventable mortalities, morbidities, injuries and disabilities.

The concept of operations is that the DOH Central Office oversees the entire operations while the Regional Health Office coordinate closely with the LGUs and provides technical as well as logistical support as necessary. In the event of a disaster, the DOH Central Office together with the

unaffected regions will provide assistance to the affected LGU under the supervision of the Regional Health Office.

On the other hand, the district hospitals in the affected LGU are under the supervision of the provincial government. In a worst-case scenario, where the local and regional health sector is non-functional, DOH Central Office/ non-affected Regional Office will assume operational control. The following are the key players and actors in the implementation of this concept.

The Lead Cluster is the Department of Health –MIMAROPA and the sub-clusters are Health, WASH, Nutrition, and MHPSS.

The other agencies that are needed to support the DOH are Department of Social Welfare and Development (DSWD), Office of the Civil Defense (OCD), Armed Forces of the Philippines (AFP), Department of the Interior and Local Government (DILG), Philippine National Police (PNP) through the Health Service and Women and Children Protection Center, Bureau of Fire Protection (BFP), Department of Education (DepEd), Department of Transportation and Communication (DOTC) through the Philippine Coast Guard (PCG), Department of Foreign Affairs (DFA), Department of Science and Technology (DOST), Department of Environment and Natural Resources (DENR) through MGB, Philippine Red Cross (PRC), and volunteers/Civil Society Organizations and other health sector partners.

The concept of sustainment is the DOH as Cluster Lead will coordinate all support and requirements of the Health Cluster in their activities and concerned government agencies and their subordinate offices shall utilize their respective internal personnel.

**Ms. Maria Monina M. Flores**

Executive Director

Corporate Network for Disaster Response

Ms. Flores presented the roles of Corporate Network for Disaster Response that build resilient companies, communities and cities. She introduced the Corporate Network for Disaster Response (CNDP) whose goal is to power business continuity and community resilience. She said that CNDP partners with the government and civil society to accomplish the CNDP's goal. The CNDP has launched NOAH's Arc project, a capacity building technology and a collaborative platform for zero casualties and disaster preparedness. The CNDP has formed 3 C's or RC3 as areas of focus such as: (1) cities, (2) companies, and (3) communities. The company serves a core sector – the repository of investment; the community as the context within which companies operate themselves; and the city which provides the physical and operability of companies. Ms. Flores mentioned the 6-8 record-breaking intensive training months which will deliver the LGUs and the community together for zero casualty disaster preparedness and stressed the collaborative platforms with 80 companies talking about how to respond to big earthquakes. She emphasized how private sectors work with the attainment of goals for CCA-DRR, including capacity-building and technology transfer to the communities. The CNDP works with the PAG-ASA, PHILVOCS and NGB and gets the best administrators of the country working with the communities in translating scientific information into well-designed capacity-building knowledge transfer to communities so



that they are able to create maps that are like cross-sections of areas. Such maps are relevant to plan for evacuation and through the maps, each barangay will identify hazard specific risks such as storm surge, strong winds, fire and explosion. Having these specific assessments, residents can come up with plans and budget. She emphasized how private sectors work with the attainment of goals for CCA-DRR, including capacity-building and technology transfer to the communities.

Dr. Gundran provided a synthesis of all the topics discussed during the session. (where is the synthesis?)

### **Question 1**

Dr. Warlito Vicente from Davao: The question is directed to Dr. Lagmay. They are communicating your information through Twitter and not many people are in Twitter. He pointed out to Dr. Mahar Lagmay that a possible reason of the poor reception of people to information disseminated through Twitter is the statistics of the use of social media platforms. There about 49 million Filipinos in Facebook every month, and 1.7% of viewers are on Facebook rather than on television. He thinks that information should also be communicated in Facebook instead of limiting with Twitter.

Dr. Lagmay: They are also in Facebook and WhatsUp, including television and radio, and other print media. They are using all social media platforms to disseminate information.

### **Question 2:**

Dr. Catalino Dotollo, Jr., of National Nutrition Council-Region 8: The issue is directed to Ms. Shiela Marie Reyes. He referred Ms. Reyes to 2007-2492-A of the Department of Health, which amended DPO 20072492, describing that the Nutrition Cluster is now headed by the National Nutrition Council. He said that the Office of Civil Defense should include them in the incident command system training the regional nutrition program coordinator and the provincial nutrition coordinator of the provinces and the region. They are not acknowledged as a separate cluster.

Ms. Shiela Reyes acknowledged the recommendation.

### **Question 3:**

Dr. Lito Acuin from De La Salle University: He asked how the panelists help develop the system in conducting research during a disaster and after a disaster. During disasters are the perfect opportunity to conduct research, but there is no system related to it. He was privileged to process documents in Yolanda response in Leyte, and one of the things that happened is that no one documented what happened. They relied on memory and most of the records are gone. So how do you develop the systems in conducting research to improve delivery of health care during disasters?

Dr. Ronald Law: They are designed to do research during normal times. But there are ethical issues regarding this, and this has been discussed during the capacity-building in the pre-forum in the

past few days. There are relevant ethical issues involved here especially on the perspective of mental health. They have encountered similar experiences related to this on mental health, especially those that happened during Sendong and Pablo. They thought they are responders but they are actually researchers, looking into aspects of mental health. At the very least, this should be coordinated with the DOH so that the response time should be the phase to do the relief. This should take priority, but he emphasized that we should also consider doing research. We should come up with policies that should direct how these things should be done. Coordination mechanisms should be in place. The regional office should know the objectives of researchers going to the areas affected by disasters, they should know the objectives of the researchers. Ethical issues are paramount. But there may be other methodologies in conducting research during disasters.

Ms. Maria Monina Flores: They welcome partnership in research. They are rich in experiences in research and documentation, but they do not have the capacity and resources to conduct research. They have come up with good data, and they can be best partners in data gathering. The platform, social and governance platform, that they have created in the areas are their best partners in data gathering and deepening your inquiries.

Dr. Virginia Murray: She responded based on international point of view. Look for published literature and peer-review domains to look and provide baseline to the impact and outcomes. They have practiced this and done this in various organizations but you have to do a pre-agreement of what needs to be done for any type of hazard, extreme events, and disasters so you have the ethical consent in place in advance and the system of surveillance for the impact, and not just a research issue in the end. It's an easier way in investigating the issue during disasters.

Dr. Primo Gundran: We encourage researchers in the country to conduct disaster research using similar frameworks discussed so we can compare results in different areas. We have already rolled out these frameworks to promote researches in disasters. The problem is that the people involved in disasters are responders and not researchers, so it is suggested that researchers be made part of the team responding to the disasters.

Dr. Mahar Lagmay: Research, in general, is regularly conducted. What was detailed in previous incidences of disasters in the country was how the scientists were able to do health research and rescue operations, and how ad hoc geographic information systems were used to identify sites to do research and rescue. Forensic research was also involved. But we need to do more because whatever we learn from disasters should be documented.

Dr. Jessie Manuta: He affirmed Dr. Lagmay's suggestions because what we have today are established protocols in conducting research at normal times. Based on their experiences, there are no protocols in doing research during disasters, so during disasters, there is already a process in place.

#### **Question 4:**

Dr. Manapsal, Las Pinas City: Las Pinas LGU is willing to partner with private sectors such as CNDR in providing data. Do we have LGU community based disaster plan so they can adopt it, and if they have data, they can feed them to the involved sectors?

Ms. Monina Flores: Each one of the task units that is mandated by law, that at the level of high risk communities, they set-up health task unit. Since they have the platform, they have invited health to come in and make it their platform in their preparedness for health. They cover all but they do not have specialization in the areas. This is how we can collaborate.

## **CONCLUSION**

Multi-sectoral presentations allows us to view CCA-DRR from multiple lenses which will guide us in developing a rigorous and responsive research agenda to fill in the gaps we need in a country challenged by many natural and man-made disasters. There were different hazards and disasters presented and our challenge is to build the evidence base for climate, disaster and health research to formulate sound policies we need in mitigating different risks and hazards, and reducing the progression of hazards into disasters, while saving lives of the Filipino people.

Moreover, there are several efforts on disaster done by private and government institutions. The key to disaster risk reduction is the appreciation of hazard and risk scenarios by various stakeholders. Communities can help monitor hazards and risks. Partnerships are also important as it leads to understanding, monitoring and managing disaster risks.

## **Regional Research Paper Oral Presentation (Professional Category)**

Moderator: Dr. Ma. Luisa D. Enriquez, De La Salle University

In this professional category of the competition on the regional research presentation, there were six (6) contestants who came from different provinces in the country.

Dr. Lorna C. Gelito, OIC President of Palawan State University and the Chair, MIMAROPA Health Research and Development Consortium (MHRDC), opened the session by welcoming the different participating agencies. She described this event as a mental contest and brain tournament, and reminded her of the Battle of the Brains. She congratulated all the participants and presenters of the event in advance. Dr. Gelito also thanked the secretariat for their support.

Dr. Ma. Luisa D. Enriquez, the moderator of the session, read the contest rules, guidelines and criteria for judging for the professional research presentation. After the three presenters, question and answer will be conducted by two judges. The papers were already judged based on technical aspect of the paper.

She also introduced the first three presenters, along with the titles of their respective papers.

Dr. Patrick A. Regoniel, Research Director of Palawan State University, introduced the judges of the competition, namely: Dr. Ofelia Mendoza from the University of the Philippines; Dr. Georgina T. Paredes from the University of the East; Dr. Ma. Alicia M. Aguinaldo from the University of the Philippines; and Prof. Katherine Escalona, from the University of the Philippines - Los Baños.

Researcher 1:

Dr. Rey Y. Capangpangan  
Caraga State University

Paper Title: Detection and Sequential Enrichment of Glycopeptides and Phosphopeptides as Cancer Biomarkers by Functionalized NH<sub>2</sub>/ZIC HILIC-type Magnetic Nanoprobes

Nano technology is a specialized science that deals with detection of diseases. The greatest challenge is how to detect diseases of bio-markers. A special nanotechnology approach was developed. The study has also enriched haptoglobin for cancer analysis.

The researcher concluded that: 1) Highest signal intensity (glycopeptides) was noted for NH<sub>2</sub>/ZIC MNP materials in 95%ACN/0.1% FA; 2) NH<sub>2</sub>/ZIC HILIC MNP can be used for glycopeptides enrichment in standard HRP and Haptoglobin samples (higher selectivity); 3) Global glycopeptides and phosphopeptides analysis was demonstrated using NH<sub>2</sub>/ZIC HILIC MNP in NSCLC.

He recommended a large-Scale Global Proteome Analysis of serum and tissue samples from cancer patients.

Q and A

(Dr. Georgina T. Paredes) – The use of nanoparticles has been studied and investigated especially in treatment of cancer. Your research is geared towards using it as diagnostic material. You are still at the basic stage. How many stage will you still undertake for application to human? When is this study going to be implemented to humans?

Answer: Application to humans will not be easy, because of the several analyses and the different samples to be considered. The researchers have not presented the other phases of the study because the collaborator is still filing for patent. They are done with the optimization process. Application to real samples is very difficult, but they have completed everything for optimization and testing on standard samples. They are now on real samples.

(Dr. Georgina T. Paredes) – The researchers were using complicated processes. Are these processes your own innovation or has it been tried with other process?

Answer: It is an innovation of a more complicated technique. It is simplified compared to established processes. It is a new concept, because as of this time, we are the first one to innovate with sample loss minimized.

(Dr. Georgina T. Paredes) - How much is the cost of materials?

Answer: Actually, the preparation of materials and the methods used are less expensive. However, mass spec is expensive, with high definition spectrometer method. This is the part which is expensive. Over-all, it is less expensive than the normal process.

(Dr. Ma. Alicia M. Aguinaldo) – What are the specs for the magnetic separation, strength of the magnet, duration of the process?

Answer: Normal magnet which can be bought in the normal store can be applied. It has a strong electromagnetic property. The magnetization property has a strong or maximum magnetization value.

(Dr. Ma. Alicia M. Aguinaldo) - The down part is the cost. How can you compare the new process, versus the classical way of determining cancer biomarkers?

Answer: They will do invasive tests. In the research, application of blood and separate serum, can detect presence or absence of glycopeptides, and the risk for cancer is high. But if we talk about the cost, we are still using high definition mass spec. It is still expensive but the preparation of the sample is cheap. There is really a tradeoff, if you do the normal process, because it just target the glycopeptides using the nanomaterials.

Researcher 2:  
Dr. Claribel Matias  
St. Mary's University

Paper Title: Isolation and Cytotoxic, Angiogenic and Antitumor Compounds from *Trichaleurina Celebica*

The study hopes to find a suitable application as food supplement, on food fortification and/ or drug development. In this particular project, the isolation of the cytotoxic components and the determination of its angiogenic and anti-tumor properties were considered prelude to finding a novel drug.

The researcher also specified the objectives of the study as the following:

- 1) Isolate the pure compounds from *T. celebica*, exhibiting cytotoxic property;
- 2) Determine the anti-angiogenic property of the isolates;
- 3) Determine the antitumor potential; and
- 4) Determine the bioactive metabolites which are characterized as cytotoxic, angiogenic and anti-tumor.

She concluded that several bioactive compounds isolated and were identified from *T. celebica* have potential as lead in the exploration of pharmaceutical products as anti-tumor, anti-angiogenic and pro-angiogenic agents.

It is therefore recommended that the isolates from *T. celebica* will be screened for its anti-cancer potential using human cancer cell lines and in the treatment of cardiovascular diseases due to its high pro-angiogenic potential in CAM assay.

(Dr. Georgina T. Paredes) - There is dearth of information in the literature. How common is this mushroom in our locality. If you are to extract, how many kilos of mushroom will you be using? In the recognition of this mushroom, were you able to authenticate if this is the mushroom.

Answer: Mass propagation is actually propagated using the mycelia. They have planned to propagate the mushroom, but they are not successful.

(Dr. Georgina T. Paredes) – Where did you get the materials?

Answer: We got it from the kaingin areas and other forest places. We collected the mushroom in the mountain side. That is why we are able to utilize the mycelial extract not the fruiting body.

(Dr. Georgina T. Paredes) – Your contention here is that the properties are based on folkloric beliefs of the local area.

Answer: Beliefs of the locals did not claim the potential of the mushroom for cancer. We have a mushroom project, such as plant screening approach that was conducted prior to this research.

(Dr. Georgina T. Paredes) - How many kilos of mycelial extract were used?

Answer: We utilized the large bottle refilling, roughly 12 bottles. Actual mycelia is 10 grams when we had the fruit extract.

(Dr. Ma. Alicia Aguinaldo) - If you have one kilogram, how many grams of refraction, how many grams of isolate? For every specimen collected, there should be authentication. Otherwise, it could be mistaken as something else. Otherwise, you cannot reproduce the research results.

Answer: Morphologically, we have identified the mushroom and the blast. We have 80% compatibility, as output for group project.

(Dr. Ma. Alicia Aguinaldo) – What about the occurrence of this mushroom from north to south? Have you inquired with experts?

Answer: They did consult with experts and it can be cultivated as long as you keep humid.

(Prof. Katherine Escalona) – What is the site ecology of this particular mushroom? Is this being eaten?

Answer: Yes, the mushrooms are being eaten by the locals in the area.

(Dr. Georgina T. Paredes) – Obviously, mushroom has medicinal properties. What are the mushrooms that are common in the areas and which are not, so you can identify which common diseases in the locale?

Answer. They will have to report the findings from other studies.

Researcher 3:  
Prof. Erwin C. Mina  
Tarlac State University

Paper Title: Bioactive Constituents of *Centrosema pubescens Benth.* inhibitory to *Culex quinquefasciatus Larvae*

The project described that mosquito-borne diseases are prevalent in 100 countries across the world, and 700,000 people are infected every year. The researcher stated that disease burden, death, poverty, and social debility in tropical countries were malaria, filariasis, dengue, Japanese encephalitis, and yellow fever.

She concluded the following: 1) LC50/LD50 and LC90/LD90 values of the ethanolic extracts reveal inhibitory activity against *Culex* larvae; 2) compounds I, A, C, B, and J were isolated through TLC; Compound I shows the most appreciable larvicidal activity; and 3) Spectroscopic analyses confirmed the presence of alcohols and aromatic compounds which is responsible for its inhibitory against *Culex* larvae.

(Dr. Alicia M. Aguinaldo) - What species of mosquitoes was used in the study? What was the reason on the interest on the *Culex*?

Answer: *Culex quinquefasciatus* larvae were used. They want to have a specie who carries dengue. It is a common mosquito.

(Dr. Alicia M. Aguinaldo) - Regarding the ethanolic extracts, how do you compare the concentrated one from the non-concentrated?

Answer: The concentrated one is active, while the non-concentrated is less active. Concentration was subjected to rotary evaporator.

(Prof. Katherine Escalona) - Is the toxic organism to larvae also effective to other tests? It is logical to subject the larval stage of the mosquito. You should have tested to other larvae of other organisms. Is the potentially toxic property of the plant be toxic also to other larvae test the toxicity?

Answer: This has not been tested on other organisms.

(Prof. Katherine Escalona) – Why did you use alcohol for your control? Why not water, but alcohol? Why did you use malathione and distilled water? Have you checked on the volatility of the compound? For biodiversity advocates, killing has a negative connotation. If the potential compound is volatile, you just have to plant in your corner and will drive away the mosquito away?

Answer: The procedure was based on a previous study.

Researcher 4:

Dr. Narciso Tapia

Vicente Sotto Memorial Medical Center

Paper Title: Modified Sheep Blood Agar-based Medium as an Alternative Culture Media for the Cultivation of *Mycobacterium tuberculosis*

The project described that with the advent of HIV/AIDS and the concern over MDR-TB, the importance of TB culture and the need for testing drug resistance in TB diagnosis has been emphasized all the more (de Waard & Robledo, 2007); that culture is still the gold standard for laboratory confirmation of TB despite advances in TB diagnostics; and that non-culture methods are expensive.

The study aims to compare modified sheep blood agar (MSBA) with Lowenstein Jensen (LJ) and plain Blood agar medium using the following parameters:

- 1) Mean days to culture positivity;
- 2) Proportion of the media with positive growth of *Mycobacterium tuberculosis*;
- 3) Contamination rate

The researcher concluded that MSBA is not as efficient as LJ in primary culture (sputum specimens).

However, it may be very useful for subculture (for transport to reference lab). It is easy to prepare, prevents contamination and is able to support the growth of tubercle bacilli. The specificity for TB from sputum specimen, its control of contamination and its earlier mean days to culture positivity makes MSBA useful in clinical laboratory diagnosis when utilized together with LJ. While waiting for LJ to become culture-positive, MSBA can provide an earlier result.

He, therefore, recommended that studies adding glycerol to MSBA or procedures utilizing other decontamination procedures considered to be milder than 4% NaOH should be explored.

A quantitative analysis of the acid fast bacilli (AFB) load should be done from the AFB smears prior to inoculation and also after colonies have been isolated from the tested media to determine the optimum bacterial load wherein MSBA best supports growth.

Q and A



Dr. Ofelia Mendoza) – Among the 6, it is the longest.

Answer: He was not able to read if there are page number restrictions.

(Dr. Ofelia Mendoza) – In the write-up, about sample size determination, the sample size determination is based on odds ratio and concordant tests. There is inconsistency in the objectives of the study and the parameters used in the sample size computation.

Answer: Based on power and confidence level, advisers advised them to use odds ratio and concordant tests.

(Dr. Ofelia Mendoza) – To compute for sample size, you should use a specific variable; logically these should be the basis for sample size determination. You went as far as odds ratio. There was another sample size determination.

(Dr. Ofelia Mendoza) – In the results showing sensitivity and specificity, is LJ considered as the gold standard?

Answer: Yes, it is the gold standard.

(Prof. Katherine Escalona) – In the rate of contamination, one of the ingredient to control is sodium hydroxide. Why do you have to decontaminate the sputum?

Answer: It is part of sputum process. It is not part of the media but it is part of the process when decontaminating specimen.

Researcher 5:

Dr. Amiel Nazer C. Bermudez

Paper Title: Factors Contributing to Maternal Deaths in a Referral Hospital in a Philippine Province: A Modified Three-delay Model

The study focused on the factors contributing to maternal deaths in a referral hospital in a Philippine province. The study stated that maternal deaths in a referral hospital were caused by: 1) delay in the decision to seek care; 2) delay in identifying and reaching a medical facility; and 3) delay in receiving adequate and appropriate treatment.

The study limitations included that maternal death rate (MDR) only included deaths that occurred in the referral hospital; factors contributing to non-facility deaths may not be captured; community interviews were not successfully carried out for two (2) decedents.

Q and A

(Dr. Ofelia Mendoza) – The four sets of factors, is relatively common already, and experienced by non-maternal deaths. Did you consider making use of a case-control study design so you can pinpoint more so the role of these factors are greater in maternal deaths?

Answer: In epidemiology, we usually do estimation rather than prediction. Here, we acknowledge recall bias. Obtaining odds ratio will veer away from the truth if there is recall bias. They used the design to have a picture of whole gamut of the factors that occur in the community and hospitals.

(Dr. Ofelia Mendoza) – The limitation of the study is that it only involved single referral hospital. Did you go to vital registration system, in which case you have more heterogenous samples? Would you have considered going to another hospital, instead of just the referral hospital?

Answer: This will be recommended for further study.

(Dr. Georgina T. Paredes): What will be the main use of this study?

Answer: Output will be more than a result as they were able to carry out maternal death reviews. How MDR was espoused, results of this study can help identify modifiable gaps, cluster the factors as modifiable or not. From this study, DOH were able to act on providing blood for patients.

(Dr. Ofelia Mendoza) – Conceptual framework needs refinement. Arrows should not be arrows, and they are misplaced. There is no need to conduct inferential statistic, such as t-test, because it is not the study objectives to compare with groups. It is commented that the contribution of the study is the documentation of a lot of practices as empirical evidence is needed even if it based on nonprobability design. If you have to make comparisons, it is recommended that it should not be between the two groups, previous and current, but rather on the normal values versus the obtained values.

(Prof. Katherine Escalona): Did you ever check on the synergistic effects of the compounds?

Answer: He did not explore on these areas.

(Dr. Georgina Paredes) – Conclusion number 3 should be derived from the results of the study. It should not be included in the conclusion.

### **Researcher 6:**

Dr. Alex Y. Pang, Jr.

Paper Title: Clinical and Metabolic Profile of Male-to-Female Transgender in Zamboanga Peninsula

The study is about transexualism, especially the strong desire to change one's anatomical gender, particularly on sex reassignment therapy, acquisition to the fullest extent possible of the sex characteristics of the other sex. The primary objectives of the study are: 1) to determine the

clinical and metabolic profile of male-to-female (MtF) transgender in Zamboanga peninsula; and 2) to describe any cardiovascular complication among MtF transgender currently or previously on cross-sex hormone therapy.

The specific objectives are: 1) to determine the demographic and clinical characteristics of MtF transgenders; 2) to describe the metabolic profile of MtF transgender currently or previously taking cross-sex hormone drug; and 3) to describe the practices of self-prescribe, unsupervised cross-sex hormone drug use among MtF transgender.

The researcher concluded that majority of MtF transgender self-prescribe cross-sex hormone drug, that they tailor-make their own drug dose/administration based on their friends' suggestion, that cross-hormone drug use is not recommended by international guidelines (WRATH). They are also prediabetics, prehypertensive and overweight was commonly noted among study participants.

Dr. Montoya concluded the session by extending gratitude to the presenters, panel of adjudicators, and the participants. He encouraged the participation of the young researchers to PNHRs events as well. He mentioned that 15 papers were submitted, yet only six were chosen to be presented in the 10th Philippine National Health Research System (PNHRs) Professional Research Competition.

Moreover, he mentioned that it is not about a matter of numbers, but it is the quantity and the quality of researches involved. He likewise encouraged new and young people to engage in research. He also thanked Palawan State University, through its OIC President, Dr. Lorna C. Gelito, who is also the Chair of MIMAROPA Health Research and Development Consortium (MHRDC), as well as the audience who attended in the said event.

## **PARALLEL SESSION 6. Indigenous Health System and Environmental Pressures**

### **Moderators:**

Dr. Virginia D. Akiate, Regional Director, CHED-IVB

Dr. Lorna C. Gelito, OIC-President, Palawan State University

Ethnic groups worldwide are not exempt from the consequences of the changing environment. They are highly dependent on our natural resources for survival and are vital in helping to improve the resilience of our ecosystem. Several environmental pressures such as habitat change, pollution, climate change and over-exploitation of resources greatly affect their way of life, especially their health.

The focus of the session was geared towards increasing awareness on the possible contributions of IPs in creation of ways to cope with the impact of environmental changes.

### **“Building Resilient Indigenous People’s Health and Food Systems Through Agro-ecological Principles and Practices”**

**Dr. Isidro C. Sia**

Director General

Philippine Institute of Traditional and Alternative Health Care

Philippines is rich in biodiversity. Total plant diversity is 8000 to 12000. In Malaysia, endemic plants are 15,000 while in Indonesia, there are 37,000.

Dr. Sia also discussed the 12 centers of plant diversity such as Mt. Pulag, Mt. Makiling and Mt. Banahaw, Mt. Isarog, Plawan, Romblon, Sibuyan. There are also areas sacred for healing such as Mt. Palali, Mt. Arayat, Mt. Banahaw, and Mt. Bandilaan.

Talking about culture, there are 110 indigenous groups, 185 ethnolinguistic groups, and 123 dialects. The language can also be considered as a mirror of the richness of our environment. Dr. Sia emphasized that it must be used to avoid destroying the environment.

Dr. Sia also shared some indigenous knowledge and activities of IPs such as fishing once a week for Itneg. In terms of food and health, there is "pinikpikan" in Cordillera, which means equality.

He also discussed the cases of IPs in areas such as Porac and Bantug, in terms of farming. He emphasized that taking care of plants is also taking good care of people in terms of life and health and that the blessings of land are blessings for all.

**"Health Practices of Tagbanua in Response to Changes in their Environment"**

**Ms. April Grace Ortega-Liao**

Regional Coordinator

College of Nursing and Health Sciences, Palawan State University

Ms. Liao on the question why Tagbanua? Tagbanua survived despite of other populations dwindling. According to her, Tagbanuas have probably health practices that made them survived. They probably adapted to their changing environment to survive. They know something that is probably not written.

She shared about her study on Tagbanuas composed of 8 key informants. Her study was based on Abraham Maslow's basic needs such as the air they breathe, use of sunlight, rest and sleep, diet and nutrition, use of pure water, temperance, and trust in God.

For Tagbanuas, air may cause illness such as colds and stomach pain. The morning sunlight is good for their body. The diet of Tagbanuas is different and is actually based on their habitats. Tagbanuas love banana, sweet potato, cassava, etc. However, some change their schedule of eating based on what they have learned from school.

Diday-diday is a habit of many Tagbanuas. This is a term where they got a break from working and have rest for a day or for days- a break to protect their body.

For illness prevention, Tagbanuas view food as a basic need to live. According to them, they should eat proper food at proper time so that they would not get sick. Meat is not very common food for Tagbanuas. They do not also eat in other houses because they're afraid to be poisoned.

#### "Health System of the Alangan Mangyans"

Mr. Juanito Guarde, Jr.  
Department of Education-Naujan South District

As discussed by Mr. Guarde, the health system of Alangan Mangyans is embodied in their culture. There is no such a structured health systems in Mangyans.

The Alangan Mangyans of Oriental Mindoro depends solely on the wisdom and leadership of Elders called Aplaki who serve as the primary provider, consultant and decision maker who decide what to do with particular matters and everything related to health.

On maintaining good health, the primary aspect is food. Aplaki decides what to plant, when to plant, and where to plant.

The Alangan Mangyans depend on the environment for their food. Their healing system is facilitated by the Aplaki which depends primarily on the environment. These Mangyans also rely on medicinal plants found on the forest and to the rest of their environment.

As shared by Mr. Guarde who is also a Mangyan himself, they believe in the sacredness of some of the parts of the Ancestral Domain. They are happy people and contented with what they have. They're not pressured and this lifestyle keeps them healthy.

Atty. Erwin Caliba  
Executive Assistant  
Office of the Chairperson, National Commission on Indigenous Peoples

Atty. Caliba discussed the Jura Regalia/ Regalian Doctrine which was first introduced by Spain and continued to the American period to the present. IPs refused colonization, stayed in their territories and maintained their way of living.

According to him, the attitude of government towards IPs is pacification to assimilation to integration to recognition.

The 1987 constitution recognizes and promotes the rights of indigenous cultural communities. Indigenous Cultural Communities/ Indigenous Peoples refer to group of homogenous communities, with distinct culture, territories, and have resist colonization.

He emphasized that IPs have the right to ancestral domains/lands such as right to ownership, stay in territories, claim reservations, safe and clean air and water, resolve conflict through customary law, transfer ancestral lands, and redeem ancestral lands lost through vitiated consent.

In terms of social justice and human rights, IPs should have equal protection and non-discrimination, rights during armed conflict, equal opportunity and treatment, basic services, protection to women, children and youth, and integrated system of education.

In terms of cultural integrity, the IPs have the rights to protection of culture, tradition and institutions, equal access to cultural opportunities or education, ownership and recognition of cultural and intellectual rights (IKSP), and biological and genetic resources.

At the end of his presentation, Atty. Caliba emphasized that all activities or research to be done at the ancestral domain should have free and prior informed consent.

### **Open Forum**

Nimfa Amonti, MSU-IIT: I have to be truthful and harsh this time. I have been to the field, I've seen the killings of Lumads. The harassments and killings are still going on. I don't see the role of IPRA in protecting the IPs. I would like your honest opinion on the role of NCIP?

Atty. Caliba: In every resource-rich areas, there are many conflicts. For me, it's about the resources that are causing the conflict. Based on the functions of FPIC, there are four core functions. What I mean is, there is health but we will not compete with DOH in terms of health. What we want is for it to become culture-sensitive. There are two standards: helpful and harmless. If it is harmful, it cannot be done, it should be corrected such as using saliva for wounds. In terms of peace, there are coordinating efforts already. We are a very small agency and there are larger agencies and we are trying to knock their doors.

Elsa Manarpaac, Western Philippines University: What are the strategies of NCIP to make the IRR understood by IPs?

Atty. Caliba: I am only in my 3 years in NCIP. We have the structure which has the full responsibility of focusing on IP. We will look into that.

Manarpaac: Example is Reproductive Law by DOH, they called for a meeting to explain this to lay persons. So we can do this initiative and maximize what agencies can do.

Dennis Madsan, MSU-IIT: Badjaos are being discriminated. What is the use of this law if the Badjaos are not recognized?

Atty. Caliba: There was a similar case before. We already seen that and Badjaos are on the list. We will coordinate with the local NCIP with regard to that. We are also asked by DFA. They are always on waters so it's also hard to give them ancestral domains.

## **Parallel Session 7: Research Fairness Initiative**

**Moderators:** Dr. Arnold N. Venturina, Dr. Jesse T. Zamora

This session introduced the Research Fairness Initiative (RFI), designed to provide a framework for collaboration that encourages fair opportunities, fair process and fair distribution of the benefits of research.

Prof. Carel Ijsselmuiden discussed the importance of fairness and competitiveness in research partnerships. Further, he stressed that the heart of collaboration is the desire to deal with increasingly complex problems of the world, such as climate change and disaster risk reduction, and COHRED's role is to promote trust, efficiency and sharing capacities among member-countries to eventually develop a sustainable research system. He also emphasized the need for a tool that the donor understands to become more competitive such as an internationally accepted accounting system. Finally, Prof. Ijsselmuiden emphasized the importance of reporting collaboration because it is through this that research institutions can do benchmarking.

Reactors:

### **Dr. Anthony C. Sales**

Undersecretary for Regional Operations, Department of Science and Technology (DOST)

USec. Anthony Sales raised the following issues that need to be addressed for further discussions, resolutions and actions:

1. There should be a defined framework for the inclusion of parties, communities and individuals who will be directly involved and affected by the health research.
2. No party or individual bears the share of direct burdens in participating in health research or that any party or individual be unfairly excluded from the potential benefits of participating in health research.
3. In which phase of the research will the communities be able contribute, is it in the beginning, or during the implementation, or at the end of the research, and will they benefit as end users?
4. There policies that clearly define the appropriate inclusions and exclusions in any health research should be reviewed.
5. What are the implications of the signing of the Executive Order on Freedom of Information on knowledge sharing?

Furthermore, USec. Sales stressed the advantages of dividing the efforts of knowledge and management sharing per cluster - Luzon, Visayas and Mindanao. Lastly, he expressed support at the efforts of the present government to regionalize research and innovation efforts.

### **Dr. Melchor Victor Frias IV**

Vice Chancellor for Research Services, De La Salle Health Sciences Institute

According to Dr. Melchor Victor Frias, there are certain issues on RFI which need to be addressed if fairness in research partnership is to be achieved, among of which are the following: (1) confidentiality regarding standard operating procedures and documents of institutions; (2) fairness of opportunity for local researchers to comment or make amendments in the protocol of proposal; (3) chance to pre-select sites and visit such site rather than gather data thru online surveys; (4) relatively lower remuneration given to research assistance, study coordinators, doctor investigators and medical technologists compared to counterparts from the high income country; (5) accessibility of the technology drugs after the research, the continuation of partnership after the research when the technology needs to be reproduced; (6) the role of children as research participants; and (7) support of the institution to individuals who have forged partnership with organizations in other country.

**Dr. Warlito C. Vicente**

Chair, Regional Health Research and Development Consortium Region 11 (RHRDC XI)

Dr. Warlito Vicente said that when you talk about fairness, there seems to be one standard way of treating all RHRDC XI member-institutions but in reality each of the institutions come from different levels of experience, expertise, and even mandates from their own institution. Hence, he proposed that in creating programs and criteria for funding, the national government should consider the need of the region. Further, he added that the regional group is quite not only different from the National Capital Region (NCR), and therefore have to be treated separately to be fair with the regions and with individual researchers. He advised researchers to look beyond personal interest and look on how the community and the region will benefit from their research. He recommended that PCHRD use the tool being used by COHRED in monitoring research progress.

**Dr. Maria Lourdes K. Otayza**

Chair, Region 1 Health Research and Development Consortium and Medical Center Chief II, Mariano Marcos Memorial Hospital and Medical Center

Dr. Otayza commended COHRED for elevating research to higher level and expressed appreciation on the fairness in opportunity, process and fair benefit sharing. She pointed that there can be no fairness if researches from the regions will not be funded at all because their Research and Development (R&D) Committees are not capable to assess or mentor the researches submitted for funding. Dr. Otayza suggested that PNHRs might want to devise activities that will capacitate R&D committees so researches may reach international funding. She also invited PNHRs to institutionalize the principles of RFI.

**Prof. Lerma De La Llana Paris**

Research Manager, Western Visayas Health Research and Development Consortium



Prof. Paris raised the following questions if ever regional committees will be part of the RFI reporting system in the future:

1. Will there be a fee?
2. Who will manage it?
3. Will the reporting system be mandated by PCHR or by what institution?
4. Will the committee/consortium receive feedback?

Dr. Paris stressed that regions are generally weakest in research utilization and that the communities involved in the research would often not receive feedbacks. She said that even if there is a fee but the proposed reporting system is not tedious and will help establish a feedback mechanism, research institutions in the Philippines might be very much willing to support it.

### **Dr. Roberto C. Pagulayan**

Executive Director, Center for Research and Development, Angeles University Foundation

Dr. Pagulayan made suggestions to improve the RFI guidelines, among of which are the following: (1) indicate specific problems that the RFI will address; (2) key users should include 'beneficiaries'; and (3) data ownership, storage, access and use could be placed under fairness of opportunities and should be tackled even before research has started to prevent conflicts. Further, he suggested that reports should include how internationally ethics review guidelines were implemented and how conflicts were resolved. He also stressed the importance of identifying the procedure that COHRED will use to validate committee reports. Dr. Pagulayan ended by emphasizing the requirement of reporting should be absolute in order for RFI to succeed.

### **Open Forum**

Dr. Cecilia Acuin of Food and Nutrition Research Institute (FNRI) of the DOST raised the question on whether fair sharing focuses only on the researchers/research institutions and not on the funding agencies. She cited as an example the delay in contract signing between FNRI and a funding agency because of the reason that the latter wanted a sole ownership on the result of the project. Prof. IJsselmuiden answered that FNRI as a research institution should follow their institution's policies in drafting contracts.

## **OPENING PROGRAM AND WELCOME DINNER**

### **DAY 2**

#### **PLENARY SESSION 1: RISK COMMUNICATION**

Moderator: DR. EDUARDO C. JANAIRÓ

Regional Director

Center for Health and Development – MIMAROPA

Department of Health

**DR. JOSE M. ACUIN**

Chief Quality Officer  
Asian Hospital and Medical Center

Risk communication is something we do before or after an adverse event which is difficult since adverse events are unpredictable. Dr. Acuin says that there is a program in communicating risks, you are not in the position to communicate risk unless you know already identified the hazards and policies surrounding it. Factor affecting effective risk communication includes level of dread, credibility of source, possible trade-off and the possibility of the risk happening to the person. The message also has to be sticky, important, and viral, given the competition on social media to become effective.

**DR. MADELEINE DE ROSAS - VALERA**

DIRECTOR  
BUSINESS DEVELOPMENT HEALTH AND WELLNESS  
TAO CORPORATION

Dr. Valera's talk focused on communicating risks given the uncertainties of outcomes. She pointed out the importance of considering the audience, as there should be a different communication strategy for each type of audience. Communication should always be evidence-based, and relayed in a manner that will instill confidence and will not confuse the audience. As such, information should be of high quality and high consistency.

**DR. AILEEN ESPINA**

MEDICAL CHIEF  
EASTERN VISAYAS REGIONAL MEDICAL CENTER DEPARTMENT OF HEALTH

The challenge on communicating health risks during Yolanda was unavailability of real-time health data. International media were asking the hospitals for data they cannot verify due to the disarray in the monitoring system during that time. Dr. Espina suggested having a system wherein data can be readily-available during crisis. In such a way, we can easily devise and implement evidence-based health policies that can address the needs of the health community quickly. The message of a preparedness campaign must be strong and effective that it could create action among its intended audience.

**ALEXANDER CODEN**

PROVINCIAL ENVIRONMENT MANAGEMENT OFFICER  
ENVIRONMENT MANAGEMENT BUREAU – PALAWAN

Mr. Coden shared on how the Environment Management Bureau strictly implements environmental laws in Palawan, such as the Clean Air Act and the Clean Water Act. EMB also informs investors who come to Palawan on the preservation and conservation measures to protect their natural resources and also the people of Palawan. He also shared that the EMB works hand-

in-hand with groups to identify possible risks and mitigating methods, especially those that will be greatly affected by the interventions.

## **OPEN FORUM**

Mr. Michael Rafa of the Department of Science and Technology asked Dr. Espina on the available sources of power and how they managed the Tacloban situation after Typhoon Haiyan. Dr. Espina said that there was a total blackout days after the typhoon. The Department of Energy was able to stabilize electricity in December through generators. Hospital personnel used emergency lights, flashlights, and even used candle lights to perform child delivery. Now, they already have solar panels installed in the hospital.

Ms. Jeda Lalian of DOST – CARAGA asked how to effectively communicate to indigenous people (IP). Mr. Coden answered that in the Bureau, mining companies, or even other industries with projects directly affecting the IPs, seek environmental compliance from the EMB. Part of the process is for these companies to coordinate with the National Commission on Indigenous People (NCIP). NCIP and EMB will aid in facilitating talks with the IPs.

Mr. Roberto Malaluan of the Mindanao State University – Iligan Institute of Technology asked if there already is a national framework on bioterrorism. Dr. Valera said that biosafety is among the issues in the ASEAN summit. We have to simulate and address this risk through management, particularly crisis management. DOH-HEMB representative added that there exists a global health security agenda, and the Research Institute for Tropical Medicine has been leading the field of biosecurity in the country. He also added that there already is a framework, but the gap is on the formulation of the guidelines. Dr. Valera said that in this talk about bioterrorism, everyone, even the public should be involved.

Dr. Nanagas also added that bioterrorism can possibly originate from an accident in the laboratory. The country has been importing different viruses and bacteria regularly and there has to be a definite system on this.

## **CONCLUSION**

Dr. Cecilia Acuin summarized the session and identified (1) probability of the risk happening; (2) power of the message; (3) possible futures; and (4) pros and cons; and (5) public engagement contribute to effective risk communication. She emphasized on the importance of engaging the public and ensuring understanding of the message in risk communication as communication without an audience cannot be considered as such. Availability of data during crisis should also be a possible area for research that PNHRs should look into, says Dr. Acuin.

## **PLENARY SESSION 2. The Philippines as Research Hub on Global Health Innovations to deal with Climate Change and Natural Disasters**

**Moderator: Dr. Ma. Josefina P. Abilay**, Regional Director, DOST-MIMAROPA

## **Manila – the global capital of...**

Prof. Carel IJsselmuiden  
Executive Director  
Council on Health Research for Development

Prof. IJsselmuiden explained that with the learnings, lessons, and experiences that the Philippines have in terms of disaster risk management, Philippines can become a leader in global disaster risk reduction/management.

He reiterated that the Philippines made a strategic decision to create a hub that would focus on either climate change or research and innovation in disaster risk reduction. In 5-10 years this could be possible, and people can start relating Philippines or Manila to something positive not just disasters.

He mentioned that we can build from last year's Forum. Forum 2015 has started moving towards innovations wherein 26 innovations were showcased. He said it is critical to think about the added value and what will happen with all the learnings from the Forum.

Prof. IJsselmuiden also underscored the importance of having a vision. Pursuing the hub will need medium and long-term financing and extensive partnership arrangements. Likewise, identifying key area is critical and it has to be a national development goal and it needs to build on 'national potential' – opportunities that give the Philippines an 'edge' over others.

He said that there are more opportunities in climate change than health. The next steps would be conducting feasibility studies and convincing ASEAN, APEC, and Global community that the Philippines is the hub and these would require improvement in traffic, connectivity, among others.

## **Philippines as Research Hub on Global Health Innovations to deal with Climate Change and Natural Disasters**

Prof. Shinichi Egawa  
Professor, Tohoku University, Japan

Prof. Egawa discussed the Argo project in Japan, an integrated global observation strategy. The monitoring system will greatly contribute to the study of inter-annual, decadal and inter-decadal variations of the climate system and long-term weather forecast.

Likewise, he mentioned that the World Health Organization (WHO) and World Meteorological Organization (WMO) are collaborating to enable access and utilization of climate and weather data for health sector decision needs. The partnership was required for global scale action to protect human health from climate change. Also, he brought up the International Workshop on

Education of Disaster Medicine and Public Health held on February 2016 wherein the Philippines was well-represented.

He shared the health-centered paradigm of R&D and S&T based on Sendai Framework in relation to health innovation for climate change and disaster. He proposed some aspects to look into that could be part of the innovation hub such as reducing hazard exposure (existing and emerging hazard, early warning, environmental intervention), reducing vulnerability (inclusive disaster risk reduction, sustainable urbanization, creation of healthy community), and increasing the coping capacity (universal health coverage, increase the accessibility to mental and physical health service, install disaster medicine in general health curriculum, longevity of well-being).

Prof. Virginia Murray

Consultant in Global Disaster Risk Reduction

Vice-chair, United Nations International Strategy for Disaster Reduction  
(UNISDR) Science and Technical Advisory Group Wellington House

Prof. Murray considered the idea of having a research hub really interesting as an outcome of Forum 2015 and she said that it may be a way to take forward what we all need. The Philippines is one of the countries experiencing many disasters and the knowledge on how the country managed these should be shared widely.

Many things happened in 2015 – the Sustainable Development Goals (SDGs) in September, Paris Agreement in December while the Sendai Framework for Disaster Risk Reduction was drafted in March. Prof Murray thought the Philippines may wish to consider the Sendai Framework further for the proposal.

Likewise, she mentioned that the Philippines should consider the Science and Technology Roadmap to support the implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030 by UNISDR if they wanted to push forward with the hub.

To implement the Sendai Framework, it is critical to enhance disaster preparedness for effective response. She said that the Sendai Framework offers enough opportunity to engage the global stakeholders on guidance and policy issues that could impact on national, regional, and global preparedness.

### **The Philippines as global hub for CCA-DRR in health**

Dr. Ronald Law

Medical Officer V/Chief of Preparedness Division

Health Emergency Management Bureau,

Department of Health

Dr. Law centered his presentation on a diagram showing science to policy to action to outcomes. He emphasized that the researchers, policymakers, and practitioners' role are interconnected and they have to work together to achieve their goals for research. He named some actions that may be undertaken for the research hub, such as (1) development of DRRM-H research agenda with partners and stakeholders, (2) research capacity building of researchers, policymakers and practitioners, (3) conduct of and publication of research (policy, operations and translational), and (4) regular research fora and related activities.

He noted that climate change and disaster risk reduction are more glamorous than health and we have to take advantage of that. He said that the Philippines is the place to be to learn about more on disasters.

### **Dr. Renato U. Solidum**

Director

Philippine Institute of Volcanology and Seismology

Dr. Solidum provided four (4) strategic advantages that make Philippines an ideal hub for disaster risk reduction and climate change adaptation: (1) The country is prone to many natural hazards and climate change impacts which also makes it experienced in developing potential solutions. (2) It has human resources committed to reduce risks from natural hazards and climate change. (3) There is already the presence of organizational structures such as the DOST, DOH and NDRRMC that can support the initiative though there might be a need to focus on certain things to realize the development of a hub. (4) Filipinos have the attitude and health to help, share, and work with others.

He also highlighted that among the many "earthly" attributes of Filipinos, it is the right heart of the Filipinos that will ultimately realize the goal of making the Philippines as the hub for disaster risk reduction and climate change adaptation with a vision of being "a leading global science and technology center in helping develop "communities" that are safe and resilient to natural hazards and climate change."

### **Ms. Maria Monina M. Flores**

Executive Director

Corporate Network for Disaster Response

Ms. Flores provided some key questions that must be answered in the process of considering Philippines as a global hub of health research, DRR and CCA. At the level of "life", key questions include determining the kind of future we are envisioning and the path of human evolution. At the "planet" level, she mentioned the need to account for human errors and restoring balance. At the "society" level, questions include how to diversity and court unity. And finally, at the "self" level, questions of how to heal and find out true nature should be asked. Ms. Flores concluded

that the ultimate the purpose of Philippines being a global hub should be to transform lives, heal the planet, unite the society and for self-awareness.

### **Dr. Carlos Primero Gundran**

Professor

University of the Philippines Manila - College of Medicine

Dr. Gundran shared that the Philippines being one of the most vulnerable countries to natural hazards, has a wealth of data to share about disasters in health. However, little is known about the experiences of the country. The Philippines rank low in in the area of disaster research and disaster research is not present in the current research agenda. He concluded that these data needs to be mined, otherwise there will not be much benefit from the richness it offers.

### **Synthesis**

Dr. Jessie Manuta

Consultant

Tropical Institute for Climate Studies, Ateneo de Davao University

Dr. Manuta shared the key messages in the session including the Philippines being a disaster hub but there is a big gap in the data research. The Philippine experience and data must be mined for something beneficial to come out of it. Strong support has been voiced for the intent to make the Philippines global health innovation hub dealing with climate change and disasters.

He also shared some future steps that will/need to be undertaken to realize this goal which include doing a feasibility study to determine the focus, roles of institutions involved, partnerships and conflicts that needs to managed, and funding required in relation to the establishment of the hub. He also shared some preliminary commitments from the DOST such as the creation of a task force.

### **Awarding and Closing**

**Master of ceremonies: Mr. Ralph G. Pulanco**

2016 DOST-PCHRD-GRUPPO MEDICA AWARD FOR OUTSTANDING UNDERGRADUATE THESIS IN HERBAL MEDICINE

1st Place:

Giselle P. Padilla (presenter), Francesca Marie A. Quetua, Symphony Jane A. Tapaoan, Kathlyn Joy D. Tropicales, and Jeffer Dan T. Yambao (Our Lady of Fatima University)/ Study Title: Efficacy of the Mosquito Repellent Spray of the Crude Extract from the Leaves of *Alpinia elegans* (Tagbak) against *Aedes aegypti*

2nd Place:

Gene Rhode F. Pantig (presenter), Karen Joy E. Manalon, Peter Paul S. Laggui Danette Cyslinn L. Guantia, Phyllis L. Cortez, and Roshelyn S. Balane (Centro Escolar University). Study Title: Characterization, Antioxidant and Cytotoxic Activity Screening of Fucoidan from Bal-Balulang (*Hydroclathrus clathratus*)

3rd Place:

Marielle Jian C. Aspa (presenter), Christian Michael M. Arguelles, and Maria Cruzita M. Amatorio (University of Perpetual Help–Dr. Jose G. Tamayo Medical University). Study Title: Antifungal Cream from the Volatile Oil of the Leaves of Mayana (*Plectranthus scutellarioides* (L.) R. Br.)

#### PROFESSIONAL ORAL RESEARCH ORAL PRESENTATION

1st Place:

Dr. Rey Capangpangan (Caraga State University, CARAGA). Study Title: Detection and Sequential Enrichment of Glycopeptides and Phosphopeptides as Cancer Biomarkers by Functionalized NH<sub>2</sub>/ZIC HILIC-type Magnetic Nanoprobes

2nd Place:

Ms. Claribel Matias (Saint Mary's University, Region 2). Study Title: Isolation of the Cytotoxic, Angiogenic, and Antitumor Compounds from *Trichaleurina celebica*

3rd Place:

Dr. Amiel Nazer Bermudez (University of the Philippines Manila, NCR). Study Title: Factors Contributing to Maternal Deaths in a Referral Hospital in a Philippine Province: A Modified Three-Delay Model

#### PROFESSIONAL RESEARCH POSTER PAPER PRESENTATION

1st Place:

Bella G. Panlilio, Mona Lisa B. Lacson, Carolyn A. Arbotante, Catherine S. Bacani, Carmela B. de Leon, Jaylin V. Villanueva, Elivie Gutierrez-Ariola, and Neil C. Tunguilut (Angeles University Foundation, Pampanga State Agricultural University). Study Title: The Anti-hyperglycemic Properties of the Ethyl Acetate, and Hexane Extracts from Kondol Leaves (*Benincasa hispida Cogniaux*)



2nd Place:

Ma. Rosita S. Quitola (Department of Pediatrics, Mariano Marcos Memorial Hospital and Medical Center). Study Title: The Efficacy and Safety of Spirulina Supplementation in the Treatment of Iron Deficiency Anemia in Preschool age Children: A Randomized Controlled Trial

3rd Place:

Alfredo A. Hinay Jr., Lilen Dorothy C. Sarol (Medical Laboratory Science Program, University of Immaculate Conception, Davao City). Study Title: Screening of *Mentha cordifolia* Opiz Buffer Crude Extract as a Putative HIV-1 Post-translational Protease Inhibitor

### **BEST POSTER, CONSORTIUM EXHIBIT CONTEST**

Western Visayas Health Research and Development and Consortium

#### STUDENT RESEARCH ORAL PAPER PRESENTATION

1st Place:

J. Bangero, DK Calise, LJ dela Pena, F Delos Reyes, E Documento, V Durana, AK Faculin, PKM Ong, RL Pueblo, NA Roldan (Western Visayas Health Research and Development Consortium). Study Title : In Vitro Cytotoxic Effects of Bee (*Apis mellifera*) Venom in HCT116 Colon Cancer Cell Lines

2nd Place:

Mark Elcyn Ramos, Justine Zamuco, Allison Alcantara, Cesar Salvador Casusi, Mikka Aynne Reyes, Austin Gaus Dela Cruz, Jesseth Erica Matias, Denise Miguel, Elaiza Joy Narciso, and Evelyn Oda (Cordillera Health Research and Development Consortium). Study Title: Tomato Paste Lycopene as an Anticoagulant

3rd Place:

Diomerl Edward Baldo and Jocelyn Serrano (Bicol Consortium for Health Research and Development). Study Title :Screening for Intestinal Anti-Inflammatory Activity of Alipinia galanga against Acetic-acid Induced Colitis in Mice (*Mus musculus*)

#### STUDENT RESEARCH POSTER PAPER PRESENTATION

1st Place:

Noel C. Salvoza, Abigail S. Alonzo, Rikki Kent D. Ba-aco, Nadine Bacalango, Jed Vincent Bacallan, Xavier George H. Cardos, Glessa Francesca G. Garibay, Jacqueline B. Javier, Bien Carl E. Pescasiosa

(Western Visayas Health Research and Development Consortium). Study Title: In Vitro Evaluation of Anti-Staphylococcal, Anti-Cervical Adenocarcinoma, and Anti-Hepatocellular Carcinoma Activities of Aqueous, Butanol, and Chloroform Fractions of Durian (*Durio zibethinus*) Ring Methanolic Extracts

2nd Place:

Norman Quilantang, Vanessa May Ybanez, Crecialyn Pulvera, Rommel Bacabac, and Frances Edillo (University of San Carlos- Talamban Campus). Study Title: Isolation and In Vitro Characterization of Adipose Derived Stem Cells From *Rattus norvegicus Berkenhout* ( Rodentia: Muridae)

3rd Place:

Mark Archibald D. Balindong, Angeline D. Beltran, Kevin K. Caballes, Angel C. Cabugwason, Greenly Sol S. Lescano (Liceo de Cagayan University. Study Title: The Effect of Iodized and Sea Salt Used as Control Agents for Mosquito Larvae in the Top Four Barangays in Cagayan de Oro City with Highest Dengue Incidence

### **Closing Remarks**

Dr. Maria Josefina P. Abilay, Regional Director of DOST - MIMAROPA gave the Closing Remarks. She quoted that "all good things must come to an end." She emphasized that it is an honor and privilege on the part of their organization (DOST - MIMAROPA) to be trusted with this task.

She also mentioned the great significance of conducting research, which they owe to the experts who imparted their knowledge and expertise. She also thanked the MIMAROPA Health Research and Development Consortium (MHRDC).