On behalf of the entire SEAMEO TROPMED Network, I would like to congratulate SEAMEO TROPMED Philippines (College of Public Health, University of the Philippines Manila), its officials, faculty members, and staff on their 95th Foundation Anniversary. At the same time, the College of Public Health is also celebrating its 57th anniversary as a Regional Centre for Public Health (TROPMED Philippines) under the Southeast Asian Ministers of Education Organization (SEAMEO). These are indeed important milestones in your history. Your continued service to the Southeast Asian region in the field of public health, hospital administration and occupational health are testaments to the unwavering commitment of the College to public health service.

The publication of this commemorative issue in collaboration with the *Philippine Journal for Health Research and Development* highlights the research contribution of the College of Public Health/TROPMED Philippines to the body of knowledge needed to address the health challenges facing the country and the region.

The theme for this year's celebration "Leadership in Higher Education in Public Health in the Now Normal for Sustainable Development" clearly elucidates the trailblazing role of the College in the field of public health.

TROPMED Philippines as part of the SEAMEO TROPMED Network continues to operationalize the vision and the mission of TROPMED Network in education, research, and public service in the Southeast Asia region and beyond.

Let me reiterate my congratulations to everyone and looking forward to more productive years with you.

Pratap Singhasivanon Secretary General/Coordinator SEAMEO TROPMED Network

My warmest greetings to the College of Public Health, University of the Philippines Manila, for its 95th founding anniversary and as it celebrates its 57th anniversary of its affiliation with the Southeast Asian Ministers of Education Organization (SEAMEO).

This is indeed a testament to the important role that UP CPH has undertaken in the service of the country and the Southeast Asian region throughout its more than nine decades of existence.

I would also like to congratulate the eight (8) research articles from UP CPH faculty and researchers that were selected for publication in the commemorative issue of the *Philippine Journal for Health Research and Development*, which will cover topics that address different major public health challenges that our country is facing in the new normal.

The pandemic situation has highlighted urgent needs in the field of higher education. As we are charged with the duty to mold future professionals, the pandemic has underscored the need for health professionals that are adequately trained, sufficiently equipped and strategically distributed to provide much needed health services to as many people as possible. Fulfilling this need amid the pandemic situation will require reliance on scientific evidence, agility in leadership, and flexibility in approach.

As Chairman of the Commission on Higher Education, I am grateful that the UP CPH and other institutions have responded to the challenge of helping formulate guidelines for HEIs for limited reopening of face-to-face classes.

In a highly dynamic environment, we will need to be responsive to change in our respective institutions, but in our current situation, we will need to respond as one higher education sector. Together, we will respond to the pandemic, and together we will continue our duty as higher education institutions in the Now Normal, so that we will evolve together.

Thank you very much. Mabuhay ang UP College of Public Health!

J. Prospero E. De Vera III, DPA Chairman Commission on Higher Education

My warmest greetings and hearty congratulations to the University of the Philippines-College of Public Health (UP CPH) on the celebration of your 95th founding anniversary and 57th year of being designated as a Centre for Public Health by the Southeast Asian Ministers of Education and Organization (SEAMEO) in 2022!

From the very beginning of the COVID-19 pandemic, we have been perplexed by its enormous effects, and its continuing impact makes us realize the value of excellence and commitment in equal measure. The increasing burden of our fight with COVID-19 has driven the cost of healthcare to unprecedented levels, and the role of medical professionals is more significant than ever. The emergence of these infectious diseases requires our medical professionals to continue honing their great minds in the practice of the medical profession. This consequently demands for more research ventures, publications, and academic undertakings that cover topics that address different major public health challenges that our country is facing in the new normal.

It is on these premises that we laud the UP CPH for continuously collaborating with *Philippine Journal for Health Research and Development* (PJHRD) to delve into more studies that contribute to the betterment of our health systems. This aspect is timely underscored by your celebration's theme "Leadership in Higher Education in Public Health in the Now Normal for Sustainable Development."

We congratulate all of your research publications that were chosen to be published in the PJHRD. May we all stay true to our commitment in advancing Philippine medicine in spite of challenges. May we all serve true to the tenets of humble service, with our minds and hearts imbued with the compassion, grace, and wisdom granted to us by our omnipotent Father.

Maraming salamat, at mabuhay tayong lahat!

Francisco T. Duque III, MD, MSc Secretary Department of Health

It is a great pleasure for me, on behalf of the Department of Science and Technology, to extend my warmest congratulations to the University of the Philippines College of Public Health on its 95th foundation anniversary and its 57th year of being designated as a Center for Public Health by the Southeast Asian Ministers of Education and Organization.

Being a close partner of DOST, the UP CPH has contributed immensely to the welfare of the Filipino people by bringing innovative solutions to the country's most pressing public health needs. Over the past nine decades, this institution has continued to make remarkable contributions to educating Filipino minds and providing the healthcare industry with excellent and dedicated professionals to meet the challenges brought by the country's evolving healthcare needs.

As you distinguish 95 years of success, the DOST is proud to have played its role in this milestone. Apart from its excellence in teaching, I applaud the College for gaining international recognitions for its research and extension achievements and services, being designated as a center for public health by SEAMEO for over five decades.

On this very special occasion, the DOST takes the opportunity to wish UP CPH continuing success in its future endeavors. In the interest of the Filipino people, let us continue to broaden and strengthen our partnership to best support our healthcare system through research and innovation.

Fortunato T. Dela Peña Secretary Department of Science and Technology

I warmly congratulate the College of Public Health (CPH) of the University of the Philippines Manila on its 95th foundation and the 57th year of its designation as Centre for Public Health by the Southeast Asian Ministers of Education and Organization (SEAMEO)!

I congratulate the UP CPH's faculty, administrators, students, staff, and alumni on this significant milestone. Since its establishment in June 1927 as the School of Sanitation and Public Health—later renamed to the School of Hygiene, the Institute of Hygiene, the Institute of Public Health, and finally the College of Public Health in 1986— the UP CPH has demonstrated the core values of honor, excellence, nationalism, commitment, and professionalism in all its teaching, research work, administrative work, and public service.

The outstanding work the College has done over nearly a century is recognized repeatedly. As early as 1965, it was designated as a National Center for Public Health by the Southeast Asian Ministers of Education Organization (SEAMEO) and later as a Regional Center in 1993. The College has drawn generations of students from SEAMEO member countries and other countries to the UP CPH. Indeed, the UP CPH to the development and promotion of global public health and sanitation has been undeniable.

I find it noteworthy that the UP CPH was founded less than a decade after the 1918-1919 Spanish flu pandemic ravaged the country. With the world battling a new coronavirus pandemic, the urgency of adequate public health measures and education, as well as science-based policymaking, has been underscored, especially among our underserved, marginalized, and far-flung communities.

Today, the UP CPH is moving forward. Simultaneously, our government strives to achieve targets under the UN's Sustainable Development Goal. We hope to end hunger, ensure the availability of clean water and sanitation, and promote healthy lives and well-being for all. Our people will look even more to the UP CPH for leadership in public health for sustainable development.

And so, I join the UP community in congratulating the UP CPH. Thank you for your outstanding and heroic service, particularly during the last two years. I also commend our UP CPH faculty and researchers whose research papers are featured in this special commemorative issue of the prestigious *Philippine Journal for Health Research and Development*. May you all continue to harness your knowledge and intellectual resources to address the different public health challenges our country faces as we move into the "next normal."

Mabuhay ang UP Manila College of Public Health! Mabuhay kayong lahat!

Danilo L. Concepcion President University of the Philippines

M E S S A G E

Warmest greetings to the *Philippine Journal for Health Research and Development* and to the University of the Philippines College of Public of Health (UP CPH).

For almost a century, the UP CPH stood steadfastly against the many trials and tribulations the Philippines has faced, from wars to pandemics. As a bastion of public healthcare, the new normal is simply business as usual as it still endeavors to give the kind of healthcare that every Filipino deserves. This commemorative issue will serve as a testament to the College of Public Health's ceaseless efforts, no matter how insurmountable the hurdles may seem.

UP CPH remains one of the Philippine Council for Health Research and Development's most reliable partners in building our nation's capacities and constantly improving our healthcare system. We, at the Council, will stay true to our commitment to support the National Center of Excellence and Leadership in Public Health in its undertakings for many more years to come.

Congratulations on your 95th foundation year and your 57th year of being designated as a National Center for Public Health by the Southeast Asian Ministers of Education and Organization.

Mabuhay ang UP CPH! Padayon at para sa marami pang mga taon!

Jaime C. Montoya, MD, MSc, PhD, CESO II Executive Director Philippine Council for Health Research and Development

On your 95th anniversary and 57th year as a SEAMEO Centre for Public Health, I congratulate the College of Public Health for recognizing the value of disseminating your researches through this commemorative issue of the *Philippine Journal for Health Research and Development*.

Excellence and relevance in research is a hallmark of a dynamic and robust university. Public health has always been a rich and significant field where scientific investigation has proven to be a powerful tool for the generation of technologies and innovations.

UP Manila has always supported the publication of its studies in accredited journals and other platforms, and their presentation in national and international conferences and forums. This is why we make it a point to increase the funds allotted for Research Dissemination Grants and Faculty Development Grants every year.

This publication and dissemination contribute to the high research productivity and integrity that enable UP Manila to post high citation scores leading to UP's higher world rankings during the past years.

I commend the CPH faculty for leading the way in impactful and priority-based researches that address the country's pressing health needs and problems. We are proud that your outputs are featured in this special PJHRD issue.

Carmencita D. Padilla, MD, MAHPS Chancellor University of the Philippines Manila

GUEST EDITORIAL

Introduction to the Commemorative Issue

As the College of Public Health (CPH), University of the Philippines Manila celebrates its 95th Foundation Anniversary and its 57th year of being designated as a Centre for Public Health by the Southeast Asian Ministers of Education and Organization (SEAMEO) this year, the CPH, also designated as the SEAMEO TROPMED Regional Centre for Public Health, Hospital Administration, Environmental and Occupational Health (TROPMED Philippines) is pleased to collaborate with the Philippine Journal of Health Research and Development (PJHRD) in this special commemorative issue. This issue highlights the contributions of CPH/TROPMED Philippines in the field of public health research. The theme of our commemorative issue is "Leadership in Higher Education in Public Health in the Now Normal for Sustainable Development."

As a SEAMEO Regional Centre, the CPH/TROPMED Philippines continues to lead and work towards sustainable development through its mandates in teaching, research, and public service amidst the challenges of the COVID-19 pandemic. It has continued to advance the field of public health in the Philippines and in the region through innovative and translational research. The pandemic has highlighted even further the importance of research leading to the development of diagnostic tools, drugs, vaccines, policies and other public health interventions that have contributed in mitigating the impact of the pandemic.

For this commemorative issue of PJHRD, eight research articles from our faculty, Research, Extension and Professional Staff, and students have been selected for publication. These research articles tackle different challenges in the field of public health such as health literacy, nutrition, environmental and occupational health, COVID-19, and neglected tropical diseases. These articles also reflect the vision of our College/Centre to be a Centre of Excellence and Leadership in public health strategically responsive to national and global development.

Since the start of the COVID-19 pandemic, several researches have looked into ways on how to combat the spread of the virus. **Altura and Ngelangel's** study determined the anti-viral activity of the mouthwash hexetidine, specifically in reducing viral concentration of Human Coronavirus OC43 and Influenza A virus. The methods employed in their study may be used to explore the antiviral activity of hexetidine mouthwash against the other virulent members of the Coronavirus Family, including SARS-CoV-2. Neglected tropical diseases are still very much present especially in poverty stricken communities and continue to be a burden to the poor even during this pandemic. The study by **Belizario** *et al.* described the prevalence and distribution of foodborne trematodiases (FBT) and taeniasis in the country, and revealed the hidden burden of these diseases. They were also able to identify species not known to be endemic in selected areas in Southern Philippines. Their major findings highlight the need for integrating control programs for such conditions with other tropical diseases that will help in optimizing limited resources.

Non-communicable diseases (NCDs) remain to be a leading cause of disability and death in our country. Health literacy is an important component in the self-management of hypertension. The study of **Mamangon** *et al.* was able to assess the psychometric properties of the Filipino version of the Health Literacy Short-Form 12 among adult hypertensive patients. Researches focusing on NCDs greatly contribute in providing measures for its prevention and control. One way to reduce the risk of having NCDs is to have proper nutrition. Better nutrition is related to improved child health, stronger immune systems, and a lower risk of NCDs. The study done by **Ignacio and Castro** showed how a dietary supplementation program affects the anthropometric status of pre-school children.

We have also discussed in this commemorative issue the importance of inter-organizational collaboration and partnership in drug treatment and rehabilitation, as well as understanding the significance of mental health as a public health issue. **Antonio and Li** systematically reviewed the features, outcomes, facilitators, and barriers of inter-organizational collaboration in drug rehabilitation and proposed insights to improve policy and practice. They obtained evidence that provides good descriptive content on what, how and how well the inter-organizational collaborations have been conducted in drug treatment and rehabilitation. It is also noteworthy to mention that mental health is currently a growing global public health concern especially among young people as they are more vulnerable to risky behaviors. The study of **Furio** *et al.* determined whether a relationship exists between educational attainment and suicide attempt. They also proposed interventions that can be applied and future studies that can be explored.

This commemorative issue also presents researches in the field of Occupational Health and Safety. Dela **Cruz** *et al.* determined the factors that affect the intent to use helmets as well as the factors associated in consistent helmet use among motorcycle drivers. Their results provide substantial contribution in addressing safety and compliance issues on helmet use among motorcycle riders. Meanwhile, the study conducted by **Manalo** *et al.* provided evidences on the extent of workplace bullying among employees of a public higher education institution. The study serves as a wakeup call for recognition of bullying as a public health concern in the workplace, and for consideration of policies and programs to promote overall employee well-being.

We would like to express our sincerest gratitude to PJHRD for this valuable opportunity to co-produce this special commemorative issue, the Editor-in-Chief Dr. Carl Abelardo Antonio for extending his expertise to this endeavor, and to all the authors, researchers, partners, collaborating institutions and agencies, as well as people in our communities, which all contributed to achieving this major research dissemination output.

Through this commemorative issue, the CPH/TROPMED Philippines hopes to continue to contribute in shaping the public health landscape in the country, the region and beyond through public health research that make impact by way of enhanced health policy and service delivery in the now normal towards sustainable development.

Vicente Y. Belizario Jr., MD, MTM&H Dean and Centre Director College of Public Health University of the Philippines Manila SEAMEO TROPMED Regional Centre for Public Health, Hospital Administration, Environmental and Occupational Health