



# HEALTH SYSTEM CHALLENGES

A DEVELOPING COUNTRY PERSPECTIVE

Dr. Myint Htwe



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**Health Sysytem Challenges:  
A Developing Country Perspective**

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# Acknowledgement

 E. Dr. Myint Htwe is a public health professional with vast experience in the field of the health sector, both national and international. The MBDS would like to acknowledge his contribution and invaluable effort in producing this book. This is the reflection of the knowledge and experience gained while he served as Union Minister for Health and Sports in Myanmar from 1 April 2016 to 31 January 2021. Many issues presented in this book reflect the ground reality of the situation of a developing country like Myanmar. Several suggestions, down-to-earth approaches, and ideas put forward may also be applicable in other developing countries. These could be very useful for public health professionals, epidemiologists, and administrators running the Health Care Delivery System in a developing country. Many health problems, issues, and management challenges are similar across all developing countries. In this regard, MBDS is proud to publish this document, which is very important for the public health domain.

Topics such as “being a versatile public health professional, health literacy promotion, producing ethically minded professionals, principles and steps in managing the epidemic/pandemic, preparedness for future waves of COVID 19, domino effect on population health, supply chain management, effectiveness and efficiency of the health care delivery system, role of population vis-à-vis health status of the country, basic health services staff vis-à-vis achieving UHC, management of hospitals in a developing country, producing well-qualified MPH graduates, harnessing the contribution of NGOs, disease surveillance, ringing the bell for the Ministry of Health, etc.” are included.

This book is intended not only to strengthen public health development and coordination mechanism but also in improving management and administrative aspects of running the Health Care Delivery System. It provides sub-national and national-level perspectives in a developing country setting. It also aims to inform policymakers, public health professionals, epidemiologists, and health program managers for effective implementation of public health interventions. Therefore, experiences that had been documented in this book can potentially be used and adopted as references, not only for Myanmar, but also for other Mekong region countries and LMIC countries setting to make public health programs more effective and efficient.

**Dr. Moe Ko Oo**

Secretariat

Mekong Basin Disease Surveillance (MBDS)



H.E Dr. Myint Htwe  
Union Minister for  
Health and Sports  
(2016 –2021)

## Author profile

**H.E.** Dr. Myint Htwe, MBBS, DP&TM, MPH, DrPH., took responsibilities of Union Minister for Health and Sports in the Union of Myanmar from 1 April 2016 to 31 January 2021. Minister Htwe earned his medical degree (MBBS) in 1973 and diploma in preventive & tropical medicine (DP&TM) from the Institute of Medicine I, Myanmar in 1979. He also holds a master degree in public health (MPH) from the Institute of Public Health, University of the Philippines Systems in 1982; and in 1992 he received a doctorate in public health (DrPH) from the Johns Hopkins University, School of Hygiene and Public Health, Baltimore, MD, U.S.A. He took the health policy making role in the Government of the Republic of the Union of Myanmar and taking a number of key positions, including as Chair of the Preventive and Social Medicine Society of the Myanmar Medical Association, and Chair of the Ethics Review Committee (Institutional Review Board) of the Department of Medical Research at the Ministry of Health. Minister Htwe is a former member of the Executive Committee of the Myanmar Academy for Medical Sciences. He also received the prestigious award from his alma mater, **“Distinguished Hopkins Alumni for 2020”**.

Dr. Myint Htwe is a public health professional with a long history of service in the health sector. He has spent over 16 years with WHO, serving in a variety of roles in the South East Asia Regional Office, including Regional Advisor for Research and Policy Cooperation, Regional Adviser - Evidence for Health Policy, Chief – Internal Review and Technical Assessment, and Director Programme Management.

H.E. Dr. Myint Htwe joined WHO Regional Office for South-East Asia in 1994 and worked until 2010. Before that he served as Chief of the Health Systems Research Unit and Chief of the International Health Division of the Minister's Office, Ministry of Health. He also served as a faculty member of the Department of Preventive and Social Medicine, and the Department of Anatomy, Institute of Medicine I, Rangoon. He worked as an epidemiologist/malariologist for the Vector-borne Diseases Control Division, Department of Health, Ministry of Health, Myanmar

H.E. Dr. Myint Htwe has vast experience in international health for coordinating, supervising, managing and providing overall technical and administrative guidance to health professionals working in various public health areas including communicable and non-communicable diseases control programmes (vector-borne and zoonotic diseases, surveillance programmes), family and community health services, expanded programme on immunization, emergency and humanitarian assistance, epidemiological and outbreak control services, medical education, hospital management, research promotion, health situation and trend assessment, research policy and strategic cooperation, food and drug administration, human resources for health, international health and coordination, and other areas such as health system strengthening and regional collaboration. ■

# Preface

The discussions made in the chapters are framed in the context of a developing country's situation. Promoting the public health domain in a resource-limited setting is quite different from interventions that would be fielded in developed countries. The health situation scenarios in developed countries are also quite different from developing countries. Of all types of resources, human resource for health is one of the key determinants to lead the program to a successful one. A strong human resource for health of the Ministry of Health together with the population possessing a high health literacy rate is a good predictor for a healthy population in the country.

There are several challenges in running a Health Care Delivery System in a developing country in terms of administrative, management, logistics, human resource, budget and finance, and technical aspects. These challenges are not insurmountable. With proper teamwork, coordinated approaches, rational resource allocation, robust and responsive health information system, built-in implementation research, rewarding career ladder for staff, systematic capacity building training programs for staff, and Continuing Professional Development programs, we can improve the health status of the population and reaching our ultimate aim of Universal Health Coverage. If all these activities are carried out under the umbrella of forward-looking National Health Policy and clear-cut and costed National Health Plan, we are likely to overcome the challenges successfully. Within the context of the above issues, the topics discussed in this book range from desirable characteristics of becoming a versatile public health professional to abstract thinking articles like actions to be taken if a person is appointed as program manager of the vector-borne diseases control program.

On 1 April 2016, I delivered a speech that included guiding principles, strategies, and interventions that were intended to be carried out during my five-year tenure as Union Minister for Health and Sports. The full text of the speech is attached as annex 1. The policy, strategic, technical, management, logistics, and administrative points mentioned in the speech are generic and still valid up to now from a public health point of view. It is hoped that the challenges that we encountered in managing our work and how we have collectively tried to overcome them in a developing country like Myanmar would be useful to the upcoming public health professionals, administrators,

health program managers, and young epidemiologists in other developing countries, who would be serving in the respective Ministries of Health. The health situation, as well as management, administrative, technical, and logistics issues of the Health Care Delivery System in developing countries is almost similar. Therefore, policymakers, health professionals, and administrators working in other developing countries would get some insights and innovative approaches after going through Myanmar's experience shared here in this book.

For health interventions or activities to be carried out effectively in the country, we need to have a clear-cut National Health Policy and National Health Plan. Rational, doable, realistic, costed, forward-looking, and time-bound National Health Plan must be made available. It should be formulated jointly by all stakeholders in the country with proper identification of division of labor among the stakeholders. There must be a sense of ownership of the National Health Plan by all stakeholders. The central nervous system is important for the human body. Similarly, the National Health Policy and National Health Plan are essential for the effective functioning of the Health Care Delivery System of the country.

The health status of the population can only be improved if public health interventions are realistic and up to the mark. Therefore, a strong public health system with a good public health infrastructure should be the ultimate aim of the Ministries of Health. A strong public health system should always be coupled with robust and dynamic monitoring and evaluation framework based on the responsive health information system. The importance of public health cannot be over-emphasized. There are two major domains, i.e., public health and clinical/hospital domain, in the Ministries of Health. They are reinforcing and complementing each other. Therefore, both domains must be strengthened simultaneously and in an integrated way. A strong public health domain can effectively reduce the workload of the clinical/hospital domain.

The second purpose of writing this book is to aim towards establishing a strong and sustainable public health system in developing countries. The ideas put forward and discussion points elicited here are from the perspective of a developing country taking into consideration all the characteristics prevailing in resource-limited settings. The twenty-one chapters in this book are complementary and closely linked to thirty chapters in the *"Reflections of a Public Health Professional"* book published by the Mekong Basin Disease Surveillance (MBDS) to commemorate its 20th anniversary.

**Dr Myint Htwe**

Public Health Professional

December 2021

# Disclaimer

The views expressed in this book and web page are those of Dr Myint Htwe and do not necessarily reflect the views or opinions or policies of the Ministry of Health and Sports, Myanmar or the World Health Organization, or various organizations, associations, and committees with which the author has been associated for many years. The author alone is responsible for the ideas and opinions expressed. The articles or contents of the book and web page can be freely reviewed, abstracted, reproduced or translated in part or in whole, but not for sale or for use in conjunction with commercial purposes. In no event shall the author be liable for the inconveniences or damages arising from the use of facts and information contained in the book and web page. ■

# Gratitude

I would like to put on record and convey my greatest gratitude to the then faculty members of the Institute of Medicine 1, Rangoon; Post-graduate School of Tropical Medicine, Rangoon; Institute of Public Health, University of the Philippines Systems; and School of Hygiene and Public Health, the Johns Hopkins University, who educated me vast knowledge on medicine, tropical diseases, epidemiology, biostatistics, international health, and public health. I would also like to appreciate and thank my colleagues from various disciplines working in the Ministry of Health and Sports and the World Health Organization at the country, regional, and headquarters level. Without the technical knowledge and experience shared by them, it would not be possible for me to further share my experience with the health professionals in the public health domain. Last, but not least, my wholehearted appreciation to my wife Dr. Nang Kham Mai for her constant encouragement and support while writing this book. ■



# Abbreviation

ADB	Asian Development Bank
AEFI	Adverse Event Following Immunization
APHA	American Public Health Association
APLMA	Asia Pacific Leaders Malaria Alliance
AusAID	Australian Agency for International Development
BHS	Basic Health Services
CDC	Centers for Disease Control and Prevention
CEO	Chief Executive Officer
CHAI	Clinton Health Access Initiative
CIDA	Canadian International Development Agency
CPD	Continuing Professional Development
DFID	Department for International Development
DHIS	District Health Information System
DP&TM	Diploma in Preventive & Tropical Medicine
DrPH	Doctor of Public Health
EPI	Expanded Program on Immunization
ERC	Ethics Review Committees
FDA	Food and Drug Administration
Gavi	Global Alliance for Vaccines and Immunization
GPs	General Practitioners
H1N1	Influenza A Virus Subtype H1N1
H2N2	Influenza A Virus Subtype H2N2
H3N2	Influenza A Virus Subtype H3N2
H3N9	Influenza A Virus Subtype H3N9
HA	Health Assistant
HCDS	Health Care Delivery System
HIS	Health Information System
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome
HQ	Headquarters
ICN	International Council of Nurses
ICU	Intensive Care Unit

IEC	Information, Education and Communication
IHD	International Health Division
IHR	International Health Regulations
IMF	International Monetary Fund
INGO	International Non-Governmental Organization
IRA	Internal Review and Technical Assessment
IRB	Institutional Review Board
JICA	Japan International Cooperation Agency
JSI	John Snow Inc.
KOFIH	Korea Foundation for International Healthcare
KOICA	Korea International Cooperation Agency
LHV	Lady Health Visitor
LMIC	Low- and Middle-Income Countries
MAMS	Myanmar Academy of Medical Sciences
MBBS	Bachelor of Medicine, Bachelor of Surgery
MBDS	Mekong Basin Disease Surveillance
MD	Doctor of Medicine
MERS-CoV	Middle East Respiratory Syndrome Coronavirus
MHA	Master in Hospital Administration
M-HSCC	Myanmar Health Sector Coordinating Committee
MMA	Myanmar Medical Association
MoH	Ministry of Health
MoHS	Ministry of Health and Sports
MoU	Memorandum of Understanding
MPH	Master of Public Health
MW	Midwife
NGO	Non-Governmental Organization
NLD	National League for Democracy
NSCMS	National Supply Chain Management System
PAHO	Pan American Health Organization
PCR	Polymerase Chain Reaction
PFSCM	Partnership for Supply Chain Management
PHN	Public Health Nurse
PHS	Public Health Supervisor
QALYs	Quality Adjusted Life Years
RAI	Regional Artemisinin-resistance Initiative
RBM	Roll Back Malaria Partnership
RCR	Responsible Conduct of Research
SARS-CoV	Severe Acute Respiratory Syndrome Coronavirus

SCMS	Supply Chain Management System
SDGs	Sustainable Development Goals
SEARO	South-East Asia Regional Office
SIDA	Swedish International Development Agency
SOPs	Standard Operation Procedures
TB	Tuberculosis
TED	Technology, Entertainment, Design
THET	Tropical Health and Education Trust
UHC	Universal Health Coverage
UN	United Nations
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNDCP	United Nations Drug Control Programme
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNOPS	United Nations Office for Project Services
USA	United States of America
USAID	United States Agency for International Development
VBDC	Vector-borne Diseases Control
VOC	Variants of Concern
VOI	Variants of Interest
WB	World Bank
WHO	World Health Organization
WMA	World Medical Association

# APPRECIATION

I would like to appreciate Dr Moe Ko Oo and his team from the MBDS Secretariat for valuable technical suggestions to improve the overall quality of the document and to Dr Soe Kyaw, editor and MEDIART, Academic Publishing Consultancy for the unique publication design. ■

## Getting full advantage out of reading the twenty-one selected topics in this book

Among many interesting topics in the field of public health, these twenty-one topics were specifically selected for sharing my viewpoints with my colleague public health professionals, young epidemiologists, administrators, field workers, representatives from like-minded agencies, associations, organizations, and all concerned staff working in the health care delivery system in the country. These twenty-one topics are also closely complementary and related to the thirty topics discussed in the **“Reflections of a Public Health Professional”** book. It was recently published, as a second edition, by the Mekong Basin Disease Surveillance (MBDS). My contribution may be small to the domain of public health but I hope it could serve:

- (i) To act as a catalyst to make the health care delivery system effective and efficient. A catalyst is **“a very strong agent for change”**;
- (ii) To generate creative ideas and futuristic thinking to tackle

important events in the health care delivery system; e.g., SARS-CoV-2 pandemic, increasing health care cost, increasing demand from the population at large, availability of state-of-the-art diagnostic equipment, and advanced treatment modalities.

- (iii) To stimulate and improve the epidemiological thinking skills among the junior public health professionals and young epidemiologists working in developing countries; and
- (iv) To consider producing technically savvy, ethically minded, and forward-looking professionals in the field of health;

I assume that the topics which I have selected have a serious positive bearing on the functions of the health care delivery system. My main aim is to have an effective and efficient health care delivery system, which can deliver quality and ethical health care (public health and clinical) services to the population at large. ■

# Thought process of a seasoned public health professional

A seasoned public health professional is like a daydreamer, always contemplating and questioning himself/herself on the evolving situations, conditions, scenarios, phenomena, issues, challenges with reference to why, what, when, where, if, if not, in case, Am I sure? Is it true? What could it be? Is the situation worsening, or intensifying, or improving, or stationary? Is it urgent or life-threatening? Does the occurrence of a situation routine or unusual? What could be the short-term and long-term implications of the situation in question? What will happen, if we do not do anything? Will it be cost-effective? Any untoward thing can happen to the population? What is the root cause of this situation? Will it be ethical if I decide like this? **“A seasoned public health professional should behave like a professional detective”**. (A situation may be a condition, a

scenario, a phenomenon, an issue, or a challenge)

**“In fact, daydreaming can boost our creativity, analytical thinking, epidemiological thinking, and problem-solving skills”**. It could also help us concentrate and focus seriously on a specific situation. The above questions or being in a state of inquisitiveness are all focused on the basic tenets of public health. A seasoned public health professional never works alone. What he viewed or thought on a situation is always shared and discussed with his colleagues or counterparts. The thought process is always dynamic, contemporary as well as futuristic. However, the most important point is **“the eyes and ears of the seasoned public health professional must be close to ground reality”**.

Some of the basic tenets of the field of public health are:

- (i) Always giving attention to the viewpoints of the community or thinking from the community's perspective;
- (ii) Always consider the effect of changing epidemiological situations on the issues, or problems, or challenges in question;
- (iii) Always consider the variables **TIME, PLACE, PERSON, AGENT, HOST, ENVIRONMENT, and VECTOR** on the issue in question; Even day-to-day mundane problems can be solved if we apply these seven variables;
- (iv) If it is ambiguous, do quick implementation research or focus group discussions or key informant interviews;
- (v) Qualitative methods can yield more information than quantitative methods.
- (vi) Collect as much data/information as possible and must have an open mind when analyzing them and never be dogmatic. Always think of long-term implications on the population.
- (vii) Always apply the principles of public health, principles of epidemiology, principles of public health ethics, and the principle of medical ethics.

The analogy is the right diagnosis of a disease made by a clinician from among the differential diagnoses. A seasoned public health professional could be able to make the right decision from among the myriad of possible decisions. A seasoned public health professional can commit mistakes if the input data/information is incomplete or incorrect. **“Therefore, all possible perspectives should be pondered before making a decision”.** (Please also refer to chapter 1. **“Being a versatile public health professional” in this book** . ■

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A DEVELOPING COUNTRY PERSPECTIVE

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# BEING A VERSATILE PUBLIC HEALTH PROFESSIONAL

“The future of public health is crossing sectors. Working with partners outside of traditional public health, because it is all linked. We in public health are collaborative in nature. We understand the power of synergy.

~Lisa Carlson (President of APHA, 2020)

The improvement of the overall health status of the population in a country depends to a large extent on the performance of the public health system. Public health activities are handled by public health professionals who are also managing the whole public health system in the country. Public health professionals may be public health trained medical doctors, para-medical and non-medical personnel. The work of all of them are equally important. **“Therefore, medical doctors and other health professionals who work in the field of public health must always improve their public health acumen in one way or the other”**. This is very crucial because these professionals are working in an environment (work of community and community-based organizations, ethnic health

organizations, various UN agencies and organizations, development partners, INGOs and NGOs; social activities of people of all walks of life, interventions of other ministries which have bearing on public health aspects, overall policy of the government, socioeconomic perspectives of the population, etc.) which we have less control over it. These situations are always in a state of flux and also interacting with each other. It can be assumed as a microcosm.

The notion that **“public health interventions must be adjusted depending on ever-changing or evolving epidemiological situations”** should always be at the back of our minds. Public health professionals, by way of collaborating closely with the communities and like-minded partners should be able to

overcome the challenges, constraints and obstacles adroitly in a reasonable way and time.

There are certain inherent characteristics that a public health professional should have to outsmart these challenges, constraints and obstacles as much as possible. We should try to inculcate and nurture the characteristics as we go along. **“The learning process of a public health professional is never-ending”. “The learning curve could not be plateaued”**. It is not that easy to have all the below-mentioned characteristics in one person. As public health professionals are dealing with groups of persons or communities or populations residing in large geographical areas, that public health is related closely and intertwined with the socio-economic conditions of the country, social fabric and social activities of the population. In a nutshell, the **“desirable characteristics of a public health professional”**, among others, are as follows: (not in order of importance)

- Viewing a situation or scenario from different angles and perspectives, taking into consideration the agent, host, environment, vector, time, place, and person related to a scenario in question;
- Contemplating things from long-term perspectives or envisaging long-term impact on the population;
- Always perceive and envisioning things from the population or community point of view,
- Possessing data analytical and interpreting skills as well as epidemiological thinking skill;
- Research minded and research-oriented;
- Always heed the principle of cause and effect in any epidemiological situation;
- Always follow the principles of public health ethics and medical ethics in decision-making processes and other important activities;
- Always do introspection or self-evaluation;
- Ability to select the best approach among several approaches available;
- No hesitation to revert or change or modify the selected approach or activity or intervention if it is found out later that it is not correct or inappropriate;
- Prioritization capability for selecting programs and strategies based on the principles of public health, principles of epidemiology, and principles of public health ethics;
- Practicing mutual respect and understanding among colleagues;
- Having a keen interest in data analysis and interpretation;
- Always apply systems approach and

## “We all need to begin thinking out of the box.”

~Peter Piot (Founding Executive Director of UNAIDS)

use systems analysis or seeing things holistically;

- Review or analyze data or information from negative aspects and actions be considered from positive perspectives;
- Always inculcate inquisitive mindset or exploratory attitude;
- Strong inclination to update the public health knowledge base and expand the knowledge horizon;
- Always promote networking among the stakeholders, like-minded organizations, and associations;
- Always do compare and contrast on a situation;
- Possessing a spirit of compromise;
- Applying team spirit and practicing team approach;
- Balanced and unbiased decision-making should be the order of the day;

Apart from the above characteristics, a good public health professional must have a craving to read background papers for agenda items of annually conducted World Health Assemblies and its resolutions. This is especially important as the spectrum

of coverage of health topics discussed at World Health Assemblies is very wide and contemporary. These background documents reflect the contemporary global situation of the topics under consideration.

**“The resolutions coming out of the World Health Assemblies include all important interventions that could be carried out at the country level”.** It also mentioned what WHO needs to do to improve the subject/agenda under discussion. In fact, the resolutions are solutions to solve the problems or overcome the challenges.

It is also important to be on the lookout for important public health topics appearing in WHO HQ webpage ([www.who.int](http://www.who.int)), webpages of six WHO Regional Offices, US CDC webpage ([www.cdc.gov](http://www.cdc.gov)), and European CDC webpage ([www.ecdc.europa.eu](http://www.ecdc.europa.eu)), and many other reliable public health websites. Upcoming public health professionals, if time permits, should listen to monthly Public Health Grand Rounds conducted by US CDC. The benefit to be accrued is immense. It is to be noted that accumulated knowledge is geometric rather than arithmetic. In other words, **“public health professionals**

**should be knowledge-hungry**". Public health professionals should realize that accumulated knowledge is synergistic and result in geometric rather than arithmetic progression.

For any public health intervention to be effective at the ground level and to have a lasting impact, the most important thing is **"peoples or communities must be involved in public health interventions"**. We have to create a scenario that there is a **"sense of belonging or ownership"** by the population for any public health program, or project, or intervention which we intend to initiate in a defined geographical area or province or region. Without that, the program or project or intervention will not last long. This is the duty of a good public health professional.

When public health professional analyzes a situation or scenario before fielding any Intervention or activity, it should be **"viewed from a holistic perspective, applying systems approach and systems analysis"**, as alluded to earlier. The social factors that may be involved in the said situation should be taken into consideration. It is also important that there must be a division of labor of all stakeholders involved in the identified public health interventions.

Public health professionals should always practice **"synchronized coordination"**. It is important when

many players are involved to carry out an intervention. It is essential especially in controlling and containing epidemics of different nature or to carry out large projects or programs. **"The basic inherent need of synchronized coordination is an element of the right timing or consideration of time factor for each collaborative activity or entity"**. Synchronized coordination involves consideration of parameters such as the right time for action, reasonable sequencing of actions, giving balanced emphasis in the context of time, priorities given in relation to time, working collaboratively with all stakeholders and like-minded organizations, and associations or agencies. **"Cooperation"** alone is insufficient to have an impact in any public health intervention or activity.

Through proactive interactions (brainstorming, brain writing, nominal group techniques, focus group discussions, idea generation techniques, etc.) with fellow public health professionals, epidemiological thinking skills, data triangulation skills, data analysis skills, data to information transformation skills, data interpretation skills can be effectively improved. These skills could be further nurtured and improved. Public health professionals should practice proactive interactions as a matter of routine.

Public health professionals should always promote establishing a strong, sustainable, and workable feedback

6 Public health is a very challenging, exciting, fascinating, stimulating, thought provoking, and interesting domain.

~Dr Myint Htwe

mechanism for the staff who are working at lower hierarchical levels of the health information system and Health Care Delivery System (HCDS). **“The practice of feedback can create a sense of ownership of a program and can lead to a successful, effective, and dynamic program”.**

**“A public health intervention must have built-in implementation research.”** An intervention without accompanying implementation research is incomplete. The administrative, management, logistics, and technical perspective of an intervention must be assessed by conducting implementation research. This can yield good evidence of whether the intervention selected is effective/efficient or not. Here, mindfulness of the importance of research is crucial. This is the duty of a good public health professional.

Any situation or issue or event or entity must be considered and analyzed in the context of agent, host, environment, vector, time, place, and person perspective of the situation. We will thus not miss the causal, precipitating, or facilitating factors of a situation. In a nutshell, the nature of the work of public health professionals

should be all-inclusive, realistic, dynamic, and responsive in terms of several perspectives.

A strong and sustained public health program is one of the essential prerequisites for improving the health status of the population in the country. Strong public health infrastructure and an efficient and effective public health system can lead to having a strong HCDS. The ability of a public health professional is directly related to the efficiency and effectiveness of the HCDS of the country, which in turn can influence the overall health status of the population. Public health professionals are like detectives looking for the cause or culprit for a condition or scenario affecting a group of people or community or town or city or region or country or the world. **“Public health is a very challenging, exciting, fascinating, stimulating, thought provoking, and interesting domain”.** If the above-mentioned discussion points are taken care of seriously, one could be successful in his or her public health

## 2

## Chapter

# HEALTH LITERACY PROMOTION: A FAR-SIGHTED STRATEGY



**Lack of access to healthcare information is a major contributor to morbidity and mortality, especially in low and middle-income countries, and among vulnerable groups in all countries.**

(70th WMA General Assembly, 2019)

**H**ealth literacy promotion has been accepted by public health professionals as one of the important strategies in the field of public health to promote population health. Be that as it may, this strategy is not given high importance as it should be. The Centers for Disease Control and Prevention (CDC), USA, defines health literacy as an individual's ability to obtain, communicate, process, and understand basic health information and services. **"Health literacy by itself will not have an impact unless the population understands clearly and practice it"**. It is also important to emphasize that the health literacy that we are sharing with the population must be genuine, valid, reliable, precise, and contemporary. Disseminating incorrect information is even more dangerous than not giving health information at all.

One of the basic tenets of the public health domain is **"the level of the**

**health status of the population is generally and directly proportional to the quantum of knowledge on determinants of health and translating that knowledge into practice by the population at large"**.

The health literacy level of the population in developing countries is generally low due to several reasons. The incidence and prevalence of many communicable, as well as non-communicable diseases, could be reduced significantly by increasing the health literacy level of the population. **"However, health literacy promotion activities should be carried out together with translating the attained knowledge or so-called literacy into action by applying another set of actions"**. This is one of the main duties of a public health professional.

The population at large will be making decisions on health and health-

related matters based on the health literacy they are getting. In that context, we health professionals, and especially the basic health care services workers should be well versed with the contemporary health literacy related to their area of services. In Myanmar, we have already distributed tablet phones with fully loaded real-time health information to all the basic health care services workers.

Public health professionals also need to target specific groups of the population residing in remote and underserved areas of the country using the right strategies consisting of simple and realistic interventions. **“We should not take it for granted that all strategies and interventions applied in different geographical areas will have the same impact”**. Strategies and interventions need to be modified or adjusted as per the educational level of the population, availability of peer groups, geographical terrain, accessibility of an area or remoteness of an area, existing health infrastructure including human resources for health, availability of communication channels, etc. In Myanmar, we have seven states, seven regions, and the capital area having different characteristics. Other developing countries may have the same geographical demarcation. One unified intervention may not work equally well in all areas as alluded to earlier. The population should be well-informed about this.

In the domain of health literacy

promotion, the role of the Department of Food and Drug Administration is crucial in order for the population to consume quality food and food products, quality medicines, and use quality cosmetics and equipment. In Myanmar, quite a huge amount of foodstuff, meat products including canned foods, vegetables, fruits and medicines come through legal and illegal routes through land borders as well as seaports and airports. There are less stringent checking mechanisms whatsoever about the quality of these imports at points of entry.

Some might have immediate untoward effects but many can lead to long-term negative consequences such as increasing incidence in liver and kidney diseases, blood diseases, cardiovascular diseases, diabetes, and malignancies even. These undesirable effects on the population should be clearly informed in a simplified yet effective way through health education or health literacy promotion sessions to the population at large. They have to use their discretion, based on the health literacy they have, to consume quality food products and medicines. The role of public health professionals in ensuring quality food, medicines, and cosmetics issues is of paramount importance.

Another area of importance to promote health literacy is the entry of microorganisms into the human body. Entering through the nose is a great

**6 Improving the nation's health literacy is critical to creating a system of care based on wellness and prevention.**

~Regina M. Benjamin (Surgeon General, USA, 2009-13)

concern to all of us especially SARS-CoV-2 virus and its variants, influenza virus, H1N1, H3N9, etc. The respiratory route entry of highly infectious microorganisms can lead to the sudden occurrence of epidemics/pandemics. The population should be well informed to (i) increase their health literacy about preventive measures for infections coming through the respiratory route, (ii) acceptance of vaccination for vaccine-preventable diseases if vaccines are available, (iii) the benefit of vaccination, etc. through various health literacy dissemination sessions.

Likewise, disease causation through sexual organs must be explained in small groups, age-group wise, gender-group wise, and occupation-group wise for not to create uneasiness and embarrassment among the population. It is generally not that easy to convince them as these diseases are related to social activities and socioeconomic conditions of the country. Other modes of entry of microorganisms and substances such as injectable narcotic drugs, blood

transfusion should also be explained in simple terms, especially about the long-term implications and danger of these diseases.

**“Myanmar applied a unique approach to promoting the health literacy level of the population throughout the country”.** The ministry distributed (free) over 30,000 seven to eight-inch internet-connected tablet phones to all basic health services workers (Health Assistants, Lady Health Visitors, Public Health Supervisors I, Public Health Nurses, Midwives, Public Health Supervisors II), Station Medical Officers, Township Medical Officers, District Medical Officers, faculty members of fifty-two Nurses and Midwives Training Schools, relevant staff members of State/Regional Director offices, central level staff members, etc.

Each tablet phone includes, just to mention a few,

- **“Three hundred and thirty-page standardized health message book”** which explained in simple terms and

with simple diagrams the causes of various diseases and conditions, preventive measures, control measures, early warning signs of diseases and conditions, what to do or simple treatment methods, etc.;

- **“All SOPs and Guidelines on administrative, management, technical, and logistics aspects of work of staff, technical documents on many diseases/ conditions”** issued by more than forty program managers of seven departments under the ministry;
- The **“ministry website”** and their contents, etc.;

They can even watch TED Talks and all relevant zoom meetings conducted by various units in the Ministry of Health. This is very effective during COVID 19 pandemic in Myanmar. Decision points on COVID prevention and control can reach the grassroots level on real time basis. The contents of the tablet phones are somewhat similar to the Bible of Health Information or Health Information Repository of the country. **“All the contents are updated on a real-time basis from the central level”**. One biggest added advantage is that all staff of the Ministry of Health and Sports (MoHS) are interconnected electronically. **“Relaying messages through tablet phones is really the most effective and quickest mode of health literacy promotion in the country”**.

The ministry has informed basic health care services workers to conduct

health education-cum-discussion sessions with three or four families at a time at the village level in the houses of the villagers. This could result in wide-ranging benefits including cohesiveness between the ministry staff and villagers and increase the confidence of villagers in the ministry staff. The positive impact of this initiative had been vividly noticed. However, we have yet to see the full impact of this strategy. It will take time to see the full impact of this strategy. It has been planned to assess the changing knowledge base and healthy health practice of the population, after three years and five years from the time of starting the strategy.

**“If the public is practicing healthy lifestyles, the morbidity and mortality of diseases and conditions would surely be reduced”**. One simple and immediate benefit is that people will know the early signs and symptoms of a disease or condition and seek early medical care at sub-rural health centers, rural health centers, station hospitals, and township hospitals. This is especially important for non-communicable diseases and malignancies where people usually go to health centers or hospitals at late stages of diseases. It is expected that morbidity and mortality rates of malignancies, other diseases and conditions would be reduced as the quantum of health knowledge literate population size increases.

The important point is that we need to find the best approach to impart health knowledge by applying various *modus operandi* for different population groups, different geographical areas, different ethnic groups, migratory populations, and different diseases and conditions. The health-seeking behavior of a person not only depends on the health knowledge level of the concerned person but also on the knowledge level of family members, co-workers, friends, and relatives. It connotes the importance of the health literacy level across the population. **“In the public health domain, many factors are interrelated and connected”**. Each and every public health professional must note these basic facts.

By way of increasing the health knowledge of the population, we need to further promote practicing healthy lifestyles by the population. In health literacy promotion, we would not forget one of the mottos of the ministry, which is **“EXERCISE IS MEDICINE”**. Every effort should be made to understand the benefit of exercise in preventing many non-communicable diseases which can negatively affect the Quality Adjusted Life Years (QALY). **“The importance of peer pressure from health literate peer**

**groups should not be forgotten”**. After all, we must all strive for having a big group of health literate population in the country.

**“Public health is not a simple and straightforward domain”**. It is reciprocally connected with several socio-behavioral activities, which are different not only from one population group to another but also in different geographical areas. These socio-behavioral activities are also influenced by socioeconomic conditions of the country, which are beyond the control of the Ministry of Health. Therefore, **“when a particular health situation is observed, every aspect leading to that situation should be scrutinized from all angles and analyzed deeply before a public health decision is made”**. Along the same line of thinking, health literacy promotion strategies should be streamlined as per the evolving situation and various underlying social conditions. It is urgent that we need to develop a **“Realistic Health Literacy Promotion Strategies”** for the country. Health literacy promotion is, beyond doubt, one of the key strategies to improve the health status of the population.

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## 3

## Chapter

# PRODUCING ETHICALLY MINDED & FUTURE-ORIENTED HEALTH PROFESSIONALS

“To establish and promote the highest possible standards of ethical behavior and care by physicians.

(Central objective of the World Medical Association, 1947)

The effectiveness and efficiency of the HCDS depend to a large extent on the capacity and ability of staff running the health system in the country. The staff working for the HCDS must preferably be ethically minded, technically savvy, team-spirited, far-sighted or future-oriented, and positive-looking health professionals. The ethical perspective is important as health professionals are mainly dealing with human beings throughout their careers. **“Ethical consideration is essential in many decision-making processes”**.

**“Technically top-notched health professional is of no value unless he/she is an ethical professional”**. One of the top desirable characteristics for a health professional is not technical superiority but possessing and practicing ethical behavior. **“In the ethics domain, peer pressure plays an important role in terms of increasing the cohort of ethical professionals”**.

Doctors and specialists who graduated from the Universities/Schools of Medicine, as well as allied health professionals produced by the Paramedical Universities, should not only be technically well-qualified professionals but also have the above-mentioned key characteristics. The image and patient safety perspectives in the medical field could be satisfactorily achieved if the professionals are ethically minded. In other words, ethical issues and ethical considerations are important determinants for the successful performance of the HCDS and we should pay due attention to promoting it. Patient satisfaction indices can be improved, which could increase the image and integrity of the Ministry of Health.

Technically well-qualified professionals must also be equipped with other mundane characteristics to the extent possible. It should be promoted throughout the scholastic years of the

courses they are attending. Future-oriented and positive-looking attitudes are very important for the holistic progress and personal development of a health professional. Generally, universities aim mainly to produce technically well-qualified professionals. In view of many developments happening all over the world and particularly in the medical domain, we should try to produce all-rounders.

**“To meet the above characteristics, extracurricular activities, debates, symposia, workshops, panel discussions, seminars, field trips to the communities, table-top exercises, simulation exercises, role-plays, case studies should be part and parcel of teaching-learning methods”.** All these activities can increase the degree of maturity as well as inculcate the future orientation attitude of health professionals. They will also be aware of the ground reality. Therefore, all relevant curricula in the teaching institutions could be reviewed and adjusted as necessary.

Principles of medical ethics should be taught and discussed openly so that the depth and breadth of medical ethics, as well as its intricacies, will be understood by the students attending medical and para-medical universities.

**“Apart from medical ethics, public health ethics and research ethics could be part of the curriculum of the medical degree course”.** Similarly, relevant

ethical principles could be taught and discussed among students attending the University/School of Pharmacy, University/School of Medical Technology, University/School of Public Health, University/School of Traditional Medicine, University/School of Dental Medicine, University/School of Nursing, and the University/School of Community Health. Dental ethics, nursing and midwifery ethics, and other relevant ethical issues of paramedical subjects could also be taught and discussed.

**“If possible, the Department of Ethics should be formed in each teaching institution”.** This department could develop teaching modules, case studies, and curricula for ethics. Lunch-time talks and seminars on ethics could be conducted to create interest in ethics among the students. **“We need to firmly ingrain the ethical principles into the minds of the students”.** It is very important for the developing countries.

Students should be informed very clearly that technical savviness alone is insufficient in the real world if they really want to excel in life. Technical excellence is only one dimension of the equation for the overall development process of a human being. Throughout the process of development of the above-mentioned characteristics for the students, one should not forget to initially



**“To establish and promote the highest possible standards of ethical behavior and care by physicians.**

(Central objective of the World Medical Association, 1947)

convince the faculty members in various universities. The faculty members should be fully informed and convinced about the importance of these characteristics.

All teaching faculty members must first attend relevant short courses on Principles of Medical Ethics, Principles of Public Health Ethics, Principles of Midwifery and Nursing Ethics, Principles of Research Ethics, and Principles of other concerned disciplines. The experience in achieving the above-mentioned characteristics could be shared compulsorily among the faculty members of all universities/schools through the conduct of **“Training of Trainers Courses”** or **“Experience Sharing Workshops on Ethics”**. **“It is to be emphasized that ethics cannot be taught but learned through sharing of experience, and an in-depth review of case studies on ethics”**. The process is slow but once established, a person may become an ethical person for decades.

After faculty members finished attending these two events, courses for the students could begin. The overall perspectives of the training courses could be improved as it progresses. It is also important to invite renowned guest expertise/lecturers to deliver relevant ethics courses of importance. As the subject of ethics is somewhat relatively new to faculty members and students, proper working documents should be provided to students for ready reference. It is to be reemphasized that sharing of experience on the teaching of ethics among faculty members from various universities is essential. This should be done without fail. It could yield many valuable inputs to all the universities for further improvement. **“In essence, technical savviness alone is insufficient in the real world of medical and allied disciplines”**. **“This area of ethics is not well-developed in developing countries”**.

## 4

## Chapter

# PRINCIPLES AND STEPS FOR MANAGING AN EPIDEMIC/PANDEMIC

**6** Let's pretend there's a pandemic. Let's everybody run around and play your role. Main result is that there is tremendous confusion. Nobody knows who is in charge. Nobody knows the chain of command.

~ Laurie Garrett

(Pulitzer Prize winner American Science Journalist and Author)

**G**enerally, the basic principles and steps for managing an epidemic/pandemic in developed countries and developing countries are the same. The discussion will be made on SARS-CoV-2 infection as an example. The principles and steps have little bearing on the Variants of Interest (VOI) and Variants of Concern (VOCs) of the virus (Alpha, Beta, Gamma, Delta, Omicron). We only need to intensify some of our efforts if the VOC is virulent and has a high infectivity rate. It is also important to follow the spreading pattern, rate of spread, clinical signs and symptoms exhibited by the new VOCs, the effectiveness of the currently used vaccines towards new VOCs, and other special characteristics, if any, being observed in other countries. Depending on these findings, we may slightly adjust our prevention and control activities.

Developed countries may be able to use state-of-the-art diagnostic tests, conduct more basic and clinical research activities during the epidemic/pandemic, conduct more case-control and cohort studies to elicit the natural history of the (new) disease, give better clinical and critical care at hospitals, do more collection of data and information for epidemic/pandemic using well-developed sentinel and routine surveillance systems, develop vaccines for (new) diseases (e.g., SARS-CoV-2) causing the epidemic/pandemic, etc. This does not mean that developing countries are managing the epidemic/pandemic at lower-level hierarchical activities than developed countries.

**"If a developing country has a better prepared and well-managed public health system, the epidemic/**

**pandemic can be contained or stopped faster than in a developed country”.**

Many world-class public health professionals and epidemiologists are present in developing countries. How to handle the epidemic/pandemic is more important than whether the country is financially well off or not. **“In controlling an epidemic/pandemic, there is no one-man show”. “Everybody needs to work together and in a coordinated and synchronized way”.**

Epidemic/pandemic will always come and go. However, in that process, we need to:

- Reduce the severity;
- Limit the geographical spread;
- Reduce the speed and quantum of spread;
- Shorten the duration of the epidemic/pandemic;
- Decrease the mortality;
- Increase the population understanding of the transmissible nature of the disease;
- Intensify the surveillance and disease reporting system;
- Enhance the laboratory and radiological services;
- Make the work of the Ministry of Health more coordinated;
- Remove disinformation and reduce infodemics;
- Strengthen the networking of all stakeholders involved in the

prevention and control activities;

- Disseminate the key clinical manifestations or signs and symptoms of the disease-causing the epidemic/pandemic to relevant entities

These days, epidemics/pandemics of various diseases especially viral diseases are emerging all over the world due to ease of travel and other factors. It will become a normal occurrence in future years and some of the pandemic diseases may become endemic diseases.

In that context, we need to revisit our IHR (2005) and assess our core capacity to what extent we are ready for future epidemics/pandemics. All the weak points should be strengthened/modified/amended depending on the available resources. In addition, we need to apply all the key action points (need to be identified for each specific epidemic/pandemic disease) that are necessary to manage an epidemic/pandemic of different nature. **“Assessment of core capacity as mentioned in IHR (2005) should be done on a regular basis”.**

Before managing the epidemic/pandemic disease, we need to brainstorm and do the following necessary arrangements:

- Formation of the central committee for the overall management of epidemic/pandemic;
- Formation of outbreak investigation teams depending on the nature of

epidemic/pandemic;

- Laboratory readiness including collection and transport of specimens;
- Supply chain management system readiness;
- Table-top exercises and simulation exercises;
- Preparedness of government hospitals and referral system readiness;
- Private hospitals involvement readiness;
- Radiological perspective readiness;
- Quarantine centers readiness;
- Health literacy on epidemic/pandemic information dissemination readiness;
- Data transmission and reporting system readiness;
- Technical briefings for health staff readiness;
- Briefings to media and population readiness;
- Role of stakeholders, volunteers, UN agencies, like-minded associations and organizations;
- Inter-ministerial coordination and cooperation readiness;
- Expanded Program of Immunization System readiness for vaccine-preventable epidemic/pandemic diseases;
- Epidemic/pandemic monitoring team availability, etc. must be ensured and put in place.

**“We may have to do all or some of the above activities depending on the severity, momentum, speed of spread, nature, and size of the epidemic.**

**For pandemic, all the above-mentioned points could be considered”. The following basic principles and actions, at least, must be adhered to when dealing with the epidemic/pandemic.**

- **Proactive Collaboration:** Proactive collaboration of entities involved in managing the epidemic/pandemic is crucial. We should not wait for collaboration to happen. We need to explore possible collaboration with stakeholders.
- **Synchronized Coordination:** Synchronized coordination is more important than collaboration per se among all the entities involved in managing the epidemic/pandemic. Confusion and waste of resources will occur if there is no synchronized coordination.
- **Discussion of Ground Level Staff:** Discussion of staff working at ground level is essential and information thereby generated should be given special attention. This is especially important as the scenario happening in one area may be different from another area.
- **Agent, Host, Environment, Vector, Time, Place, and Person:** These variables related to the said epidemic/pandemic should be considered at the very outset. If we follow this, we will not miss the likely causation, pockets of transmission, transmission potential, transmission momentum, and trajectory pattern of the disease-causing the epidemic/pandemic.

- **Historical Perspective:** Historical perspective of the said epidemic/pandemic, if there is, should not be forgotten and referred to as appropriate. We could get much more information that could be used in controlling the current epidemic/pandemic. Getting the experience of controlling/containing the epidemic/pandemic through the World Health Organization could be an advantage.
- **Flow of Information:** The flow of information in an epidemic/pandemic should be bi-directional and on a real-time basis. The feedback system should be enhanced fully. The strength of feedback is generally related to the duration of the epidemic/pandemic.
- **Spreading Scenario:** Pattern of spread, speed of spread, specific population groups affected, specific age and sex afflicted, and specific geographic areas involved could be put to the limelight. This could aid in modifying our currently used strategies in controlling the epidemic/pandemic.
- **Critical Review:** Daily critical review or brainstorming on the evolving epidemic/pandemic is crucial. This could facilitate reviewing and modifying our currently used strategies to control the epidemic/pandemic. Serious attention should be accorded to this critical review process.
- **Management and Administrative**

**Perspective:** This perspective is vital in managing the epidemic/pandemic and should give undivided attention. Control of many epidemics/pandemics got delayed and prolonged because of administrative and management weaknesses.

- **Population:** Population must be well-informed on a real-time basis about the evolving epidemic/pandemic and their specific role to be played. This is very crucial. Population proactive involvement should be obtained by all means. It could definitely aid in shortening the duration of the epidemic/pandemic.
- **Domino Effect:** The creation of a domino effect is one of the most effective approaches to propagate the preventive measures of COVID 19 among the population.

One simple example is once the “husband” or a “person” got the important COVID 19 preventive information, he/she must tell his wife/husband, siblings, uncles, aunties, nieces, nephews, close friends and relatives, neighbors, co-workers, his/her subordinates, his/her senior or anybody he/she encounters in his/her daily routines. The one who has received that information must be requested to further spread that information in a similar pattern. For ease of reference, **“practical key messages”** are mentioned below. **“As COVID 19 is a novel disease, we have to tackle it with innovative approaches”**. A similar mode of COVID

19 literacy transmission must be done in schools, factories, industries, offices, etc. If we can do this the population will know what to do and they will warn each other if someone is practicing behavior that is contradictory to the norm.

- **Networking:** Networking of all entities involved in controlling the epidemic/pandemic must be strengthened. The stronger the network the better will be the coordination.
- **Supply Chain Management:** This aspect must be given special attention as it determines the severity and duration of the epidemic/pandemic. One of the most important factors in determining the quick and successful control of the epidemic/pandemic is good supply chain management.

Depending on the size of the evolving epidemic/pandemic, all types of resources required must be estimated and informed to the responsible higher authorities in advance.

- **Information Repository:** Information Seeking Unit must be established to get the latest information on public health measures and clinical management of the disease (which causes the epidemic/pandemic) from renowned organizations and nearby countries especially for epidemic/pandemic of new disease such as SARS-CoV-2 virus infection. Freshly received critical information on the epidemic/pandemic should

be disseminated to all concerned immediately. If required new SOPs and Guidelines must be issued.

- **Proper Recording:** Recording of all activities done and changing epidemiological parameters in space and time is a must. The benefit accrued is immeasurable.

For any activity that will be initiated in controlling, containing, and mitigating an epidemic/pandemic of any disease, the following “generic steps” should be followed as much as possible. These are not in order of priority and not in order of importance.

- Establishing a Central Command Center for Control and Containment for epidemic/pandemic depending on the nature, size, and severity of an epidemic/pandemic.
- Reliable and timely information received must be shared among relevant stakeholders on a real-time basis.
- The data and information thereby received must be critically reviewed and thoroughly analyzed to see the trajectory and severity of an epidemic/pandemic.
- Delineate the area of the epidemic/pandemic continuously.
- Mapping of cases must be done and spreading pattern (trajectory) must be monitored daily for specific geographical areas.
- Neighboring areas must be ready to tackle the spreading epidemic/pandemic.

- Human, financial, material (laboratory, radiological) resources, and logistics required to tackle the epidemic/pandemic must be worked out and cross-referenced with available resources. Additional resources required must be calculated and get it in time. Good planning is key to success.
  - Necessary preparatory activities must be taken at nearby hospitals to manage the overflowed patients coupled with the strengthening of laboratory and radiological units of nearby hospitals.
  - Strategies for proactive involvement of the population must be developed as one of the priority interventions.
  - All necessary SOPs and Guidelines on the epidemic/pandemic must be prepared by a team involving various disciplines and distributed quickly.
  - Conduct of implementation research/ case-control studies/cohort studies/ clinical studies/case studies may be contemplated.
  - Simple and efficient patient referral system must be put in place. Guidelines for referral must be made ready.
  - Reporting to higher levels for policy and strategic decision-making and to the lower level for actions to be taken.
  - Daily reporting of the situation of the epidemic/pandemic to the population affected and to the general population must be done through the use of various communication channels. A small working group should be formed to decide on the types of information to be disseminated.
  - Inform WHO, if required, as per IHR (2005).
  - Publication of papers on the epidemic/pandemic in relevant journals may be considered.
  - Report of the epidemic/pandemic must be ready at the end of it for review, teaching purposes, and for future reference.
- Generally, rapidly evolving and severe epidemic/pandemic (especially respiratory route transmissible diseases epidemic/pandemic) can cause confusion among the health staff. Therefore, preparatory activities as alluded to earlier are very crucial. Deep discussions among responsible professionals are very important. There should be no panic in dealing with the epidemic/pandemic. **“Epidemic/pandemic must be dealt with calmly and with confidence”. “In epidemic/pandemic, every piece of information is important until proved otherwise”.**
- The **“key predictors”** for quick control and containment of epidemic/pandemic are:
- Degree of involvement of people or sense of ownership of the epidemic/pandemic by the population;
  - Real-time transmission of reliable data/information and bi-directional



feedback;

- Preparedness for supply chain system readiness and its responsiveness;
- Extent of convincing the people about nature, cause, and preventive measures for the epidemic/pandemic;
- Administrative, management, logistics, and technical capability of professionals managing the overall situation;

Every effort must be made to take care of the above five key predictors. In essence, the success of controlling and containing the epidemic/pandemic within a short period depends to a large extent on the degree of peoples' involvement and their clear-cut understanding of the cause, preventive measures, and nature of the epidemic/pandemic.

As the role of population in curbing the extent of spread of epidemic/pandemic is a major determinant, the following **"practical key messages"** are relayed to the population, apart from other routine preventive measures.

- **"Inform and remind each other about the practice of preventive measures"**. Generally, when we are concentrating on our routine work or daily chores or office matters, we tend to forget the disease and we got closer to one another resulting in an easy spread of the virus.
- **"Do not buy from shopkeepers if they are not wearing the masks"**. In this way, shop keepers will notice that buyers are shunning away, and shop keepers will start to wear masks.
- **"Spending the least amount of time in markets"**. Make a clear list of what items you intend to buy before going to the market. The markets, especially wet markets, are places where most of the spread is occurring as it is generally congested especially in the morning.
- **"If you are suspected of having signs and symptoms of SARS-CoV-2 infection, go immediately to the quarantine center near your residence to consult with the health staff assigned there"**. This is the best way to cut the transmission chain of the virus.
- **"Try to avoid public transport as much as possible" and better take a taxi for compulsory travels"**.
- **"Wearing a mask is mandatory when you go out"**
- **"Try to avoid closed and confined spaces as they are conducive to the easy spread of the virus"**.
- **"If you are a worker going out daily, do not eat together at the same table, and do not talk within six feet with other family members in your house, especially who had comorbid conditions"**. The household spread could be effectively reduced.
- **"Your house or office room should be fully ventilated or the doors and windows should be opened."**
- **"Do not stay with other people in the closed room or not well-**

ventilated room”.

- **“Whenever there is an opportunity to get a vaccination, do it quick”**  
This would lessen your chance of hospitalization or death or getting serious disease.
- **“No one is safe until everybody is safe. So, make everybody safe”.**
- **“Do not underestimate SARS-CoV-2 infections. It could be life-threatening”**
- **“You can have long COVID 19 symptoms”**

#### SUMMARY INFORMATION:

If you wear masks, wear face shields, do hand washing (at least 20 seconds) with soap frequently, avoid going to crowded places, avoid taking public transport (buses) as much as possible, take the vaccination, practice cough etiquette, not eating together with friends and with co-morbid people, do the least number of visits to markets, reduce social visits and encounters, avoid karaoke bar or entertainment, the chance of getting SARS-CoV-2 infection is almost nil. Closely follow the guidance issued by the Ministry of Health and share the information with your friends, colleagues and family members.

At the start of the epidemic/pandemic, the role of the Ministry of Health is important as several SOPs and Guidelines related to epidemic/pandemic had to be produced. As time goes by, the role of the population and local organizations is

becoming more important. It is worthwhile to develop two living summary documents especially for pandemic-causing diseases like SARS-CoV-2 infection, one is for the health staff and another one for the population. **“For health staff, the following points, at least, should be included”.**

- Brief historical perspective of the pandemic, if any;
- Basic virological information and its behavior including mutation;
- Detailed epidemiological descriptions of the pandemic in the country including daily spreading pattern and trajectories – mapping and epidemic curve;
- Early clinical signs and symptoms, full-fledged clinical features, clinical management issues, and referral of patients;
- Quarantine centers and related matters;
- Updated list of SOPs and Guidelines issued by the Ministry of Health and the Government;
- Preventive and control measures being initiated by the Ministry of Health;
- General challenges being met in the country;
- Work of national laboratory systems and challenges;
- COVID 19 health literacy promotion activities being done;
- Activities initiated in collaboration with other ministries, like-minded

- organizations, and stakeholders;
- Donation and various forms of contributions received from within and outside the country;
- Brief pandemic situation in neighboring countries and in the world;
- Important messages to the health staff, etc.

For the population, apart from the practical key messages and summary information mentioned above, a very simplified form of the information for the health staff should be included. The facts need to be explained in layman language. These documents must be continuously updated and put on the website of the Ministry of Health. We will know the pandemic situation on a real-time basis. When updating is made, updated portions should be highlighted in color. It is hoped that these two documents could facilitate

the preventive and control activities tremendously. The population must be aware of what the Ministry of Health is doing for them.

**“If the ownership of the epidemic/pandemic is taken by the population, it is highly likely that it will end sooner than later”.** It is also desirable that a detailed and full report of the epidemic/pandemic must be documented and archived for future reference. That report could be part of the course material for Master of Public Health and Master of Hospital Administration students of the University/School of Public Health and for students attending the University/School of Community Health and other relevant universities. The report could also be discussed in **“COVID 19 Seminars”** to get more insights for preparedness for future epidemics/pandemics.

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## 5

## Chapter

# PREPAREDNESS FOR FUTURE WAVES OF COVID 19

Transitioning towards what we call – a new normal – must be guided by public health principles, together with economic and societal considerations.

~Hans Henri P. Kluge  
(WHO Regional Director for Europe)

The discussion will center on developing countries' scenarios. The preparedness will have less bearing on the Variants of Interest (VOI) Variants of Concern (VOCs) of the virus (Alpha, Beta, Gamma, Delta, Omicron). We only need to intensify some of our efforts if the VOC is virulent and has a high infectivity rate. **"The principle of preparedness for future waves of COVID 19 is generally based on the findings of the holistic review of how we have managed earlier waves of COVID 19 in the country"**. This principle should be compulsorily applied because the virus is novel and many unexpected changes are still occurring (unpredictable virological behavior and random mutation, evolving clinical manifestations, the appearance of long COVID 19 signs and symptoms, newer treatment modalities of patients, varying efficacy and effectiveness of vaccines, development of newer and novel drugs, changing concepts of vaccine

hesitancy by the population, evolving mix-and-match COVID vaccines guidelines, emergence of newer side effects of vaccines, changing behavioral pattern of the population towards COVID 19, etc.). Based on the findings, we have to strategize how to prepare for future waves of COVID 19. **"The renewed strategies and interventions should be realistic and doable in the context of a developing country's situation"**.

**"Developing countries could not afford to have frequent waves of COVID 19. It is economically unbearable, let alone the social fabric disruption"**. Therefore, developing countries should give special attention for preparedness of future waves of SARS-CoV-2 infections.

Every country in the world is fighting COVID 19 as per the changing epidemiological conditions, unstoppable genetic mutation of virus and appearance

of new variants of SARS-CoV-2, varying degrees of population involvement, vaccine hesitancy, unequal population coverage of vaccination, overflowed ICU in hospitals, ambiguity in relaxation and opening up of entry to countries, resistance to a lockdown of areas, and fluctuating availability of various forms of resources. **“Some small countries are going for a zero COVID 19 strategy”.**

Waves and waves of COVID 19 episodes are happening in many countries. In view of geographical terrain, extensive land borders with nearby countries, relatively low-level of health literacy in the population, limitation of resources (human resource, financial resource, and material resource) in the country, high population density in slum areas, difficult to impose strict travel restrictions, unavailability of required vaccines, uncontrolled internal migration of the population, insecurity in some areas of the country, the influx of people from nearby countries, etc., Many countries may not be in a position to practice Zero COVID Strategy. **“The nature and spread of the virus are such that Zero COVID Strategy is technically not feasible at this point in time”.** However, developing countries must be well prepared for preventing and tackling future waves of COVID 19.

Although COVID 19 vaccination may be the best approach not to have waves of COVID 19, many developing countries including Myanmar may not be able to get the required doses of vaccines. The demand for vaccines all over the world is too high. **“Therefore, we need to think of other effective public health interventions or non-pharmaceutical interventions that can reduce the chances of waves of COVID 19 in the coming months and years”.**

A country like Myanmar and developing countries which have similar geographical terrain need to be very alert in preventing future waves of COVID 19 due to new VOC as the country's land border is very long with big countries. **“Very stringent preventive and control measures must be practiced at the land border, seaport, and airport”.** Those who came through these ports should be quarantined for 14 days very strictly. The performance of quarantined sites should be closely monitored using checklists. All other preventive and control measures applied at border checkpoints are the same. A sufficient number of staff members must be assigned at border checkpoints and close monitoring of the staff performance and epidemiological situation at these checkpoints must be analyzed carefully. **“If we can control these border checkpoints,**

the chance of having future waves of COVID is slim”.

“Myanmar got invaluable experiences while managing the earlier waves of COVID 19”, such as:

- Coordination and collaboration issues;
- Management of quarantine centers;
- Referral of patients from home and quarantine centers to nearby hospitals;
- Throat swab sample collection and transportation to laboratories;
- Laboratory system management;
- Data/information transmission, feedback and its management;
- Total hospital management system for COVID 19 patients from admission to discharge or death;
- Intensive Care Unit management;
- Supply chain logistics for COVID 19 prevention, control, and treatment;
- Approval process for import of COVID 19 supplies and equipment by Food and Drug Administration;
- Human and financial resource management;
- Health literacy promotion activities on COVID 19;
- Management at border checkpoints (land, sea, and air);
- Role of General Administrative Department;
- Inter-ministerial cooperation;
- Working with INGOs and local NGOs and community-based organizations, working with various stakeholders, like-minded organizations, UN agencies, societies and associations, and councils;
- Duties and responsibilities of people;
- Population response to COVID 19;
- Effectiveness/weaknesses of lock-down measures and travel restrictions;
- Overall performance of the Ministry of Health especially in terms of dissemination of technical information and coordination issues at different levels of the HCDS;
- Readability and understanding of SOPs and Guidelines on COVID 19;
- Management of websites of the Ministry of Health;
- Role of information seeking unit for COVID 19 in the Ministry of Health;
- International coordination on COVID 19 issues;
- Communication with WHO headquarters, WHO Regional Office for South-East Asia, and WHO country office;
- Behavior of shop keepers and customers at wet and dry markets;
- Behavior of government and private office staff;
- Findings of implementation research and other research projects on COVID

- 19 carried out during earlier waves;
- Role of basic health services workers and other medical and paramedical staff at different levels of the HCDS;
- School opening rules and COVID 19 prevention and control at schools;
- COVID 19 prevention and control at factories, and industrial complexes, internally displaced population groups;
- Opening rules of government and private offices;
- Management at sea, land, and air border checkpoints;
- Role of the Ministry of Information and other relevant ministries, etc.

The above information should be considered or cross-referenced with time-linked sequential epidemiological data of COVID 19 found in earlier waves. The above experiences so far accumulated would be extremely useful for the preparedness for future waves of COVID 19. However, the so-called “**experience packages**” are confined to specific groups of stakeholders involved in earlier epidemics/pandemics. These “**experience packages**” need to be shared openly among all the groups involved in COVID 19 prevention and control.

**“As COVID 19 prevention and control activities are integrated in nature and reinforced each other, they should**

**be disseminated simultaneously to all stakeholders through a common platform”.**

This national platform must be arranged by the government. State/Regional/Provincial level discussion forums could also be conducted. Based on the outcomes of discussions, we can chalk out a realistic action plan for preventing and handling future waves of COVID 19. If we really want to reap the full benefit of what we have experienced, the moderator/facilitator of the platform should be selected carefully.

### **HOW SHOULD WE LIVE WITH COVID 19 IN THE COMING YEARS?**

Work from home, more online communications to complete the businesses, online procurement of supplies and equipment, online banking and payment system, online ordering of food items, promote the use of various forms of internet-based personal communications such as WhatsApp, Viber, Telegram, Signal, Instagram, Twitter and emails, internet-based teaching and learning sessions, internet-based examination system, and zoom meetings are some of the entities that we should move forward with greater momentum and speed.

Unnecessary shopping and loitering in shopping centers should not be promoted. Reducing the trips to markets



and shopping centers should be practiced. Major sources of infections are in dry and wet markets, public transport systems, restaurants, get-together parties, Karaoke saloons, banks, and closed-door meetings. We need to avoid these places as much as possible.

**“We need to change our lifestyles in the future months and years until we have the most efficacious and effective vaccines and achieve more than 80 % vaccine coverage”.** We need to use various country or even state/region-specific realistic strategies to make electronic communication practice a routine way of living by the population. At the same time, intensified surveillance on COVID 19 must be done by the health ministry and relevant ministries, organizations, and associations.

The COVID 19 will be with us for many years like the common cold unless the virus naturally changes its genetic pattern or sequencing to a less infective form, less virulent form, or decreases its frequency of mutations. The SARS-CoV-2 virus then becomes less infectious and less virulent. Waves after waves of COVID 19 (some small and some big) will be here in Myanmar, as well as in other countries, for many years.

The rate of transmission, degree of severity of the disease, transmission potential of the virus, morbidity and mortality rates, duration, and severity of

epidemics may vary from state to state and region to region and country to country. It is, therefore, hoped that due to increasing population immunity because of sub-clinical infections, asymptomatic infections, full-blown infections, increase coverage of the vaccinated population, decrease in transmission potential or infectivity of the virus, SARS-CoV-2 infection may become a mild endemic disease. We may also face the worst-case scenario but we will hope for the best.

We need to be ready for future epidemics/pandemics by having a **“Long Term COVID 19 Prevention and Control Strategy”** in the country. The last determinants for ending the current epidemic/pandemic will depend on the seriousness accorded by all those involved in preventing and controlling COVID 19, the nature of mutation of the virus, vaccination coverage, and degree of involvement of the population in COVID 19 prevention and control activities. **“My view is that degree of involvement by the population is the key determinant in preventing future epidemics/pandemics”.** We, therefore, need to strategize on how to increase population involvement.

In order to have a technically sound plan with an acceptable level of management, logistics, and administrative rules to carry out the plan, and all

stakeholders involved in control and management of earlier epidemics must be involved proactively and brainstormed collectively. The most important part is the plan must be embedded with realistic monitoring and evaluation component with practical indicators coupled with a robust and responsive feedback system. It will then be easier for us to prevent and control future waves of COVID 19.

The following steps must be taken in the process of preparedness for future waves of COVID 19. They are not exhaustive, and not in order of preference or priority. Many of the steps can be taken care of simultaneously.

- Review and update all available SOPs and Guidelines for the population and SOPs and Guidelines for health staff related to COVID 19.
- Translate into local languages/dialects and distribute to stakeholders in relevant geographical areas and explain clearly to health staff as well as to the specific population groups about their role to be played.
- All concerned persons must be fully involved and they should play a proactive role in many preparatory activities needed for prevention and control of COVID 19. This is very important to create a sense of

ownership of the plan as they are the professionals who will carry out the plan.

- Before formulating a realistic plan, national-level meetings/workshops/symposia must be conducted for a holistic review of what we have done and experience gained to control the earlier COVID 19 epidemic/pandemic in the country (Please cross-reference with the points mentioned above).

Discussion must be very frank. No finger-pointing to a specific person or organization or association must be made about the weaknesses and lapses in prevention and control activities already done. **“Discussion must be particularly focused on management, administrative, coordinative, collaborative, and logistics aspects of earlier epidemics/pandemics in the country”** in terms of:

- COVID 19 data transmission pattern and feedback given and actions taken or not and weak points noted; **(An essential epidemiological understanding of the epidemic/pandemic can be obtained.)**
- How were throat swabs taken from different townships and how were these transported to laboratory examination sites? How were the

results transmitted back to the health staff working in the catchment areas? **(Logistics as well as technical deficiency of throat swab taking and transport can be divulged. It could be corrected in time.)**

- Performance of laboratories examining the throat swabs in terms of capacity, availability of technicians, laboratory equipment and reagents availability, recording of data and analysis, etc. A checklist of assessment questions could be used. **(We can prevent disruption or failure of the laboratory system, which is an important chain-link in the control of epidemic/pandemic.)**
- Mapping of laboratories available in the country which can do PCR, etc., and possible geographical areas that can be covered; **(This could greatly aid in conducting early contact tracing.)**
- Detailed review of National Supply Chain Management System for procurement and distribution of COVID 19 related supplies and equipment; **(An important activity to prevent preventive and control of COVID 19 from being collapsed.)**
- Detailed review and assessment of how we have disseminated COVID 19 prevention and control information to the population;
- Role played by NGOs, INGOs, various associations and councils, community-based organizations, General Administrative Department staff, UN agencies, relevant ministries, especially Ministry of Information, Ministry of Education, Ministry of Social Welfare and Resettlement, in COVID 19 prevention and control. Key Informant Interviews and Focus Group Discussions could be conducted to know the ground reality. **(The aim is to have close collaboration and synchronized coordination in controlling the epidemic/pandemic.)**
- Critical review of national viral disease surveillance system and strengthen all the weak areas and links as a matter of top priority. This must be linked and integrated with the hospital disease surveillance system. **(This is very crucial to detect impending epidemic/pandemic well in advance.)**
- Review of performance of COVID 19 Control Command Center of the Ministry of Health. A checklist could be used to make the process quick. **(Based on the findings, management, administrative, and logistics perspectives can be improved.)**
- Detailed review of the implementation status of vaccine procurement and vaccine roll-out plan together with

monitoring mechanism; **(A crucial activity for the smooth and effective conduct of COVID 19 vaccination program in the country.)**

- Role played by the National-Level Central Committee on Prevention, Control, and Treatment of Coronavirus Disease 2019 (COVID 19); **(For improving the overall management of the epidemic/pandemic.)**
- Performance of Quarantine Centers all over the country, including patient referral system to hospitals; **(Proper management is crucial not to have outbreaks inside the quarantine centers.)**
- Guidelines for the management of quarantine sites must be issued and updated as necessary. **(A very important and useful endeavor.)**
- Detailed review of how we have managed in earlier waves at places where groups of people are there (prisons, factories, industrial complexes, schools, internally displaced groups, offices, hotels, boarding schools, orphanages, etc.). Based on that experience, COVID 19 preparatory SOPs and Guidelines could be issued before the next wave sets in. **(An extremely important activity to prevent big COVID 19 outbreaks in these crowded and confined places.)**
- Detailed review of how we have

managed at land border checkpoints, seaports, airports; **(The entry of SARS-CoV-2 infected persons into the country can be deterred and we will not miss infected persons to be quarantined.)**

- Review of COVID 19 treatment given at various categories of hospitals together with referral system; **(Latest and standardized line of treatment in hospitals can be achieved. Referral system guidelines can be improved.)**
- Meeting with Medical Superintendents of hospitals about hospital administration, supplies chain management, and handling of COVID 19 patients starting from admission to discharge or deaths; **(It is crucial in lowering the death rates of COVID 19 in hospitals.)**
- Situation of the genetic sequencing of SARS-CoV-2 done by the concerned research institutions and plan for the future for increasing its coverage and efficiency; **(Early detection of VOC can be made.)**
- Role of Food and Drug Administrative Department (FDA) for approval of imported COVID 19 related supplies and equipment; **(Delay in importing process of COVID 19 related supplies and equipment will lead to**

**uncontrolled epidemic/pandemic.)**

- Role played by Central Epidemiology Unit, offices of State/Regional Directors, Township Medical Officers, Station Medical Officers in COVID 19 prevention and control; **(A key activity to have overall success in controlling epidemic/pandemic.)**
- Overall coordination scenario of COVID 19 prevention and control for earlier epidemic/ pandemic; **(It could be a key input to successful management of future waves of COVID 19.)**
- Review of how we have disseminated COVID 19 information to the public, health educating materials, etc.; **(Many practical points can be revealed.)**
- Quick assessment of level of health literacy of COVID 19 by the population; **(This is very important. We have done it during the early part of the second wave of COVID 19 in Myanmar and to our surprise, the knowledge level of the population even in urban areas on COVID 19 is unsatisfactory.)**
- Management, administrative, and logistics perspectives of activities pertaining to overall prevention and control of COVID 19 in the country. **(An essential activity to yield information for improving**

**the overall strategy of COVID 19 prevention and control.)**

Administrative, management and logistics issues are more important than technical perspectives. In Myanmar, all updated SOPs and Guidelines must be put into the 30,000 or so tablet phones already distributed to medical doctors and other health staff all over the country. It is crucial that each must impart or disseminate essential COVID 19 information to the population residing in their areas of responsibility.

The degree of thoroughness of discussion made on the above points will lead to obtaining a good plan and successful COVID 19 prevention and control for future waves. As we discuss the above-mentioned points, many important offshoot points will evolve for further in-depth discussions. The success of future epidemic/pandemic prevention and control finally depends on the degree of proactiveness shown by the population at large together with the commitment of health staff in the country. **“We should take the challenges of COVID 19 control as opportunities for our staff to build up the capacities”.**

**“The preparedness plan is just a plan. We need to chalk out how are we going to carry out with proper division of labor among all the stakeholders”.** The plan could be adjusted as we are

“ If we do the kind of common-sense public health measures we know work, we ought to be able to stop it from being a global pandemic.

~ Julie Gerberding

(First Female Director of CDC, Atlanta, GA, USA)

implementing it. We have to live with SARS-CoV-2 for many years until we have very efficacious and effective vaccines. Many virological, clinical, public health and technical issues are still evolving. **“The top priority for us is to make the population deeply involved in our attempt to fight COVID 19”**. Once the population felt that COVID 19 is their business and had a sense of ownership of the preparedness plan, we are bound to be successful very soon. We are yet to have a complete natural history of SARS-CoV-2. **“Let us fight back this scourge once and for all so that we can live a normal social life.”**

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## 6

## Chapter

# DOMINO EFFECT ON POPULATION HEALTH

“By working together, polling our resources and building on our strengths, we can accomplish great things

~ Ronald Reagan  
(40th President of the United States)

The discussion will focus on the two important ministries. The activities of the Ministry of Health and Ministry of Education are complementary to each other. **“The overall health status of the population could be dramatically improved in the long run if the Ministry of Health and Ministry of Education work in tandem”**. The improvement in health status will also be sustainable. Out of the total population of 50 million or so in Myanmar, more than 9 million are students attending in over 47,000 basic education schools. We have to do something to enhance their health status and health literacy level.

I have alluded to in several instances, **“the level of health literacy of the population has a direct linkage with the quantum of the healthy population”**. We need to harness the power of the big peer group of health knowledge literate student population to health educate

fellow students and their parents or to those people living under the same roof to improve their health literacy level. This would have a positive domino effect not only for the health sector but also for the socio-economic development of the country. **“The power of having enough health literacy in the population can lead to many positive consequences for the country”**. Naturally, this knowledge base could be translated into good health practice.

In order to do this, some basic health promotion and common preventive measures for communicable and non-communicable diseases, mode of disease transmission, anatomy and basic physiology of human body and knowledge on key physiological changes as they grow up, nature and spread of sexually transmitted diseases, early signs and symptoms of common diseases and conditions, the importance of



personal hygiene including dental health, menstrual health, eye health, skin health, micronutrients, and nutrition-related information, the relation between types of food taken, food eating habits and healthy body, immediate and long-term dangers of taking tobacco products, alcohol, and narcotic drugs usage, how to practice healthy lifestyles, the importance of doing regular exercise as per the motto of the Ministry of Health and Sports, **“Exercise is Medicine”**, etc. should be embedded in the **“curriculum of primary, middle and high schools”**. Depending on the need, it could continue to the University level curriculum, where the emphasis to be given may be different. If the **“Exercise is Medicine”** motto is translated into action and practiced regularly, it could have an unbelievable positive impact on the health of the student population.

**“This investment of some amount of hours out of the regular study period time of students will pay a very big dividend in the long run”**. Millions of students attending primary, middle, and high schools all over the country will become health-conscious adults or healthy adults and practice healthy lifestyles in later life. **“This will be the biggest asset that the country will ever have for the overall development of the nation”**. A healthy cohort of pregnant women will be there in the country which

could lead to healthy newborn babies. An increase in healthy working-age groups can also augment productivity in many sectors, be it economic or commerce or industry or administration or education or health.

The students should also be informed about **“Exercise is Medicine”** and the multiple benefits of doing regular exercise must be well understood by them. Once we have this very big cohort of healthy school-going children, the health security of the adult or university student population, to some extent, can be ensured. **“If we have this big quantum of health literate student population, the overall health situation of the country will be definitely improved”**. There will be less morbidity of many diseases and premature deaths can also be averted. This would have saved millions of kyats/dollars as we do not need to give treatment for their health care. The extra money thereby accrued could be used for procuring advanced diagnostic equipment, modern laboratory apparatuses, state-of-the-art radiological and radiotherapy machines, etc.

**“The role of teachers is also very crucial”**. All the primary, middle and high school teachers should be convinced about the above-mentioned points by way of conducting several workshops

and seminars for them in all states and regions of the country. The School Health Teams from the Ministry of Health is now taking care of it but we need to do it in an intensified and systematic way.

Inter-school and inter-university sports competitions must be promoted and conducted to get a healthy body and mind. The inculcation of sporting spirit on the students is really essential for the overall personal and psychological development of the students. From time to time, in collaboration with the Ministry of Education, School Health Surveys could be carried out by the School Health Teams of the Ministry of Health to assess the trend of the overall health status of the student population.

**“The findings of School Health Surveys could be considered in formulating or reformulating School Health Policy and Strategies of the country”.** Topics of contemporary importance should be highlighted by giving special talks or seminars in schools, e.g., COVID 19, Diabetes Mellitus, Hypertension, Sexually Transmitted Diseases, Tuberculosis, HIV/AIDS, Dangers of Using Tobacco, Tobacco Products, Alcohol, Narcotic Drug Use, etc.

**“A Permanent Joint Committee of the Ministry of Health and Ministry**

**of Education should be formed with the aim of establishing Health Promoting Schools all over the country”.** Realistic and doable Terms of Reference for the Permanent Joint Committee must be developed as soon as possible. This committee can give sage advice to the two Union Ministers. In order to carry out all the above-mentioned ideas, a close working relationship between state and regional level, district level and township level counterpart officials of the Ministry of Health and the Ministry of Education must continue and work as a closely knitted team.

**“We should also not forget the importance of environmental sanitation in schools and its environs”.** Many types of gastrointestinal diseases, water-borne and water-associated diseases, food-borne diseases, mosquito-borne diseases, skin diseases, and zoonotic diseases could be prevented if we can keep up good environmental sanitation in schools. Responsible officials from the Department of Public Health and the Department of Disease Control of the Ministry of Health should take care of it in collaboration with City Development Corporations and relevant ministries. This could lead to a substantial reduction in morbidity rates of many communicable diseases.

“Coming together is beginning.  
Keeping together is progressing.  
Working together is success.”

~ Henry Ford  
(Inventor of the Ford Model T car)

Here, we may need the support of the Parents Teachers Associations, and various in-house school committees. **“The most important point is that when these environmental health activities are carried out, the student body could be involved to have a sense of ownership for sustainability”.** The sense of environmental cleanliness or habit of cleanliness would continue to practice in their homes and environs.

Going in the direction of having more and more Health Promoting Schools is a very cost-effective strategy. Detailed strategies must be developed jointly by the two ministries. **“The implementation of ground-level health-promoting activities carried out in schools should be led by school teachers and student leaders and not by the health staff”.** The purpose is to have a strong foundation and sustainability of activities of Health Promoting Schools. The ultimate aim is that the students would be delivering health messages to

their parents, uncles, aunts, relatives, and other students in the family. If we review the health status of the population, many diseases are occurring. These diseases could not have happened if one is health literate.

All the above points clearly depicted the significance of working cohesively between the officials of the two ministries. It is important to chalk out the road map or framework of actions to be carried out jointly by the two ministries. These facts should be clearly spelled out in the policies and strategies of both ministries. **“We may need a review of the existing School Health Policy of the country”.** More School Health Teams should be formed and activities of the teams must be regularly reviewed and updated. At present, the activities and performance of School Health Teams are commendable. However, there is always room for improvement.

During holidays, school children should be requested, through respective Parents Teachers Association to get involved in community-based public health activities such as health education talks, environmental sanitation activities, nutritional assessment activities, etc. They should lead the show. Guidance and close coordination will be given by concerned health authorities. This would create a sense of responsibility not only in terms of public health but also other mundane activities.

During COVID 19 pandemic in Myanmar, it was heartening to note the extremely warm working relationship between officials of the two ministries. Many COVID 19 SOPs and Guidelines, and School Health Assessment Checklists to prevent and control COVID 19 in schools

were jointly produced. This has led to the successful control of COVID 19 in schools all over the country.

At present, the relationship between the two ministries is at its highest point. As many private schools are opening in the country, a collaboration between private schools and the Ministry of Health needs to be strengthened. Giving importance to Programs on Health Promoting Schools is a necessity and every effort should be made to make it happen. **“The student leaders must be proactively involved in any health activity to be conducted in schools”**. In essence, a strong collaboration between the two ministries will set the tone for having a sustainable healthy population in the country.

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## 7

## Chapter

# SUPPLY CHAIN MANAGEMENT: THE BACKBONE OF THE HEALTH SYSTEM

“ Supply chain: getting the right product, to the right place, in the right quantity, with the right quality, at the right total cost.

(SupplyChainToday.com)

Many countries do not give priority attention to firmly setting up and smoothly running the National Supply Chain Management System (NSCMS). **“In fact, the National Supply Chain System is like a vertebra column of the human body”**. The weak bony structure of the vertebra column can make the human body collapse. Likewise, the functional capacity of the HCDS will come to a standstill if the NSCMS is not functioning well. This could affect not only the domain of public health but also other domains and disciplines of medical care and the hospital system. The division or department which handles the NSCMS should be expanded and strengthened from many aspects. Generally, this unit is small in many countries. **“We need to advocate the senior officials of the Ministries of Health to give priority attention to supply chain management aspect of the HCDS”**. The efficiency of the HCDS and especially the hospital

system could be greatly improved in terms of improvement in many hospital assessment indicators, reduction of the duration of stay of patients in hospitals, increase patient safety and satisfaction indices, etc.

The NSCMS starts from the right amount, right items, and the right time for procurement of quality supplies and equipment, medicines, transport to Central Medical Stores Depot from the port of entry of the country, further distribution to sub-depots all over the country, and then to hospitals down to station hospitals and public health institutions ending in rural health centers and rural sub-centers. It also covers the monitoring of expiry dates of supplies and equipment, types of medicine available vis-à-vis prevailing disease pattern, surplus supplies and equipment, and medicines to be shifted out to hospitals and health institutions in need, monitoring of storage

system, security and fire safety of medical store depots, and availability of the computerized supplies and equipment indenting system.

NSCMS also covers medical stores in public health institutions located all over the country. The whole system must be fully computerized and strongly networked. The analogy is like running a network of national railways systems.

**“The initial investment to have a fully computerized NSCMS may be high but the long-term dividend for the efficient performance of the HCDS far outweigh the initial investment”.** The whole distribution network must be closely monitored electronically by a group of professionals and take immediate reporting to higher levels for urgent issues and take immediate actions for change or improvement. As much as possible, the lag time for action must be kept to a minimum. It is complicated and challenging work but also very interesting.

The inefficiency of the medical care and hospital system due to unavailability of required quality medicines in time for different disciplines, surgical accessories, laboratory equipment, reagents, operating room items including anesthetic gases, radiological, laboratory, and radiotherapy equipment spare parts could lead to an

increase the duration of stay of patients in hospitals, high bed occupancy rates, high nosocomial infection rates, let alone the high mortality rates for various diseases and conditions. It can also negatively affect the psychological and job satisfaction of staff working in hospitals. This could have serious consequences not only to the staff but also to the hospital care system. **“There will be a plethora of untoward incidences if the NSCMS is not functioning smoothly”.**

The small supply chain management system in a hospital or a health institution or a health center or an office is also a part of the NSCMS. The NSCMS, in fact, is a combination of various small supply chain management systems. **“Disruption in the supply chain management system in a hospital can result in many untoward consequences in running the hospital”.** We should not underestimate the importance of even a small supply chain management system in a small hospital. Every supply chain system (for medicine, equipment, and spare parts, laboratory reagents, hospital linen, etc.) in the HCDS is essential and important. **“All supply chain systems irrespective of size are equally important”.**

Likewise in the public health domain, one glaring example is activities of the Expanded Program for Immunization

can slow down or even come to a halt if the supply chain system is not working properly. This could result in the emergence or resurgence of vaccine-preventable diseases in various parts of the country and even outbreaks of diseases leading to the deaths of children. Specifically, weaknesses or lapses in the supply chain system for vaccines, i.e., cold chain system, could have disastrous effects on the health of children.

The normal growth pattern of affected children will be disturbed. Another example in the public health domain is successful control of disease outbreaks depends tremendously on the efficient functioning of the Supply Chain System. **“A disjointed and uncoordinated performance of the NSCMS may have unthinkable consequences on the efficiency of the HCDS”.**

In order to improve and strengthen NSCMS, it is desirable that this subject be embedded in the curriculum of MPH courses offered by the University of Public Health or more theses on this subject should be done by MPH students. The importance of NSCMS must also be highlighted in the Final MBBS Part I Preventive and Social Medicine classes and courses delivered at the University/School of Community Health. **“If possible, the University/School of Public Health**

**should offer diploma courses on NSCMS. The role of teaching institutions in promoting the importance of NSCMS is crucial”.** We should ask for technical support from UN agencies such as UNOPS, UNICEF, USAID, WHO, etc.

We should not underestimate the depth and breadth of establishing an NSCMS in the country. We need to have a sufficient number of Medical Store Depots before we initiate the NSCMS apart from the availability of well-trained computer literate staff for NSCMS. It is also crucial that the current status of performance of NSCMS should be assessed in detail before improving it. **“It is time that the Ministry of Health should accord priority importance to having a sound and well-managed NSCMS in the country. It is an investment worth undertaking it”.**

The following activities are proposed in order to have a well-coordinated and efficient NSCMS. The **“National Health Supply Chain Task Force”** should first be formed with specific Terms of Reference. The general aims of establishing NSCMS are:

- to have an efficient, cost-effective, and transparent health supply chain that ensures timely availability of quality, efficacious medicines,



medical supplies, and equipment at all levels of the HCDS, and

- to improve health outcomes and integrate existing multiple health supply chains for reducing complexity, cost and increase its efficiencies.

Under the guidance of the Task Force **“National Health Supply Chain Strategies for Medicines, Medical Supplies and Equipment”** should be formulated. It needs technical and financial support from development partners such as USAID, UN agencies (UNOPS, UNFPA, WHO, UNICEF), and collaborating partners such as CHAI, JSI, etc.

The following activities are envisaged before we have a full-fledged NSCMS. Depending on the resource availability, we may determine the size of the NSCMS. A phase-wise approach may also be considered. The activities mentioned below are not in order of priority or importance. Additional activities may need to be identified depending on the evolving **“National Supply Chain Strategies for Medicines, Medical Supplies and Equipment”**

- In-depth evaluation of the existing health supply chains from all perspectives;
- Ensure an optimal number of tiers in

the health supply chains system of the country;

- Establish appropriately sized and suitably located storage facilities based on the demand and geography of the country;
- Develop a management information strategy and health supply chain system architecture to facilitate automation and make sure interoperability;
- Enhance efficient management and service delivery through a public-private partnership;
- Align supply chain financing structures, commodity acquisition, changed implementation, and resource allocation that can sustain an integrated NSCMS;
- Ensure that policies, regulations, and legislation governing health supply chain components are complementary and create an enabling environment for the smooth operation of health supply chains;
- Develop formal and standardized forecasting and supply planning procedures, tools, and processes to decide the future needs of medicines, medical supplies, and equipment and for supporting effective medium and long-term planning;
- Establish an efficient and effective procurement system based on the principles of fairness and



## The supply chain stuff is really tricky.

~Elon Musk

(Entrepreneur and business magnate)

transparency, enabling suppliers to respond to government needs to meet value for money with quality products;

- Develop an optimally designed, modern, efficient, and appropriately financed warehousing and distribution system that supports the delivery of health services across the country;
- Design and build inter-operable electronic management information and control systems for medicines, medical supplies, and equipment;
- Conduct a series of **“National Supply Chain Planning and Strategy Formulation Workshops”**. During these workshops, the following topics may be discussed. (e.g., Procurement Technical Support Plan, National Health Supply Chain Baseline Assessment, Warehouse Rapid Assessment, Procurement Options Analysis, Logistics Management Information System, Management Information

System Harmonization and Mapping, International and National Level Training on Procurement for Central Medical Store Depot staff, Procurement for Generic Medicine Specification, International Training on Procurement for senior staff of the Ministry of Health, Regional Supply Chain Strengthening, Warehouse Management System Assessment, Procurement Capacity Building Training, Procurement Regulations, Strategic Investment Plan for Pharmaceutical and Technological Sector, Forecasting Training for Concerned Staff of Hospitals, Quick Survey on Supply Chain Stakeholders’ Feedback on health supply chain;

- Conduct a national-level workshop on **“Finalization of National Health Supply Chain Strategies for Medicines, Medical Supplies, and Equipment”** and finalize the **“Implementation Activities Framework for National**

**Health Supply Chain**", which could serve as a road map for the development of NSCMS.

The above activities will take more than one year to complete it and every effort must be made to be successful. The efficiency of the HCDS can be greatly improved if we have a realistic **"National Health Supply Chain Strategies for Medicines, Medical Supplies, and Equipment"**. Proper planning of activities should be done using Gantt chart. **"The role of the "National Health Supply Chain Task Force is crucial"**. Proper division of labor among the responsible staff is

essential. It is important to emphasize that NSCMS is not static but dynamic and growing. It is not a one-time affair. It has to be fine-tuned as we go along.

#### Reference:

Presentation made by Dr. Myint Htwe at the Workshop on **"Development of Master Plan for National Health Supply Chain Strategy for Medicines, Medical Supplies & Equipment (2015-2020)"** SCMS, PFSCM, JSI, Kempinski Hotel, Nay Pyi Taw, 2nd – 3rd December 2015 and working documents of the workshop.

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## 8

## Chapter

# CAN WE IMPROVE THE EFFECTIVENESS AND EFFICIENCY OF THE HEALTH CARE DELIVERY SYSTEM?

“The world is full of frameworks, roadmaps, and action plans that sit on the shelves collecting dust and never makes a difference to people. I urge you, starting now, to translate your good intentions into concrete actions that transform the health of your people.

~Tedros Adhanom (Director-General of WHO)

The effectiveness and efficiency of the health care delivery system (HCDS) is a very broad area but it is very critical for the country. It has several sub-domains. Depending on the state of condition of each sub-domain, we have to improve it in a step-wise and phase-wise manner. If we really want to render quality public health and clinical services to the population at large, undivided attention should be given to issues related to human resources for health. **“Human resource for health is the key determinant influencing the performance of the HCDS”.**

The top priority action of the senior officials of the Ministries of Health is to do a holistic review of the performance of the HCDS. The HCDS is the lifeline for improving the overall health status of the population in the country. No country in

the world has the so-called perfect HCDS. Strength, deficiencies, and weaknesses can be seen in many sub-domains of the HCDS. **“The major challenge facing the HCDS is the availability of well-trained human resources for various disciplines in public health and the clinical domain”.**

Firstly, we need to know the current work, workload, and performance of the HCDS. The review of the HCDS should cover areas such as administrative, management, technical, logistics, finance, and budget, human resources including staff morale, training, in-service orientation courses, career ladder of staff, public health and clinical/hospital infrastructure, all SOPs and Guidelines produced by different public health (communicable and non-communicable diseases and conditions)

and clinical disciplines, national supply chain management system, public health infrastructure and system, hospital infrastructure and system, health information system (HIS), etc.

The spectrum of review is too wide that we need to prioritize areas that should be taken care of immediately. It could be carried out in step-wise and phase-wise manner. If we use the checklist type of review, the process will be much faster and the important points required for decision-making can be quickly obtained. The most important area to review first is the human resource for health. **“The job descriptions of all categories of staff should be immediately reviewed”**. The job descriptions should be categorized into primary and secondary. The primary or essential work must be performed by all concerned staff without fail.

If capable and committed human resource for health is not available, we have to start implementing interim measures such as crash training workshops and courses for different disciplines. This could be followed by an **“institutionalized certificate awarding short courses”** for staff working in different public health and clinical disciplines after proper preparatory

works. We also need to find out the root causes of having incapable staff in the ministries of health. To get more details, proper and full-fledged surveys, as well as key informant interviews and focus group discussions should be conducted.

**“We need to apply unbiased methods and approaches in eliciting the true scenario of the overall performance of the HCDS in the country”**. Therefore, the above-mentioned review activities must be carried out jointly by representatives from associations such as medical, nursing, paramedical, public health, and councils, societies, research institutions, and organizations available in the country. It would be an advantage if UN agencies could be involved.

Before conducting the holistic review on the performance of the HCDS, one national-level technical seminar together with several brainstorming sessions should be conducted. Appropriate technical committees could be constituted for overseeing the whole process. The findings of the surveys, key informant interviews, and focus group discussions must be thoroughly scrutinized and acted upon. Systematic follow-up must be done to see the improvement of the performance of the HCDS at some point in time.

The HCDS mainly consists of the public health domain and clinical domain. Other supporting domains are the food and drug domain, human resource for health domain, research domain, traditional medicine domain, sports and physical education domain in Myanmar. **“In fact, the population should be part and parcel of the HCDS”**. If we want to improve the effectiveness and efficiency of HCDS, we need to consider all these aspects from a holistic point of view including the inter-relationship of all the domains.

Other important stakeholders outside the Ministry of Health that we should not forget is the role played by local NGOs, international NGOs, associations, community-based organizations, ethnic health organizations, development partners, like-minded partners, relevant ministries, specialized agencies such as WHO, UNAIDS, UNICEF, UNFPA, UNOPS, UNDCP, World Bank, ADB, USAID, THET, DFID, JICA, Gavi, SIDA, CIDA, KOICA, KOFIH, Access to Health Funds, etc. We may need to identify and delineate major areas of support that these entities are contributing.

As there are many players in the field of health, activities carried out by them may have some redundancies and duplications in terms of technical

and geographical areas. **“It is, therefore, essential to map out the activities of all players to reduce redundancy and duplication”**. Activities of similar nature can be grouped and carried out in an integrated manner. This could dramatically decrease the resources required for each activity/program thereby making the programs or activities more cost-effective and cost-efficient.

We have formulated several strategies and action plans. There are also roadmaps and recommendations made by professionals working in several public health and clinical programs for improving the overall performance of HCDS. Some of the strategies and action plans are on the shelves. Taking into consideration the current epidemiological scenario of the country, it is time that we need to critically check, sort out, prioritize, and transform them into a realistic **“DO NOW OR NEVER”** activities mosaic for the country's HCDS. The time frame, costing and responsible entities could be identified.

There are several factors that can influence the overall performance of the HCDS. If we can manipulate and improve these factors, we may be able to make the HCDS efficient and effective. However, some of the factors are beyond the purview and control of the Ministry of

Health. Some could emanate from outside the country such as epidemics in neighboring countries and pandemics such as SARS-CoV-2. Some diseases occurring along the border areas, (malaria, HIV/AIDS, dengue, zoonotic diseases, sexually transmitted diseases, other viral diseases, etc.) may spread into the country.

Apart from these, the HCDS also needs to consider and cater to improve population health for different social groups, ethnic minority groups, people living in remote, underserved, and hard-to-reach areas, prisoners, factory workers, workers in big industrial zones, persons living in rehabilitation centers and elderly homes, people affected by natural and man-made disasters, school children, internally displaced persons due to various reasons, etc. **“These groups of persons need special health care packages”**. It could be appropriately developed. This is part of the improvement of the performance of the HCDS. (Please refer to chapter 19, **“Ring the bell for the Ministry of Health”** in this book.)

Some of the principles that we need to apply if we want to improve the effectiveness and efficiency of HCDS are:

- Think globally and act locally;
- Apply systems approach and systems thinking;

- Always see a scenario from a holistic point of view and be critical of factors influencing the current situation;
- Apply epidemiologic thinking and re-analyzing the situation from technical, ethical, social, and economic perspectives;
- Always assess and check the situation in question and act accordingly;
- No hesitancy to make adjustments and modifications of the interventions if the health situation has changed (good or bad) due to evolving epidemiological conditions;
- There is always room for improvement;
- Always think of capacity building for different categories of staff;
- The final strength of the system is the strength of the weakest part of the system;
- Improve the administrative, logistics, and management aspects of the HCDS by way of conducting implementation research;
- Cutting unnecessary administrative procedures;
- Apply the planning cycle approach and always think within the loop of the planning cycle;

The central nervous system is important to the human body to make physiological, psychological, and physical adjustments for the human



“ I think the world should unite and focus on strong health systems to prepare the whole world to prevent epidemics or if there is an outbreak, to manage it quickly – because viruses don’t respect borders, and they don’t need visas.

~Tedros Adhanom (Director-General of WHO)

body. **“Likewise, the health information system (HIS) can be regarded as the central nervous system for the HCDS”**. We, therefore, need to give proper attention to the proper functioning of the HIS. Therefore, before we start to consider improving the performance of HCDS, one of the important activities is to do is a quick review of the performance of the HIS in terms of: (Please refer to chapter 12 **“Quick assessment of the health information system”** in the **“Reflections of a Public Health Professional”** book.)

- Current framework and components of HIS;
- Data transmission or data flow pattern;
- How data are being transformed into information;
- How information is being used to

streamline and change the current strategies and interventions of various programs in the ministry;

- Information feedback system from central to peripheral health staff and institutions and vice versa;
- Any major revamping of the HIS during the last 5 years due to epidemiological changes;
- Degree of the utilization of data for planning and policy development;
- Work of networks of HIS, i.e., health information system has several sub-networks and each network must be properly linked with each other and run synchronously.

(The above points should be considered under the rubric of the above-mentioned principles, key informant interviews, and focus group discussions).

Smooth, prompt, and reliable information flow among several sub-domains at different levels of HCDS as well as in various health programs is key to improving the performance of HCDS. Much more important is staff should have the capacity and ability to use that information for program administration and management. A dynamic feedback system should be present and robust. Annual evaluation meetings should be carried out for all health programs and recommendations made at these evaluation meetings need to be closely followed up and necessary actions should be taken. **“Data and information emanated out of the HIS are like neurotransmitters for the nervous system”**. Without reliable data and information, the performance and direction of HCDS will be like a ship sailing without a rudder.

In order that each health staff is playing a proactive role in their work, it is necessary that the career ladder of staff should be reviewed and improved to an acceptable level. The morale of the staff should be high, positive and had forward-looking attitudes. The working atmosphere must be such that it is conducive to having these characteristics. **“A favorable working atmosphere for staff is highly desirable”**.

There should be **“Central Level and State/Regional/Provincial Level Health System Oversight Committees”** to oversee the performance of HCDS from all perspectives. Similarly, **“District Level Health System Oversight Committees”** could be formed. Realistic input, process, and output indicators should be identified. The trend of these indicators should be closely monitored and given immediate attention. These committees must have **“National Level Annual Review Meetings”** to discuss in-depth with the objective of issuing general and specific guidelines to be followed by all programs and staff in the country.

The performance of HCDS depends much on the ability and capacity of the staff running the system. Every effort must be made to conduct capacity-building training workshops or short courses for specific groups (disciplines) of staff. The **“Certificate for Successfully Passed”** the workshops or short courses should be awarded, i.e., not **“Certificate of Attendance”**. All training programs must be centrally monitored and recorded properly. These certificates could be used in the promotion and transfer of staff in the country. The quality of these workshops and short courses should be ensured.

The performance of the HCDS is also associated with the organogram and structure of the HCDS. The organogram or structure should not be static especially in developing countries. **“The organogram or structure may be a perfect one at the time of the last restructuring”**. Strictly speaking, (i) due to changes in disease epidemiology; (ii) transformation of social fabrics; (iii) directional changes in overall government policy; (iv) shifting in economic conditions of the country: good or bad; (v) changing pattern of the requirement of human resources for health; (vi) increasing demand from the population; (vii) rapid population growth and shifting population structure; (viii) new developments in the field of public health; (ix) rapid sophistication in many aspects of clinical domain; (x) outbreaks of new diseases, the occurrence of emerging, re-emerging diseases and pandemics of the novel virus of uncertain natural history; (xi) emergence of advanced diagnostics and state-of-the-art treatment modalities, the organogram or structure review is needed every five years or so. In fact, **“the structure of the Ministry of Health has a huge influence on the work performance of the ministry as well as the health conditions of the population at large”**.

**“Too big a structure is not conducive to having good output from**

**the Ministry”**. The minor structural change can be exercised as and when necessary. Some units need bigger structures while other units need smaller and nimble structures. It will depend on the quantum of work and the extent and trend of health and health-related problems that the unit is dealing with. **“Generally, we tend to forget to give attention to the structure of the ministry”**.

While adjusting the structural aspects, we should simultaneously do capacity-building activities for the staff to fit with the new structure or functional requirement. The size and the nature of the structure is associated with the capacity and ability of the staff. Simultaneously, a budget allocation pattern to the new structure must be considered. **“Existing staff strength should be taken into consideration when a structural change of the Ministry of Health is considered”**. The current and future production capacity of human resources for health from the universities should be given due attention. The staff attrition quantum and pattern are important in undertaking a structural change of the Ministry of Health. The new structure should be conducive to achieving the short-term and long-term health priorities of the country. This could lead to increasing the effectiveness and efficiency of the HCDS.

Another area of significance is the Division of Labor. Staff working in various areas and levels of work must have a proper Division of Labor, especially for key activities. **“Without proper Division of Labor assigned, nobody will take responsibility for any lapse in the functions of various sub-domains of the HCDS”.**

In any HCDS, there are several SOPs and Guidelines. These SOPs and Guidelines should be updated regularly and obsolete ones removed. However, there should be a minimum number of SOPs and Guidelines in all the domains and disciplines. **“Too many SOPs and Guidelines will lead to confusion and defeat its purpose”.** These SOPs and Guidelines must have the date of revision clearly printed on them together with references quoted. There should be no hesitancy in improving or updating the SOPs and Guidelines if it is not necessary. **“The SOPs and Guidelines must reach its intended units or responsible staff members in time”.**

The Department of Human Resources for Health and other Departments under the Ministry of Health should always monitor the HRH situation in detail and projections should be made for different categories of staff for further training and production. This activity is

so important that it must be done every three years. The production of human resources takes time. The availability of **“The Human Resources for Health Computerized System”** will make this task a lot easier.

The Job descriptions for each category of staff must be thoroughly scrutinized and modified based on the requirement of the contemporary situation and nature of work they are performing. This activity is crucial in order to reduce human resource wastage, remove the imbalanced workload, and prevent staff morale from deteriorating. There may be imbalanced distribution of staff in various units, sections, divisions, and programs in the HCDS. It should be suitably balanced or improved as one of the priority actions.

The financial perspectives of the HCDS must be continuously monitored. A user-friendly **“computerized Financial Management System”** should be made available. Rational allocation of budget to different health programs should be considered not only from financial perspectives but also from Public Health Ethics aspects. Rational allocation of budget is one of the tenets of Public Health Ethics.

**“Resource Flow Analysis”** could be made for each budget cycle using

National Health Account as a source for basic budget and finance information. A detailed review of the National Health Account is the preliminary activity to be carried out before we start the “**Resource Flow Analysis**”. It should be carried out from time to time, especially near the end of the current budget year before submitting the ministry’s following year budget proposal to the Parliament.

“Sometimes, we may be allocating relatively more budget to programs that are not important for the country or less budget for programs of priority”. We must not accept the funding support offered by outside entities to non-priority health programs. It would unnecessarily involve our staff in such programs at the cost of the time that should be given to other priority or essential health programs.

It is preferable that “**Resource Flow Analysis**” could be carried out in all the departments under the Ministry of Health. The analysis should include the government budget as well as funding support coming in from other entities such as from UN organizations, World Bank, ADB, IMF, Global Fund, Gavi, DFID, AusAID, JICA, bilateral country support, multi-lateral agencies, etc. The analysis will show many interesting and even unexpected findings. As a second step, “**Resource Flow**

**Analysis**” should be done for each health program of the Ministry of Health. Proper design and format must be developed before we conduct “**Resource Flow Analysis**” to save time. The findings of “**Resource Flow Analysis**” could be used to increase the effectiveness and efficiency of the HCDS.

Depending on the availability of resources, the following actions could be considered for further improving the performance of the HCDS.

- Use of “**Unique Patient Identifier System**” for patients admitted to various hospitals in the country together with “**Electronic Patient Recording System**”; (A total of 56,700 hospital beds available in 1,177 hospitals: 16 bedded to 2,000 bedded hospitals)
- Development of “**Electronic Hospital Information System**” for various categories of hospitals;
- Development of “**Electronic Laboratory Management Information System**” in hospitals and public health institutions;
- Upgrading the “**Cancer Registry System**”;
- Development of “**Diabetes Registry System**”;
- Upgrading the “**Research Registry System**”;

- Upgrading the **“Research Information System”**;
- Development of **“Thesis Registry System”**;
- Upgrading the **“Human Resource for Health Database”**;
- Development of **“Electronic Office Memo Transmission System”**;
- Fine-tuning the **“Communicable Diseases Morbidity and Mortality Database”** as well as **“Surveillance and Sentinel Diseases Surveillance System Database”** for communicable and zoonotic diseases;
- Fine-tuning the **“Non-communicable Diseases Morbidity and Mortality Database”**, etc.;
- Fine-tuning all the **“Indicators and Parameters”** used in the public health domain and hospital administration and management in the Ministry of Health;
- Updating the **“Framework for Career Ladder for Various Categories of Staff”** of the Ministry of Health;
- Develop **“Master Information Registry for Regular Short-Term Training Courses”** given in various departments under the Ministry of Health;
- Develop a **“Compendium for All SOPs and Guidelines”** for use in the Ministry of Health;
- Develop a **“Compendium for All Functioning Key Committees”** in the Ministry of Health.

**“To the extent possible, we may run the administrative and management aspects of the HCDS electronically to make the HCDS efficient”.** Some developing countries have started to do so. All developing countries may go for it. It is highly cost-effective, time-effective, and less labor-intensive in the long run. The workload of health staff can be dramatically reduced and they can give more time for other important works of the HCDS. Some of the staff are somewhat reluctant to be involved at the very outset because of their low computer literacy. In order to overcome this, all staff must first be trained in basic computer skills and inform them of the benefit of using the computerized system by citing specific examples related to various functions of the HCDS. We may need to invest some budget to procure computers and accessories.

**“Improving the performance of the HCDS is easier said than done but we have to strive for it in the coming years”.** In essence, factors that can influence the performance of the HCDS should be monitored and appropriate

**6** Health system development is a key to effective detection, response, and control of any outbreak.

~Margaret Chan (Director-General of WHO)

actions are taken as and when necessary. It is a very vast subject and not all can be mentioned and discussed in this short paper.

(Many points mentioned in other chapters of the **“Reflections of a Public Health Professional”** and **“Health System Challenges: A Developing Country Perspective”** are complementary to the ideas elaborated in this chapter).

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## 9

## Chapter

# EXPANDED PROGRAM FOR IMMUNIZATION: A PRIORITY FOCUS OF ATTENTION



**Investments in immunization yield a rate of return on a par with educating our children – and higher than any development intervention.**

~Seth Berkley

(CEO of Gavi, The Vaccine Alliance)

There are several health projects and programs being implemented in the HCDS of countries all over the world. Expanded Program for Immunization (EPI) is one of the most cost-effective programs among all the health programs. The Ministries of Health should accord top priority attention for supporting and promoting the EPI program. **“A healthy EPI means healthy children”**. A 2016 study conducted by Johns Hopkins University and published in Health Affairs, found that for every dollar invested in vaccination in the world’s 94 lowest-income countries, US\$ 16 is expected to be saved in healthcare costs, lost wages, and lost productivity due to illness and death.

The EPI, Myanmar, is giving 13 antigens/vaccines (Bacilli Calmette Guerin, hepatitis B vaccine, diphtheria vaccine, tetanus vaccine, pertussis vaccine, Hemophilus influenzae type B

vaccine, poliomyelitis vaccine, measles vaccine, rubella vaccine, rotavirus vaccine, pneumococcal conjugate vaccine, human papillomavirus vaccine, Japanese encephalitis vaccine) to the children population. The program got various types of support from Gavi, UNICEF, WHO, UNOPS, etc. Gavi gives financial as well as technical support.

**“The reduction in the incidence of vaccine-preventable diseases has an enormous positive impact in terms of reducing the workload of hospitals in any country”**. The hospitals of developing countries are overwhelmed with childhood diseases. If there is a reduction of the incidence of vaccine-preventable diseases, the hospital staff especially pediatricians, medical doctors, nurses, and medical technologists can give more time to attend to children suffering from other childhood diseases. Therefore, quality medical care

services and more attention can be given to children suffering from other diseases. The budget for medicines and other costs for laboratory and radiological investigations is also reduced as we need to treat a lesser number of children. The workload of radiological services, laboratory services, nursing services, general hospital management services, admission, and discharge services are accordingly reduced.

Generally, there will be fewer nosocomial infections in the hospital leading to the shortened duration of hospital stay and a reduction in bed occupancy rates of the hospital. As the children are not suffering from vaccine-preventable diseases, socioeconomic aspects and quality of life of families could be improved. Healthy children can lead to a happy family. Education of children will be less disturbed. There will be fewer outbreaks of vaccine-preventable diseases which help lessen the work of public health staff.

Most importantly, the growth and development of children will not be unnecessarily retarded. This could result in several positive consequences in life, including undisturbed cognitive development, when the children grow up to adulthood. Healthy adults are important assets for the country. These are some of the pointers that direct us to give undivided

attention to the smooth conduct of the EPI.

When we give priority attention to EPI, it is important to first strengthen the capability of basic health services workers (Health Assistants, Lady Health Visitors, Public Health Supervisors I, Public Health Nurses, Midwives, Public Health Supervisors II) by conducting in-service capacity-building training workshops regularly. In fact, the operational aspects of the EPI program are handled by them.

**“The real success of EPI should be determined by the trend in the reduction in the incidence of vaccine-preventable diseases throughout the years and not by geographical area vaccination coverage and the number of children vaccinated”.** The birth registering system should be strengthened in collaboration with relevant ministries and local administrative authorities. Having had a complete birth registration will lessen the missed opportunities for vaccination. Every effort could be exercised to achieve this end.

Any outbreak of vaccine-preventable diseases should be thoroughly investigated. The lessons learned must be widely distributed to all concerned staff so that we can prevent future outbreaks. If necessary, existing SOPs and Guidelines for

## 6 Vaccines are among the most successful and cost-effective interventions in history.

~Seth Berkley  
(CEO of Gavi, The Vaccine Alliance)

outbreak investigation should be modified and updated. For successful implementation of the EPI program, township-level microplanning is crucial. General and specific guidelines for conducting township-level microplanning workshops should be updated and distributed to all Township Medical Officers. Proper training should be given to them. Township level microplanning exercise has been done in Myanmar for decades. The caveat is that we need to strictly follow the agreed upon points mentioned in the Township Microplan.

The performance of EPI needs to be further enhanced by conducting implementation research to improve the management, administrative, logistics, and technical perspectives of the program. **“The utility of conducting implementation research should not be underestimated. The generic protocol for implementation research for different components of EPI program could be developed to save time”.**

In addition, EPI Information Management System including data flow patterns should be streamlined, strengthened and the feedback system regularized. In view of its importance, the Ministry of Health is conducting EPI Annual Evaluation Meetings on a regular basis. Management, administrative, logistics, human resource, financial, budgetary, and technical perspectives of the program are critically reviewed during the EPI Annual Evaluation Meetings.

**“The most important point is that key action points or recommendations arising out of the annual meetings must be closely followed up and actions are taken accordingly”.** Generally, the follow-up of the implementation of the recommendations made at EPI Annual Evaluation Meetings needs to be reinforced. More implementation research projects on EPI should be conducted to

improve the administrative, logistics, and management aspects of EPI.

As alluded to earlier, **“EPI Information Management System”** needs to be complete, robust, and responsive. A **“Data Review and Analysis”** team should be formed at the central level and assigned to run the **“EPI Information Management System”**. If possible, a quarterly newsletter, either electronic or paper-based, should be issued. This newsletter should include the latest technical information on vaccines, immunization, adverse effects following immunization (AEFI), outbreak investigation findings, hospital-based immunization centers, cold chain systems, the incidence of vaccine-preventable diseases, and important information on immunization from other countries.

**“There should be regular feedback about immunization issues from the central EPI division to all concerned staff in the country”**. This feedback is essential to create a sense of ownership of EPI staff working at the ground level. Apart from data on immunization, the **“EPI Information Management System”** should include geographical terrain, seasonal mode of communication available in different parts of the country, distances and time to travel between villages and village tracts, sites of sub-depots, basic health services staff

availability in sub-rural and rural health centers, children population data, etc.

In order to increase the efficiency of EPI, hospital-based immunization centers are being introduced in Myanmar. All those children who are missed in outreach immunization sessions can go to the hospital-based immunization centers to get vaccinated. This could improve the coverage of EPI. It has several other advantages as well. **“We need to increase the number of hospital-based immunization centers”**. The outreach EPI services had been in place for decades.

**“We should promote health information dissemination sessions in outreach immunization services”**. Health knowledge enhancement talks should be given on topics such as common childhood diseases, multiple benefits of immunization, dangers of vaccine hesitancy, malnutrition, and nutrition information, the normal growth pattern of children, personal hygiene, environmental sanitation, worm infestation, infectious disease transmission, etc.

In order to elicit the true scenario and to further improve the effectiveness and efficiency of the EPI in the country, the following fact-checking and certain verification activities should be done. It is not necessary to carry out all the activities mentioned below.

“For just a few dollars a dose, vaccine save lives and help reduce poverty. Unlike medical treatment, they provide a lifetime of protection from deadly and debilitating disease. They are safe and effective. They cut healthcare and treatment costs, reduce the number of hospital visits and ensure healthier children, families and communities

~Seth Berkley (CEO of Gavi, The Vaccine Alliance)

- Whether the target children population data for immunization is complete in terms of geographic areas? Are there pockets of children missed for immunization? We need to cross-reference with various population data sources;
- Quick check on birth and death register in certain geographical areas;
- Are cold chain vaccines depot sites performing as per the standard set? Are the checklists used for the assessment of cold chain depots and cold chain systems up-to-date? The cold chain system is the lifeline of the EPI. No compromise is allowed.
- Are **“outreach sites’ performance assessment checklist”** up-to-date and whether the outreach sites are regularly submitting the findings of assessment checklists? Do we make the analysis of the reports submitted?
- Viewpoints of basic health services staff and certain groups or characteristics of the population about outreach immunization sessions and hospital-based immunization centers could be revealed by conducting key informant interviews and focus groups discussions;
- Composite review of **“AEFI reports”** for the last one to two years;
- Quick surveys to elicit **“misinformation and disinformation about immunization”** among populations residing in remote and

hard-to-reach areas and in areas where immunization coverage rates are low;

- Conduct an **“EPI coverage survey”** (30 by 7 cluster sampling), if necessary;
- Quick review of **“EPI data transmission system”** using checklist type of assessment;
- Quick review of last year’s report of **“EPI Annual Evaluation Meetings”**;
- Quick review of **“transfer policy and career ladder of EPI staff”**;
- Quick review of **“research projects conducted on EPI and related activities”**;
- Quick review of **“Gavi Assessment Mission reports”** and actions taken on the recommendations;
- **“Quick review of budget allocation and use in EPI activities”**;

Based on the findings of the above activities, necessary program adjustments could be made. The strategies and certain interventions of EPI may be modified, if necessary.

One of the key determinants for the successful performance of EPI is proper care and maintenance of cold chain systems, apart from having a good logistics system. The EPI unit gives extreme attention to this aspect and appears that there are no major lapses in the cold chain

system as observed by the reduction of incidence in vaccine-preventable diseases in the country throughout the years. However, there were some instances of small and sporadic outbreaks of diphtheria, pertussis, and measles. But these are probably not due to problems in the cold chain systems.

**“EPI Program Manager should have the management, logistics, administrative, leadership, communication, technical, and epidemiological thinking skills”**. The person must be a true public health professional and should have the characteristics of successful public health professional. The EPI is one of the most successful health programs running in the country. However, there is room for improvement.

The EPI should have a **“Program Oversight Committee”** to oversee the program from a holistic perspective. The Ministry of Health must continue to accord special attention and support to keep up the current success of EPI in view of its national importance. **“There is no way that we can afford to interrupt the vaccination program in the country at any point in time”**. Our aim is to have a very big cohort of vaccine-preventable diseases free children in the country.

## 10

## Chapter

ROLE OF POPULATION  
*VIS-À-VIS* HEALTH STATUS  
OF THE COUNTRY

Public health is purchasable. Within a few natural and important limitations any community can determine its own health.

~ Hermann Biggs  
(American Pioneer in the Field of Public Health)

**The role of the population in improving the overall health status of the country should not be underestimated.**

The contribution from the population especially in the field of public health can be very dynamic, focused, forceful and sustainable. If we know how to effectively handle and shape this hidden force, it is highly likely that many public health interventions will achieve their intended goals.

Health professionals, (both public health and clinical) generally consider interventions from their perspectives about how much they can contribute to the benefit of the community and patients. **“We tend to forget the enormous force that the population can reciprocate from their side of the coin”**. The population could exert an enormous impact on the following issues.

- In reducing the incidence and prevalence of communicable and non-communicable diseases and conditions;
- In reducing incidence and prevalence of environmental sanitation-related diseases including water-borne, water-related, and water-associated diseases;
- In reducing the burden of nutrition-related conditions such as malnutrition and micronutrients deficiencies;
- In preventing sexually transmitted diseases;
- In preventing disease outbreaks and shortening the duration of disease outbreaks;
- In preventing and reducing tobacco and tobacco-related products and narcotic drug use;
- In reducing the incidence of accidents and man-made disasters;



- In reducing occupation-related diseases and occupational hazards;
- In disseminating and sharing health knowledge among themselves;
- In promoting the practice of healthy lifestyles, etc.;
- In notifying sensitive and epidemiologically useful information available at the grass-root level, which could not be accessible by the health staff;
- In apprising undesirable health conditions and inappropriate health care activities happening at the ground level and in hospitals;
- In informing early warning signs of disease outbreaks;

There are few costs in achieving the above scenarios. The positive impact of population actions can be observed more clearly if the level of health knowledge of the population is high. The population should not take a passive role in receiving health services from the Ministry of Health. They should think of how they can be involved in public health interventions carried out at the ground level. **“Many diseases and unwanted conditions are happening for want of health knowledge and non-application or non-translation of health knowledge into action”**. The public health professionals can make these situations happening into reality.

The positive impact can be felt more if local groups of the population work together as a team or form small community groups. The health professionals, including basic health services staff, should note and honor these local groups and work closely with them while implementing the public health programs. Through this mechanism, there will be a sense of ownership of ministry's health programs by local groups. Once this is achieved, the program is bound to be successful and sustained. Here, the formation of local groups consisting of like-minded persons proves to be useful in disseminating health knowledge and putting it into practice.

**“The networking of local population groups is essential and should be promoted”**. The exchange of various types of information among local population groups can be greatly facilitated if we can create a network of local population groups. Respective state/regional/provincial and township health offices can help develop the networks. There will be healthy competition among the groups which is essential for their growth.

The Ministry of Health should have an icon on its website where all the key health information is put up in layman's terms. It is important that correct

and valid health information must be conveyed to the population. All the health myths must be clarified. This approach of networking local population groups for health promotion is innovative. **“We need to apply multidimensional, multisectoral, multidisciplinary, multifaceted, and multilayered approaches when the population dimension is involved in any public health and health promotion activity”.**

In order to have more local groups who are interested in health, we have to convince the population through several communication channels using simple strategies, such as conducting more local health talks, small group discussions on issues of contemporary importance, etc. During these talks, it is desirable to stimulate them to talk more and not by health professionals. Let them be talkative. Let them overwhelm and lead the discussion.

Sometimes, health professionals can put forward probing questions or creative ideas, or even contentious issues. The moderator of these talks should make everybody get involved in the discussion. The role of the moderator is crucial to achieving the goal of stimulating population interest. **“The first phase is to broaden the knowledge horizon**

**of the population. The second phase is to translate the obtained health knowledge into practice”.** It will take time. But with high peer pressure, it will happen. Different strategies need to be used for translating health knowledge into practice.

One clear-cut example is immunization of children and reduction in the incidence of vaccine-preventable diseases. When there is an outreach immunization session in a community, the population themselves should do the following.

- Alert the parents of children eligible for immunization about the date and time of immunization and to bring their children to the outreach immunization sites;
- Enlighten the types of diseases that can be prevented from happening if the child is vaccinated;
- Propagate the risks of non-vaccination;
- Apprise the public how much the government has spent on vaccination programs and that population should take full advantage out of it;
- Inform that if the child is not suffering from vaccine-preventable disease, the growth, cognitive and physical, development of a child will not be disturbed;

- Inform that immunization is the easiest and best way to prevent many childhood diseases, etc.;
- Convey that health information about common childhood diseases, multiple benefits of immunization, dangers of vaccine hesitancy, malnutrition, and nutrition information, the normal growth pattern of children, personal hygiene, environmental sanitation, worm infestation, infectious disease transmission, etc. will be given by health workers at the immunization sites;

The local groups can take care of these initiatives for convincing the population to get their children immunized.

Another recent example is COVID 19 pandemic or occurrence of any disease outbreak due to respiratory route transmission of the organisms. If people strictly follow mask-wearing, social distancing (not going to crowded places and congested areas), proper hand washing, practicing cough etiquette, not to be afraid of being quarantined, accepting vaccination, go to health institutions as soon as they have early signs and symptoms of COVID 19, inform and warn each other about the nature of the spread of disease – we are so

engrossed in our work that we intend to forget the basic preventive measures, the quantum and spread of COVID 19 will be reduced significantly. There will be fewer waves of epidemics/pandemics. If people are cooperative and follow the preventive measures issued by the Ministry of Health, the pandemic can be stopped sooner than later. **“In fact, the duration of the pandemic is indirectly proportional to the behavior of the people”.**

**“The following interventions can be initiated to strengthen the role of the population in improving the overall health status of the population”.**

- Increasing the health knowledge base and expanding the knowledge horizon of the population;
- Establishing more local population groups for health promotion in various geographical areas;
- Appreciating the work done by local population groups;
- Distributing health knowledge materials, handouts, and posters to local groups (in local dialect) and asking them to give comments for further improving these materials, i.e., asking them feedback to have a sense of ownership;
- Conducting National or several Regional Seminars on **“Role of Community Groups in Promoting**

“The power of community to create health is far greater than any physician, clinic, or hospital.

~Mark Hyman

(A fourteen-time New York Times bestselling author)

- **Health Status of the Population”;** Discussing with local population groups when a new health program is launched.

**“In essence, a strong connection between health professionals and local (community) population groups is required, like an umbilical cord attached between mother and foetus”.** We also need to strengthen the networking system of local (community) population groups. The sharing of information among the networks is desirable. In view of the important role that the population can play especially in public health interventions

carried out at the ground level, the Ministry of Health should urgently formulate National Strategy on **“Role of Population in Improving Overall Health Status of the Country”**. In formulating the strategy, local population groups should be proactively involved. It will then create a sense of ownership by the local population groups on the strategy. If we can harness the population power and get involved in public health interventions and health promotion activities, the health status of the population of any country can be dramatically improved.



# PRODUCING WELL-QUALIFIED MPH GRADUATES

Public Health is an honorable profession that is often under-sung but almost always over-delivering. Since public health's most important goal is the absence of risk or disease, when it is not working everybody screams but when it is working, it speaks with a whisper and almost and often goes unheard.

~ Seth Berkley (CEO of Gavi)

As I have alluded to earlier, the strength of the HCDS depends to a large extent on the performance of the public health domain. Thus, the drivers of the public health domain must not only have a strong public health acumen but also be able to practice according to the principles of public health ethics in running public health programs and projects.

#### Strong public health acumen

means:

- one must have excellent epidemiological thinking skills;
- the ability to generate futuristic or forward-looking ideas;
- possessing an analytical and critical mindset;
- always viewing things from holistic perspectives;
- capable of explaining or transforming complex problems or matters into simple ones;
- always viewing things from the population or recipient's perspectives;
- practicing spirit of compromise and not dogmatic;
- balanced decision-making;
- mutual respect and understanding towards other professionals;
- genuinely showing the spirit of cooperation, etc.

Taking into consideration the above characteristics, giving priority to increasing the public health knowledge base alone is insufficient to become good public health professional. **“Didactic lectures alone will not lead to producing good public health professionals”**. In

order to expand the thinking dimension of MPH students, the role of teaching methods comes into prominence. More platforms should be created to have more exchange of ideas among the MPH students and faculty members and especially guest lecturers from departments under the Ministry of Health, UN agencies, organizations, and associations. The guest lecturers especially from the departments under the Ministry of Health could give wider and realistic views based on what is happening at the ground level, which could not be noticed by the faculty of the University/School of Public Health.

**“The spectrum of public health subjects is very wide”. “The epidemiological situation of a disease or condition observed is the result of the interaction of several factors”.** Some of the factors are beyond the control of the Ministry of Health. Many social factors related to public health are also linked with the economic situation of the country concerned. In order to expose these social factors vividly, more interactions or platforms for discussions are required between MPH students, guest lecturers, and faculty members. These platforms must be made available.

Therefore, for a lecture session of an hour, didactic lectures should take

50 minutes most. Ten minutes must be reserved for questions and clarifications. This is the period where MPH students can start to think of (i) the gaps in technical contents of the lecture topic; (ii) the weaknesses of the reasons given by the lecturer; (iii) the disjointed nature of the contents of the lecture topic, if any; (iv) the areas where further clarification and elaboration are required; (v) the points not clearly explained by the lecturer; and (vi) not raising or emphasizing the contemporary situation of importance, etc. The clarification or question/answer sessions can lead to more understanding of the topic under discussion and could also improve the lecturing ability of the lecturer. It is mutually beneficial for MPH students and faculty members.

**“The interactions between the MPH students who raise the questions and responses given by the lecturer can also benefit the rest of the MPH students in the lecture hall”.** It will further stimulate the MPH students to have more interest in the subject in question. Inquisitive minds of MPH students are stimulated and opening up or intrinsic instincts and ability will be exposed.

More debates and panel discussions on contemporary public health topics of interest could be conducted.

These are very desirable platforms where many hidden issues, sensitive matters, complicated nature of the scenario can be further elaborated and noticeable. The expansion of the knowledge horizon in the field of public health can effectively be obtained. This is the platform where topics for MPH dissertation or thesis could be generated. The nature of the thesis topic could be realistic, contemporary, and appropriate. It will be beneficial not only to the domain of public health but also to the country.

The University of Public Health in Myanmar is unique in that it has many guest lecturers coming from the Department of Public Health, Department of Medical Services, Department of Food and Drug Administration, Department of Traditional Medicine, Department of Medical Research, Department of Human Resource for Health, Department of Sports and Physical Education, many societies of Myanmar Medical Association, Myanmar Health Assistant Association, Myanmar Nurses and Midwifery Association, Myanmar Dental Association, Myanmar Medical Council, Myanmar Academy of Medical Sciences, Myanmar Red Cross Society, Myanmar Maternal and Child Welfare Association, UN Agencies and Organizations, etc. This could result in

a teaching atmosphere where a range of evidence-based information could be shared with the MPH students. It is very important that some general guidelines for the guest lecturers could be prepared for ready reference. It should be modified as and when necessary.

In order to open up the intrinsic knowledge base and expose thoughtful ideas, **“Reflection Papers”** could be submitted by MPH students once every fortnightly or once a month. There is no right or wrong answer in the contents of the **“Reflection Papers”**. So long as they can give rational and sound reasons for the ideas put forward, it is acceptable. This is an excellent platform for generating new ideas for consideration by the policymakers or the Minister for Health or the Directors-General of various departments in the Ministry of Health. Some exemplary headings for **“Reflection Papers”** are:

- **“If you are appointed as Program Manager for Expanded Program for Immunization, how are you going to manage and lead the program?”**
- You received a message: **“There was a measles outbreak last week in Township “X” in Yangon Region. Please investigate and control it”**.
- You received a letter: **“You are**



**promoted as Rector of the University of Public Health, Yangon. Outline the action points that you are going to do to improve the image as well as the quality of teaching of the University?"**

- **"What should be the role of population in controlling COVID 19 pandemic?"**
- **"Nurses are essential staff of hospitals" Do you agree with this statement?**
- **"There is an increasing trend of non-communicable diseases occurring in the country. How would you bend the increasing trend curve?"**
- Prepare talking points on: **"Reducing the incidence of non-communicable diseases in a developing country"**.

Sometimes, the statement and questions are purposely framed in an incomplete way to generate further in-depth thinking and to improve epidemiological thinking skills.

**"There should be regular Lunch Time Talks in the university"**. Students from nearby universities, hospitals, departments, associations, councils, concerned INGOs, local NGOs, and Final MBBS Part I students studying Preventive and Social Medicine subjects could be invited. The titles of talks need

to be carefully chosen. Contemporary subject matters and contentious issues of importance could be selected to attract more attendance. Attendance of Lunch Time Talks should be compulsory for MPH students.

Lunch Time Talks could be given by faculty members, MPH students, expertise from outside, or anybody assigned by the Rector or Dean of the University/School of Public Health. All Lunch Time Talks, with consent from the speakers, should preferably be videotaped and stored in the University of Public Health or School of Public Health library or in a proper place for viewing later by those who missed the talks. **"The success or sustainability of Lunch Time Talks depends on the interesting nature of the talks and who gives the talk"**. Therefore, proper choice of titles and selection of good speakers for the talk is crucial.

**"Networking among Universities/ Schools of Public Health is highly desirable. Every effort should be made to make the network dynamic and responsive"**. Many innovative and creative ideas on teaching methods could be shared among the network members. Faculty exchange for short periods within the network may also be considered. Networks are already in place but we need to expand

the network coverage. This would be very useful for Continuing Professional Development (CPD) for faculty members. Proper communication channels could be established and used. Zoom meetings could be fielded during COVID 19 time.

In order to enhance the faculty strength of the teaching institution, it is desirable that more Professors Emeritus, Visiting Professors/Lecturers, Honorary Professors/lecturers, Adjunct Professors/Lecturers could be appointed. They could also serve as personal advisors or mentor to MPH students. The presence of strong faculty can lead to production of quality MPH graduates.

The selection of thesis topics for MPH courses is very important. It should be done very carefully as it is very crucial for promoting the public health domain for the country. **“The Thesis Bank, which includes titles of the previously conducted thesis together with the objectives, be made available online”**. This could ease the choice of a thesis title. Plagiarism is absolutely not acceptable. It must be closely watched out using computer software to detect plagiarism. Students should be pre-warned about the seriousness of plagiarism. Detection of plagiarism is tantamount to expulsion from the course. **“One unique feature of MPH course in Myanmar is that all**

**MPH students are active government service professionals”**. They already have some experience in the functions of the government administrative machinery.

More emphasis should be made in the MPH curriculum to include topics such as Research Management, Responsible Conduct of Research (RCR), Research Ethics, Research Information System, Research Registry, Functions of Institutional Review Boards (IRB), Research Methodology including Qualitative and Quantitative Research Methods, Prioritization of Research, Research Title Bank, and Utilization of Research Findings. The teaching institutions for public health should have their own Institutional Review Boards.

**“The curriculum of MPH course should be dynamic and forward looking”**. Holistic review of MPH curriculum could be made as and when necessary. There should be no hesitancy for doing so. It should be based on the information acquired from networking with sister Universities or Schools of Public Health from other countries. Minor changes in the curriculum could be made as required. Inputs from international agencies and organizations, MPH graduates coming back from Schools of Public Health from other countries and

medical educationists should be sought in the process of modifying the curriculum.

Prospectuses of MPH courses conducted at Schools of Public Health from developed countries, especially the USA, could be studied. It would be desirable to adopt some of the processes if deemed necessary. Teaching methods and teaching aids play an important role to get quality MPH graduates. Inappropriate or sub-standard teaching methods can lead to production of mediocre quality MPH graduates.

**“We should not underestimate the significance of having a dynamic website of its own”.** The website is the face of the University. It could attract more MPH students. Electronic Library must be well maintained. However, several important reference textbooks pertaining to public health and epidemiology be made available in the paper book form in the library. Teaching-Learning Environment should be conducive to a higher learning atmosphere. State-of-the-art teaching aids should be made available. Good and complete library can give a helping hand in getting quality MPH graduates.

Capacity-building activities for faculty members (Continuing Public Health Education, Continuing Professional Development) be systematically planned

and carried out without fail. It is proposed that a **“Medical Education Seminar Focusing on Promoting Public Health Teaching”** be conducted. As alluded to earlier, the strength of the faculty is conducive to the production of quality MPH graduates.

Depending on the strength of faculty members and other resources, diploma courses on:

- Epidemiological Methods;
- Health Policy Analysis;
- Sampling Methods and Sample Size Computation;
- Research Management;
- Quantitative Statistical Methods;
- Qualitative Statistical Methods;
- Advanced Statistical Methods;
- Clinical Trials;
- Health Policy and Planning;
- Outbreak Investigations;
- Public Health Ethics;
- Research Ethics, could be conducted.

These diploma courses could attract students to be serious in their studies. The University Public Health in Myanmar is under the administrative management of the Department of Human Resources for Health, Ministry of Health and Sports. It is a production factory for well-qualified public health

“Graduates, your field of public health is as wide as the world. Your mission is the welfare of humankind.

~ Natalia Kanem  
(Assistant Secretary-General of the United Nations)

professionals for the public health domain of the country. Therefore, every effort should be made to further strengthen the University from different perspectives. **“The best approach is to take out the University of Public Health from the administrative machinery of the Ministry of Health and Sports”**. It should be an independent University. The Dean and the faculty should decide the future of the university.

In Myanmar, the strength of the public health domain depends on the strength of the University of Public Health. It will be the same for other developing countries. Let us strengthen the Universities of Public Health/Schools of Public Health in the countries. We should have an international or regional seminar on **“How to Effectively Strengthen Universities/Schools of Public health”**.

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# 12

## Chapter

# BASIC HEALTH SERVICES STAFF *VIS-À-VIS* ACHIEVING UHC

“We are convinced that universal health coverage, with strong primary health care and essential financial protection, is the key to achieving the ambitious health targets of sustainable development goals (SDG).”

~ Tedros Adhanom (Director-General of WHO)

Basic health services (BHS) staff consists of Health Assistants (HA), Lady Health Visitors (LHV), Public Health Nurses (PHN), Public Health Supervisors (PHS) I, Midwives (MW), Public Health Supervisors (PHS) II. The titles are slightly different from country to country. The **“BHS staff are the backbone of the public health system. Every effort should be made to make them technically efficient and ethically sound”**. They give both public health and some curative services to the population in rural and peri-urban areas by working in rural health centers (1,904) and sub-rural health centers (9,077) located all over Myanmar in 2020. We need to give quality public health services and some quality curative services in these centers located all over the country.

Many centers are located in hard-to-reach and under-served areas of the country. If we really want to achieve UHC, necessary support must be given to these centers in terms of medicines, supplies and equipment necessary to run these centers in full swing. In this context, giving proper orientation training to BHS staff should also be the top priority action of the Ministry of Health. Vacant staff positions in these centers must be filled immediately.

They are produced by the University of Community Health and 52 Nurse and Midwifery Training Schools, and other training institutions located all over the country. Orientation training courses are also regularly conducted at these institutions. The quality of teaching,

curriculum, and teaching methods are important determinants for the quality of services they are going to give at the health centers.

**“Systematically planned in-service capacity-building training programs should be conducted in increasing frequency for all categories of BHS staff working all over the country”.** These capacity-building training sessions should be monitored and evaluated to further improve them. This must be done without fail. Carefully prepared background documents/ working documents are made available at all training sessions and put into the mobile tablet phones (30,000) provided to them.

In order to streamline many things, it is desirable that **“The National Education Seminar for BHS staff”** be conducted as soon as possible. During the seminar, the discussion could be made on the relevancy and completeness of the current curriculum being used *vis-à-vis* their current work and health situation. Teaching methods being used are as important as having a good curriculum. In addition, field visits and practical exchange of ideas between the students and the faculty members are *sine qua non* to promote the quality of products coming out from the above teaching institutions. All these should be brainstormed thoroughly.

Innovative ways of teaching should also be identified during the seminar. Most importantly, capacity-building programs for faculty members of training institutions should be part of the agenda of the seminar.

**“The BHS staff should be thoroughly informed about the meaning of Universal Health Coverage (UHC) and the specific roles to be played by them in attaining UHC.”** It is a very long journey and we have to work collaboratively and in an integrated way. At the same time, the population must be enlightened about the meaning of UHC so that they can judiciously demand the health services to be rendered by the BHS staff.

The BHS staff are the first point of contact between sick people with the health system. By providing quality health services to the population, we can create confidence-building between the population and the health staff. This is very desirable for future collaborative public health programs to be carried out in their geographical areas. Once we carry out successful public health programs in the community, the overall health status of the population could be improved, which might have a positive domino effect.

For health centers in remote areas of the country, they have to take

care of both public health and more curative activities. **“The firm confidence developed between the caregivers and the recipients can lead to the sustainability of public health programs or any activity being carried out in the community”.** This is the scenario that the public health professionals are looking forward to it along our path to UHC.

**“If health knowledge is disseminated to the population effectively, we could detect many non-communicable diseases early”.** Appropriate interventions could be made so that the disease would not progress further. The Ministry of Health has given Internet-connected seven to eight-inch mobile tablet phones to all the BHS staff. Health knowledge and information on preventive to curative aspects of diseases and conditions and all SOPs and Guidelines produced by the Ministry of Health are included in the tablet phones. The BHS staff can easily refer to and apply it accordingly. This is really the greatest asset for our BHS staff to promote the public health domain in the country. **“Through the use of tablet phones, networking among health professionals could be strengthened very quickly”.** Many UHC-related activities can be effectively and efficiently implemented.

As the tablet phones are also given to Station Medical Officers, Township

Medical Officers, Nursing Officers, and officials working at District and State/Regional offices, the interconnectedness of all health staff is possible to the benefit of the overall HCDS of the country. This is one of the good building blocks on our road to achieving Universal Health Coverage. However, it is crucial that we need to promote the use of tablet phones in their daily health care activities. As tablet phones are internet-linked, many things can get done efficiently. **“Through the use of mobile tablet phones, even Union Minister can communicate with any health staff or all health staff at one time in the country instantly”.** This is a very desirable situation on our path to UHC.

The BHS staff are using internet-linked mobile tablet phones for conducting small surveys, the transmission of data and information (using DHIS II software), management of outbreaks, conducting orientation training courses, etc. **“The future of the public health domain in Myanmar is very bright”.** Using Mobile Device Management software, the contents of the tablet phones can be updated instantly by responsible technical and administrative units at the central level. Myanmar is unique by using mobile tablet phones to improve the health literacy level of the population and then overall public health domain. It is expected



## “ Universal Health Coverage is key to building resilient health systems that make people and planet healthier.

~ Judith Rodin  
(President, The Rockefeller Foundation)

that the health status of the population could be improved in a matter of years. A very good scenario on our path to UHC.

As BHS staff are underpinning the success and impact of activities of the public health domain in the country, there should be a **“Technical Advisory Group for Promoting the Work of BHS Staff”**. This group should see all aspects of BHS staff. It could definitely facilitate reaching UHC at an earlier date. BHS staff are not only the backbone of the public health domain in the country but they

are the point of contact between the Ministry of Health and the population. This point of contact must be made as smooth as possible because they are essential team members of the HCDS of the country. Every effort should be exercised by the Ministry of Health so that they can deliver public health services to the population effectively and efficiently. (Please refer to chapter 5 **“Approaches to Achieving Universal Health Coverage”** in the **“Reflections of a Public Health Professional”** book published by MBDS).

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# 13

Chapter

## CHALLENGES IN MANAGING A HOSPITAL

“Hospitals are key to reaching Universal health Coverage. If we continue to give little attention to upgrading and integration of hospitals and their services, low- and middle-income countries will remain ill-equipped to meet their commitment to Universal Health Coverage.

~ Maureen Lewis

(Author and senior fellow, Center for Global Development)

The discussion will center on the hospital in a developing country's scenario. **“Managing hospitals in developing countries are not always smooth and simple. There are many unexpected issues and challenges over and above the bureaucratic rules and regulations”**. The quality of diagnostic procedures, investigations, and treatment services are given to patients in the hospital truly reflect the image of the Ministry of Health. The hospital services are also an important part of the functions of the HCDS. Out of the two major domains in the HCDS, clinical domain activities are taken care of by hospitals and their staff. Proper management, administration and efficient handling of the hospital machinery are taken care of by Medical

Superintendents of the hospital and the staff working under him/her. Our prime goals are to have **“patient satisfaction”, “staff satisfaction” “smooth running of the hospital”** and **“patient safety”**.

**“The administrative ability, performance efficiency, and management capability of a Medical Superintendent are of paramount importance”**. It is also noted that possessing the high-capacity and broader capability of a well-experienced Medical Superintendent is far more desirable than a person or medical doctor with a Master of Hospital Administration degree. **“The experience counts more than a degree in hospital administration”**. There are many social issues, personal matters, and unexpected challenges.

Complaints from the population are generally coming more from the hospital domain than the public health domain. **“If some untoward incidences occurred in the hospital domain, it could badly affect the image of the Ministry of Health”**. Every care should be exercised so that we can give quality, ethical, and efficient health care services to the patients attended at the hospital.

**“Management of the hospital in a developing country is quite different from managing a hospital in a developed country”**. Common issues and problems which could not be seen or thought of in the hospitals of a developed country are present in many hospitals in a developing country. Medical Superintendents must look forward to dealing with such a scenario. The solutions to overcome these challenges could be sought through regular meetings between Medical Superintendent and hospital staff including doctors, nurses, and other para-medical staff. **“Many problems arise from weaknesses in administration, management, logistics, and insufficient human resources”**.

Each hospital should have a well-functioning **“Hospital Oversight Committee”** to help solve the problems.

The scenarios seen in hospitals of developing countries are generally do not appearing in hospital management textbooks. The solutions given in these books are also not fully applicable to solve problems met in hospitals of developing countries. Hospitals of different hierarchical levels have different sets of problems. Some problems are unique for certain geographical locations. **“Hands-on experience is better than a textbook experience for managing hospitals in developing countries”**. Many commonsense approaches need to be applied to solve the problems met in hospitals.

Medical Superintendents play a very important role in the HCDS as hospitals are part of it. They should have good management, logistics, and administrative skills together with some technical skills on supplies and equipment and supply chain management issues as well as knowing basic public health principles. It is not that easy to acquire all these skills in one go. In view of the similar nature of issues, problems, and challenges encountered in hospitals, it is highly desirable that, from time to time, we should conduct **“Hospital Medical Superintendents Experience Sharing Meetings”**. Collective thinking

is necessary to solve problems and overcome challenges.

The line of communication between different hierarchical levels of the hospital system with the central level needs to be reviewed and streamlined. In Myanmar, we have 16, 25, 100, 150, 200, 300, 500, 800, 1000, to 2000 bedded hospitals **“(a total of 1,177 hospitals and 56,700 beds, as of January 2021)”** and various sizes of so-called “specialty hospitals”.

The following issues and challenges are commonly noticed in hospitals of developing countries. The degree of seriousness of issues and problems varies from hospital to hospital. **“The duty of the Medical Superintendent is to anticipate and overcome these challenges through close consultation with the staff of the hospital in a collective way”**. In fact, Medical Superintendents should be all-rounders. They have to handle the below-mentioned points to the best of their capacity and capability.

- Hospitals are not constructed as per the **“standard hospital blueprint”** for a particular type of hospital resulting in disruption of normal flow pattern of patients. The location of service units in the hospital is not in proper order and negatively affects the smooth movement of patients.

There is unnecessary delay in giving emergency treatment to patients, creating stressful conditions to the patients and attendants. It takes more time to reach the radio-imaging, laboratory, radiotherapy, radiography, physiotherapy, ultrasound units, etc. **“(Time and motion study for out-patients and in-patients needs to be done in the hospital)”**

- Hospitals are generally not run by the **“full staff strength”**. Hospital workers are overworked and it could lead to clinical errors and unnecessary stress to them.
- **“Hospital environmental sanitation”** is not properly maintained to prevent the spread of many gastrointestinal diseases, rodent-borne diseases, and mosquito-borne diseases. It could result in disease outbreaks and could overwhelm the hospital beds.
- **“Hospital building codes”** are not properly followed. Wear and tear can happen prematurely. Approval to repair the damaged parts of the hospital building may take months.
- There is no strict control over the **“number of attendants allowed”** for each patient. It could result in many unwanted situations, such as the spread of infectious diseases

including respiratory tract infections and nosocomial infections. Patient attendants are not abiding by the set time to see patients.

- **“Water supply system, garbage disposal system, hospital waste disposal system, and sewage disposal system”** are not functioning perfectly. Blockages of pipelines are commonly seen. This could result in unbearable conditions and prone to have disease outbreaks. Improper or sub-standard hospital waste disposal is a very serious matter with unacceptable consequences. There is no fire alarm and fire sprinkler system even in big hospitals.
- The **“electricity supply”** in many hospitals is erratic. The voltage is also fluctuating widely resulting in frequent breakdowns of electrical equipment. Some breakdowns could result in catastrophic consequences. The lighting system is generally not optimized.
- Very few hospitals have complete **“hospital management information system”**. The hospital Record Section is generally understaffed. An unnecessary delay in the management of patients could happen. It would be difficult to know the trend of morbidity and mortality of the diseases and the trend of caseload taken care of by the hospital. The planning process for the hospital domain will be badly affected.
- **“Blood transfusion service”** are not up to the mark. It could result in unnecessary suffering to the patients.
- There is always a **“shortage of medicine, laboratory equipment and consumable items, supplies and equipment”**, etc..
- **“Frequent breakdowns”** of laboratory equipment, radiology, radiotherapy, and physical therapy machines due to reasons apart from voltage fluctuation. The clinical course of the patient may be negatively affected.
- **“SOPs and Guidelines”** on administrative and treatment protocols are not up-to-date and sometimes not available. Patient safety may be badly affected.
- **“Proper arrow signs”** for the location of various wards and service units are not always seen. Unnecessary confusion to the patient is not good.
- **“Rooms for resting”** of hospital staff are not enough. This could create unnecessary stress and strain on the hospital staff. The work efficiency of the staff could be decreased.
- The **“number of patients admitted”**

is more than the sanctioned beds. This could result in an increasing number of nosocomial infections and overburden the hospital staff.

- **“Disinfection of the hospitals”** is not commonly practiced due to lack of funds. Serious disease outbreaks can happen.
- Patients do not bother with the **“cleanliness”** inside the hospital and they never follow the duties of patients and their attendances posted on the wall of the hospital. More nosocomial infections can happen.
- Not all hospitals have **“medicine and supplies shops”**. A lot of inconveniences can happen especially during night time.
- Complaints from patients are very common. **“Suggestion letterboxes”** from patients are not available in most hospitals.
- The **“ambulance cars”** are not properly maintained and there are no logbooks on their use, etc. Frequent breakdowns are not uncommon. Resuscitation equipment sets are not complete. Staff to handle resuscitation equipment inside the ambulance are not available.

The Master in Hospital Administration (MHA) degree course offered by the University of Public Health

in Myanmar is quite different from similar courses run in developed countries. The curriculum is modified as per the need of the country. In order to improve the administrative and management ability of Medical Superintendents, regular orientation training courses for Medical Superintendents should be conducted. In these courses, senior Medical Superintendents could serve as trainers or facilitators. One of the side benefits of conducting these training courses is several SOPs and Guidelines on hospital-related matters would come out of these training courses.

**“All in all, the administrative and management acumen of the Medical Superintendent is key to successfully running the hospital”**. These are not written in hospital textbooks. These administrative and management issues are also different from one part of the country and another part of the country. It is also related to the character and personality of health staff working in the hospital. It needs intuition, educated guesses, and commonsense decision-making. The hospital service experience is crucial and sometimes we have to practice **“learning by doing”**. If Medical Superintendents work in close coordination with the **“Hospital Oversight Committee”**, many challenges could be taken care of to a certain degree of satisfaction.

6 The key things I learned as a hospital administrator are to be organized, communicate, and be flexible.

~Glen Mazzara

(An American TV producer and writer)

Using a checklist for assessing the hospital performance or situation for any situation or condition is an advantage. The findings of the checklist responses could be confidentially discussed during the “Hospital Oversight Committee” meeting. Advanced preparation and anticipation could ease many administrative and management issues. Patient safety and patient satisfaction could be fulfilled if the hospital is properly

managed. Be that as it may, Medical Superintendents in developing countries are doing their level best so that the hospital can give its medical care services to the population satisfactorily. “It is satisfying to note that in spite of the big challenges they are facing, Medical Superintendents are performing well. We have to honor their hard work”.

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# 14

Chapter

## STRENGTHENING THE NURSING DOMAIN: AN ISSUE OF CRITICAL IMPORTANCE

“The value of nurses has never been appreciated and valued more than it is right now. They are the support system that is keeping the world together, hand in hand with the doctors and medical staff, battling forth against the novel corona virus.

(International Nurses Day 2020)

Given the fact that the role of nurses in the clinical-cum-hospital domain is crucial, **“the Ministries of Health of the developing countries should give priority attention to strengthening the nursing domain from all perspectives”**. If we can improve the performance quality of the nurses, we can get several benefits not only to the patients but also for the HCDS of the country. **“Their work is reflecting the image of the hospitals they are working”**. Generally, a nursing shortage is noticed in developed as well as developing countries. The developing countries suffer the most because of a brain drain of nurses to developed countries, where the salary is high, good living conditions, and several perks are also available.

There is an increasing trend of patients suffering from non-communicable and other chronic diseases in many

developing countries due to changing lifestyles of the population. This has led to high bed occupancy rates in hospitals. Many new private hospitals are opening up in developing countries. In the newly opened hospitals, the required number of nurses is more than the required number of doctors. Due to the shortage of nurses, they have to take long duty hours which can badly affect the quality of patient care services let alone the stressful condition affecting them. In developing countries, nurses have to do jobs other than nursing care services, such as data recording and reporting and many non-nursing duties.

In this context, we need to dramatically enhance the production of qualified nurses. This is especially the case for all developing countries. Myanmar is now producing 4,000 nurses yearly. It will need a certain number of years to take

care of the 56,700 beds in 1,177 hospitals in Myanmar. A similar scenario may be present in other developing countries. The number of nurses trained in specialized clinical disciplines is in high demand in many countries. We need to simultaneously consider how to produce more nurses trained in that perspective. Myanmar is now offering about ten diploma courses for specialized clinical disciplines. As more specialized centers or hospitals are opening up in many developing countries, we need more nurses trained in specialized clinical disciplines. **“Ethical conduct of work is equally important as quality performance”.**

In point of fact, the **“quality and ethical performance of nurses is directly associated with achieving the following (hospital) parameters”.**

- High patient satisfaction indices;
- Shortening the duration of stay of patients in hospitals;
- Reducing the nosocomial infection rates;
- Improving the overall efficiency of hospitals;
- Reducing the incidence of side effects of medicines through proper briefing to patients;
- Reducing Antimicrobial Resistance (AMR) through proper briefing to patients;

- Decreasing the postoperative complication rates;
- High confidence and respect of patients towards nurses;
- Reducing the incidence of **“Hospital Accidents”** such as blood transmission mishaps, giving wrong medicines and injections, operation room mishaps, etc.

In view of the above scenario, we need to do the following activities. We have to start taking action from the teaching institutions for nurses. (In Myanmar, we have two Universities of Nursing, and 52 Nurse and Midwifery Schools). **“The quantum of investment that we are going to put in could yield dividends worth several times the original investment”.**

Based on my experience, in order to produce quality and ethical nurses, we need to strengthen the institutions in developing countries to produce nurses by way of: **(Each statement mentioned below should be further discussed and line of actions could be outlined.)**

- Updating teaching curricula in line with the changing demand and need of the public and private hospitals of the country;
- Nursing ethics and research ethics subjects should be included in the

- curricula of every scholastic year;
- Practicing state-of-the-art teaching methods;
- Ensure availability of latest teaching aids;
- Create conducive teaching-learning environment;
- Recruiting quality faculty members who can lecture and teach well;
- Institutionalize capacity building training courses for faculty members;
- Appointing more professor's emeritus, honorary professors, adjunct professors, and visiting lecturers;
- Establish networking with Schools of Nursing of other countries;
- Initiate a system for faculty exchange with Schools of Nursing in the network;
- Constant communication with WHO Collaborating Centers for Nursing, international Council of Nurses (ICN), and International Nurses Association for specific disciplines to get technical support and for intensified collaborative works;
- Appoint paid **"Teaching Assistants" or "Preceptors"** from the outstanding nursing students;
- Facilitating smooth practicum for nursing students at hospitals;
- Ensure availability of good hostels for nursing students and housing for faculty members;
- Give more time for leisure activities for nursing students;
- Conduct regular lunch-time talks;
- Initiate more extracurricular activities including debates and symposia;
- Ensure availability of **"state-of-the-art electronic library"**;
- Establishing and promoting mentor-mentee system;
- Inculcate interest in research together with the strengthening of Institutional Review Boards (IRB) and research topics are part of the curricula;
- Establish **"Nursing University Research Registry"** and **"Nursing University Research Information System"**
- Establish **"Research Integrity Unit"**, which will also take care of teaching research topics;
- Ensure funding availability to conduct research projects approved by the University IRB;
- Establish a system for discussing case studies on nursing ethics;
- Issuing quarterly newsletter of the two universities combined and one Newsletter of the 52 Nurse and Midwifery Schools;
- Establish a Student Union for the

## 6 Nurses: A voice to lead- a Vision for Future Healthcare

(International Nurses Day 2021)

- welfare of the nursing students;
- Form **“High-level Advisory Committee for Promoting the Nursing Education System”** for the two universities and 52 Nurse and Midwifery Schools;
- Initiate the **“Excellent Student Prize”** or **“gold Medalist”** award for each scholastic year.

Some of the above activities seem trivial but they could have a wide-ranging positive impact on the nursing institutions in the long run. In-service nurse capacity and capability must be strengthened. Regular Continuing Professional Development (CPD) certificate courses should be arranged

by the Ministry of Health in collaboration with the National Nursing Council, and the National Nursing Association in the country. The attendance of these certificate courses could be considered in promotion and in their career ladder. **“The career ladder system for nurses must be given top priority attention”**. Nurses should not be second-class citizens. They are one of the key professionals in the clinical-cum-hospital domain. If we could consider doing the above-mentioned suggestions, we will definitely reach our ultimate aim of the so-called **“Satisfying Nursing Domain”**.

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# 15

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## Chapter

# HARNESSING THE CONTRIBUTION OF NGOS

6 NGOs increasingly work as advisors to national governments, international agencies and the UN. Today NGOs are at the table, enriching intergovernmental discussions with grassroots knowledge and subject matter expertise. It has evolved into a system of governmental and intergovernmental partnerships.

~ Kofi Annan  
(United Nations Secretary-General)

The discussion will center on developing countries' scenarios. The external entities (INGOs and local NGOs) are playing a very important role in supporting the work of the HCDS in developing countries. **"The Ministry of Health needs to facilitate the work of external entities so that they can carry out the activities effectively and efficiently"**. We need to work together as a team. The combined strength is far stronger and effective than the staff of the Ministry of Health working alone. There are hundreds of external entities working in the field of public health domain in many developing countries. The INGOs got funding support from many developed countries and philanthropists.

There are also many UN agencies and organizations supporting the health domain of developing countries. Bilateral country assistant programs, World Bank, and ADB-supported programs are also present in developing countries. Various types of support (technical and funding) given by these entities are important. We have to honor and make the most out of the financial and technical support given by them. **"We need to shrewdly use the fund as it comes from taxpayers' money from developed countries"**.

The Ministry of Health, Myanmar, has produced a detailed profile of INGOs working in the country and it needs to be updated regularly. It is essential that developing countries

should have profiles of external entities working in their respective countries. This could facilitate administrative and policy decisions by senior management of respective Ministries of Health. It is essential that general assessment of the work and impact of external entities should be conducted involving staff from the Ministry of Health and external entities. It should be geared towards fact-finding rather than fault-finding. **“To enhance the effectiveness of work of external entities in the country, we need to do mapping and scouting their work”** in terms of;

- Broad technical areas giving support for any duplication and redundancy of work;
- Detailed projects/activities carried out in the country for consideration of future collaborative works;
- Geographical areas covered to assess its appropriateness;
- Amount of funding actually used for various activities to know the priority areas of support received by the population;
- Salary and expenses used for local and expatriate staff to know the administrative versus activity budget allocation ratio;
- Quick review of last annual reports of the external entities for chalking out future collaborative activities;
- Detailed review and follow-up of MoUs concluded between the

ministry and external entities;

- Cross-referencing the activities mentioned in the MoUs with the real activities implemented at the ground level;
- Review the networking scenario of the ministry with external entities;
- Interview with senior officials of external entities and also with operational level responsible staff to know their general and specific viewpoints;

After reviewing and analyzing the above, we have to sit with officials of external entities in groups of similar nature to discuss how to further move ahead with their collaborative activities most effectively and efficiently. **“The staff of the ministry should realize that external entities are not competitors but help the ministry as per their respective mission statements and objectives”**.

There should be a coordinating unit in the ministry specifically to deal with external entities. This unit could help the smooth functioning of external entities and could sort out all the contentious issues quickly. **“Annual Review Meeting on Work of External Entities”** would be very useful for the country. The Ministry of Health, Myanmar, does not yet have a clear-cut policy on external entities. This should be formulated as soon as possible. **“All developing countries should have**



clear cut policy on the external entities”.

The following basic tenets should be adhered to or observed for making their support (financial, administrative, material, and technical) more effective.

- External entities are, in fact, part and parcel of the Ministry of Health and supporting the health domain of the country. Every effort should be made to work closely and effectively with them;
- Keeping in mind the principle of **“Value for Money”** and effective and efficient utilization of the funding support received; We have to make the most out of the support of external entities.
- Establish mutual understanding and mutual respect between the Ministry of Health and external entities and other partners;
- There should be less redundancy and minimal duplication of work in terms of technical and geographical areas;
- Each problem or obstacle or challenge being encountered should be treated as an opportunity;
- Strengthen the monitoring system for improving the collaborative activities using a checklist type of review;
- The work of external entities would have the greatest impact if they work closely with state/regional/provincial level and concerned district/township

level health staff;

**“All the work of external entities should be cross-referenced with the (i) National Health Policy, (ii) National Health Plan, (iii) Strategies of various health programs of the ministry, and (iv) Agreed upon work plans as mentioned in the MoUs”.**

The major areas of work of external entities must cover the priority areas mentioned in the National Health Plan. If that is not the case, some adjustments must be made through friendly negotiations. As per our experience, most of the external entities concentrate their supporting work on HIV/AIDS, TB, Malaria, Maternal and Child Health, and Reproductive Health. As per the evolving epidemiological situation in developing countries, we need more support in the control of non-communicable and chronic diseases, elderly health care, capacity building for basic health services workers, community-based organizations, and health literacy promotion activities.

**“These external entities should involve in the implementation research activities of various health programs of the country”.** If we could accommodate the larger external entities in the ministry office complexes, the efficiency could be greatly increased. In order to know the ground reality, the ministry should jointly develop a six-monthly reporting format

6 International NGO work is crucial in campaigns that mobilize citizens at the community and national levels. Currently, NGOs are critical contributors in global efforts to achieve the UN's Millennium Development Goals.

~ Harvard Law School

about the activities of these external entities.

In Myanmar, we have a very good system of working closely between the Ministry of Health and external entities through “**Myanmar Health Sector Coordination Committee (MHSCC)**”, chaired by Union Minister. Many issues can be sorted out during the meeting. The committee members are senior officials of the Ministry of Health, UN agencies, development partners, representatives of INGOs and local NGOs, etc. Currently, International Health Division of the Minister's office is serving as focal point for external entities.

Every effort should be made so that the work of external entities would have the greatest positive impact on the health system performance and health status of the population in the

country. Based on the current scenario, **“the most crucial thing is respective program managers of the ministry need more connections, communications, and dialogues with all the external entities”**. Frequent small discussions between state/regional/provincial and district/township level staff with external entities should be promoted especially at the operational level. We need to harness the full potential of the external entities (INGOs and local NGOs) with seriousness. The quantum of support that we are getting from external entities is very huge and cover many geographical areas of the country. **“We also need to accept the fact that they are part and parcel of our HCDS. The combined strength is synergistic and multiplicative”**.

# 16

## Chapter

# WHAT IF SCENARIOS “A”?

“Imagination is more important than knowledge. Knowledge is limited. Imagination encircles the world.

~ Albert Einstein  
(Genius, and Nobel Prize laureate)

“What if scenarios” should be practiced among public health professionals, epidemiologists, researchers, and social scientists dealing with public health issues on a regular basis. **“This is the best approach to strengthen the epidemiological thinking skill, critical thinking skills and also open up our minds and broaden our thinking horizon and expand our knowledge spectrum”.**

The example that we are going to discuss is **“If you were appointed as Program Manager of Vector-borne Diseases Control (VBDC) Program in a country, outline the initial steps that you are going to do?”** This is one example of a Reflection Paper. This is one form of testing the knowledge base and knowledge horizon in the field of public health as well as technical, administrative, management, and logistics skills of the MPH students.

It could be considered for any health program of the Ministry of

Health. This is the best way to stimulate creative thinking for MPH students or any public health official. There is no right or wrong answer. The reason given behind each statement should be rational. It could create a very proactive discussion platform among the MPH students or public health officials. This would enhance the capability of MPH students or public health officials to a higher level. It is a bit like preparation for tabletop exercise or simulation exercise.

I would start with the following line of action. To get the preliminary information, I will coordinate with the earlier Program Manager and get general guidance from him/her. Following this, I will have a quick meeting with central level VBDC staff and then a meeting with VBDC Team Leaders of seventeen States and Regions in the country. Then, a quick meeting with some professionals (medical doctors, para-medical staff, epidemiologists, entomologists, health

assistants, representatives of basic health service workers) to know the operational level activities. During the meeting, I will give guidance on how to handle the following twenty points and complete the assigned tasks within three to six months.

**“The following actions will then be carried out before I refine the National VBDC program policies, strategies, and interventions for immediate implementation”.** Many review actions would be done simultaneously.

- Existing human resource situation of the VBDC Program;
- Quick assessment of the capacity and capability of VBDC Program staff using various modus operandi or checklists;
- Quick review of the division of labor of the VBDC Program staff together with the job description of each category of staff;
- Quick epidemiological review of the latest Annual Report of the VBDC Program;
- Quick review of the existing National Strategies and Interventions for VBDC Program;
- Quick review of recent outbreak control reports, if available;
- Quick review of internal and external evaluation mission reports, if available;
- Quick review of recent VBDC Program Annual Meeting Report;
- Quick review of the functioning status of the information system of the VBDC Program;
- Get non-personalized responses from VBDC Team Leaders and some central level staff about their viewpoints for improving the performance of the VBDC Program;
- Quick review of entomological perspectives (vector mapping, vector bionomics, etc.) of vectors involved in vector-borne diseases in the country;
- Quick review of the drug resistance malaria situation in the country;
- Quick review of technical and funding assistance given by external entities such as WHO, other UN agencies, Global Fund, RBM, USAID, APLMA, ADB, WB, Mekong sub-regional RAI, INGOs, etc.;
- Quick review of the MOUs concluded with external entities (INGOs and local NGOs) and their implementation status;
- Quick budgetary (Government)

“ We can’t solve problems by using the same kind of thinking we used when we created them.

~ Albert Einstein  
(Genius, and Nobel Prize laureate)

review of VBDC Program for the last three years;

- Quick review of the findings of “Resource Flow Analysis” of the VBDC Program, if available;
- Quick review of ongoing externally funded projects being implemented;
- Quick review of the role of basic health services workers in the VBDC Program activities;
- Quick review of the role of local NGOs and Community-based Organizations in the VBDC Program activities;
- Quick review of all the research projects carried out during the last three years and the situation of ongoing research projects of the VBDC Program;

The findings emanated out of the above reviews and meetings will be summarized and presented at the national level meeting. It will be attended by key officials and team leaders of the VBDC program. Discussion will be made for developing a concrete road map to control vector-borne diseases in the country effectively. The finalized road map, consisting of costed interventions and responsible units and staff, will then be submitted to Union Minister through proper in-house office procedures for approval. **“A Similar line of thinking can be applied to any health program of the Ministry of Health”.**



# WHAT IF SCENARIOS “B”?

HEALTH SYSTEM CHALLENGES [ A developing country perspective ]

Dr. Myint Htwe

**“ You have a brain and mind of your own. Use it and reach your own decision.**

~ Napoleon Hill  
(American self-help author)

**Y**ou received an appointment letter from the President of a developing country “X”, mentioning that **“you are appointed as the Minister for Health in country X”**. The letter also included a summary health situation as well as important information about the health care delivery system (HCDS) of country “X”. What are you going to do? (This is another example of **‘thinking aloud’** or **‘futuristic thinking’**).

I will tender my duty entry report to the President. Following this, I will study the two documents provided to me very carefully. Knowing that the job of the Minister for health is very challenging, taxing, and demanding, I will do my level best to serve the population of country “X” with all my humility and without prejudice. The responsibility is also huge. The following preliminary activities will be carried out.

I will hold a series of quick meetings in groups with Deputy Minister, Permanent Secretary, Directors-General, Rectors/Deans of the universities, Deputy Directors-General, Directors responsible for various health programs, regional/state/provincial Health Directors, heads of prominent local NGOs and INGOs, associations, organizations, councils, UN agencies, and bilateral program to know the overall scenario in a nutshell. **“Their unbiased viewpoints will set the tone for my future line of thinking and roadmap of activities to be carried out during the tenure of my term as minister”**.

Following these meetings, in consultation with my senior staff, I will assign specific group of professionals to do the following. The purpose of assigning groups is to have a sense of ownership. A Gantt chart will be prepared for the activities mentioned



below. Many activities will be carried out simultaneously.

- To conduct key informant interviews with select groups of senior professionals working at different hierarchical levels of the HCDS, members of parliament, retired senior health professionals, etc. for clarifying and getting more information. **“Getting to know the ground reality situation is a priority”;**
- To conduct focus group discussions with different categories of staff, community leaders, representatives of community-based organizations, ethics health organizations, INGOs and local NGOs, UN agencies, medical, dental, nursing and midwifery, health assistant, medical technologist, pharmacist associations, etc. The purpose is to know their viewpoints, ground reality, and elicit the real situation from different angles and perspectives;
- To do a quick review of national health policy, national health research policy, national health plan, and various major strategies of programs being implemented in country ‘X’;
- To quickly review health-related speeches made by the President or Prime Minister and important speeches delivered by the earlier Minister for Health; The policy-related points in the speeches will be considered seriously.
- To quickly go through resolutions of World Health Assemblies for the last three years and resolutions and recommendations of the WHO Regional Committee meetings for the last three years. These will be cross-referenced with the strategies being used in country “X”; There must be some congruity between key points of the resolutions and health strategies being applied in the country.
- To do a review of the existing human resource of the Ministry of Health and current and future human resource production scenarios;
- To do a quick review of the trend of budget and finance situation (allocation and utilization pattern) of the Ministry of Health. The **“national health account could be used as a reference. (Resource Flow Analysis)”;**
- To review all the external financial inputs (including loans and grants) to the Ministry of Health; (last two budget years)
- To do a holistic review of the national laboratory system;
- To do a holistic review of the national hospital system;

- To do a holistic review of the national public health system;
- To do a quick review of the career ladder of various categories of staff;
- To do a holistic review of capacity-building activities for various categories of staff (clinical and public health); (Continuing Professional Development); (last two years)
- To do a quick review of job descriptions of some important positions;
- To do a quick review of memoranda of understanding concluded between the Ministry of Health and different entities;
- To do a quick review of reports of external evaluation missions on various programs; (last two years)
- To do a quick review of annual reports of various programs; (last year);
- To do a quick review of important directives, including SOPs and Guidelines, issued by the Ministry of Health; (last 3 years);
- To do a quick review of the monitoring and evaluation systems for different programs being used in the Ministry of Health;

Based on the findings and recommendations emanating out of the above activities and in consultation with my relevant senior staff, I will give guidance on

further actions to be taken. Depending on its importance, actions will be taken in a phase-wise manner. New initiatives may need to be considered later based on the outcome of the above nineteen activities.

Simultaneously, the following actions, which have a broader impact on the health of the population, will be carried out as a matter of priority.

- Formulating (if not yet available) and implementing **“National Strategies for Health Literacy Promotion of the population”**; (if available, we will fine-tune it);
- Formulating (if not yet available) and implementing **“Chronic and non-communicable Diseases Prevention and Control Strategies”**; (if available, we will fine-tune it);
- Fine-tuning and improving the **“Disease Surveillance System Together with Sentinel Disease Surveillance System”**;
- Fine-tuning and improving the **“Non-communicable Disease Surveillance System”**;
- Developing prototype **“Public Health Surveillance System”** and test run it;
- Fine-tuning and updating all the **“SOPs and Guidelines”** in the clinical as well as public health domain;
- Developing **“checklist type of**

**performance and infrastructure assessment tools”** for hospitals, public health institutions, universities, various health programs. Checklist type assessment is the fastest approach to know the situation or conditions or performance;

- Fine-tuning and improving the national health information system and information systems of various health programs;
- Updating the computerized system for human resource for health;
- Formulating realistic strategies for working closely with the Ministry of Education under the umbrella of health literacy promotion;
- Incorporating built-in implementation research projects for improving management, administrative, logistics, and technical perspective of health programs;
- Developing detailed plan for housing projects for staff of the Ministry of Health;
- Conducting a national seminar on **“Improving the Working Atmosphere for Staff Working in Hospitals, Universities, and Offices”**;
- Conducting a national seminar on **“Integrating Health Services of Similar Nature”**;
- Conducting a national seminar on

**“Improving the Undergraduate and Postgraduate Medical Education System”**;

- Conducting a national seminar on **“Improving the Undergraduate and Postgraduate Nursing Education System”**;
- Conducting a national seminar on **“Improving the Undergraduate and Postgraduate Para-medical Education System”**;
- Conducting a national seminar on **“Welfare of staff of the Ministry of Health”**;
- Conducting **“National Health Assembly”** to be attended by the population at large from regions/states/provinces. The viewpoints from the population perspective are crucial;
- Promoting the **“teaching of ethics”** such as medical ethics, nursing ethics, public health ethics, research ethics, and ethics of various clinical and para-medical disciplines;
- Promoting **“disease registry systems”** for various types of cancers, diabetes, blood diseases, congenital anomalies, and diseases, etc. The selection of diseases will depend on the incidence and prevalence of the disease concerned.

I hope that the above two sets of activities will put the work of the Ministry of Health in alignment with the existing health scenarios of country “X”. The envisaged activities are not exhaustive. These are just preliminary lines of actions that I will do to start the ball rolling. We need to create a desirable working environment for the staff to function in full swing with commitment.

Additional activities will be incorporated as we go along. While thinking of new initiatives, we should also think to twilight or sunset some of

the programs. **“We should stick to the principle of doing things depending on the changing epidemiological conditions”.** The collective thought process involving public health professionals, epidemiologists, clinicians, social scientists, researchers, administrators, ethicists, management experts, policymakers, anthropologists, psychologists, and representatives of community-based organizations is necessary for the field of health. **“This is a very big undertaking but it will definitely pay back in the long run”.**

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# 18

## Chapter

# VIEWPOINT: DISEASE SURVEILLANCE SYSTEM

6 Surveillance improves public health response, allowing systems to adapt to current and future public health innovation.

~ Michael F Lademarco

(Director, Center for Surveillance, Epidemiology and Laboratory Services, US CDC)

The discussion will center on developing countries' scenarios. The priority action of ministries of health in developing countries is to strengthen the existing disease surveillance system. Depending on the resource availability, it could be slowly developed into a full-fledged public health surveillance system. **"The disease surveillance system is the eyes and ears of the Ministry of Health"**. Depending on the eyesight we may need to wear spectacles (presbyopia or myopia) and sometimes we may need to use binoculars. The analogy is that the disease surveillance system may need added support and fine-tuning as the systems are constantly evolving.

The disease surveillance system will expose the potential threats to population health in advance and remedial actions could be taken in time by responsible health authorities. The

stronger the disease surveillance system, the higher the chance of detecting the impending outbreaks. It will also show the trend of the disease under surveillance so that we can do necessary preparatory actions to reduce the quantum and spread of the disease under surveillance. It, therefore, follows the public health principle of **"Prevention is better than cure"**.

**"The disease surveillance system must be dynamic, responsive, robust, and forward-looking"**. We may need to adjust the framework, strategies, and modus operandi depending on the changing epidemiological situation of the diseases under surveillance or emergence of new diseases or re-emergence of old diseases or at times of pandemic due to H1N1, H2N2, H3N2, SARS-CoV, MERS-CoV, and SARS-CoV-2.

The work of the disease surveillance system must always be monitored by an **“oversight team”** to make the systems responsive, robust, and useful to the disease control and public health domain of the country. The **“oversight team”** should at least be composed of epidemiologists, public health professionals, health information specialists, computer programmers, social scientists, anthropologists, ecologists, ethicists, microbiologists, virologists, laboratory scientists, research scientists, data analysts, biostatisticians, administrators, basic health service staff, representatives from the General Practitioners Society, etc. The **“oversight team”** should meet at least once in six months.

Under the umbrella of the national disease surveillance system of the Ministries of Health in developing countries, there are several specific disease surveillance systems. **“The staff are functioning at different levels of maturity, efficiency, capability, and capacity”**. Generally, the networking among specific disease surveillance systems is not very strong in developing countries. Every effort should be made to reinforce and integrate this network. Many redundant activities could be weeded out.

As per my experience, we also need to give more backstopping to zoonotic disease surveillance system as many outbreaks at the present time are due to zoonotic diseases. When we discuss disease surveillance system, we used to concentrate on communicable disease surveillance system. **“Non-communicable disease surveillance system is proportionately important and it could have serious and long-term unwanted effects on the health of the population if we are not taking care of it in time”**. However, we will concentrate on communicable disease surveillance in this discussion.

In the domain of communicable disease prevention and control, surveillance is the core activity to which we need to give priority attention. Without a proper and well-functioning disease surveillance system, we will never ever achieve our goal of preventing and controlling disease or condition or event or outbreak. If we really would like to have an excellent disease surveillance system in the Ministry of Health, we first need to train and explain very clearly to the staff working for the disease surveillance system in terms of:

- The objectives, framework,

components, and key activities of the disease surveillance system;

- The challenges likely to meet in running the disease surveillance system;
- Predictors of successful disease surveillance system;
- The need to identify realistic, specific, and practical parameters/indicators for the diseases under surveillance;
- The critical role of laboratory perspective in the disease surveillance system;
- How to set up and sustain the bi-directional feedback system along with the hierarchical levels of the HCDS;
- Data transmission system and its vagaries;
- Basic skeletal framework of the computerized disease surveillance system;
- Importance of transforming data into information and its interpretation;
- Importance of sending quick feedback to ground level staff;
- Importance of networking with community-level organizations, General Practitioners Society, private hospitals, polyclinics, and some associations;
- Relationship between the health literacy level of the population and

availability of data/information for the disease surveillance system;

- Its importance for policy and strategy formulation/ reformulation for communicable disease prevention and control programs in the country.

The strategies for the prevention and control of diseases could be technically sound and acceptable. If the disease surveillance system is not up to the mark, it will go nowhere and there will be wastage of human resources, time, material, and financial resources. One of the important influencing factors for having a strong and dynamic disease surveillance system in the country is the health literacy level of the population. The high health literacy level of the population will result not only in the easy and quick flow of disease data and information to our disease surveillance system but also the data will be more valid, reliable, and complete.

**“The weak disease surveillance system in the country will result in repeated outbreaks of communicable diseases”.** The occurrence of even one episode of an outbreak is very costly to the country, let alone the deaths and socioeconomic consequences on the family. For childhood diseases, the developmental milestones of the children



may be delayed. The zika virus outbreak in pregnant women will result in preterm births, miscarriages, microcephaly, and other congenital malformations. These are some of the pointers why we need to invest in disease surveillance systems.

Due to outbreaks, the workload of the hospitals will be unnecessarily high leading to unwanted scenarios. It points that the Ministry of Health must accord priority importance to the disease surveillance system. One of the components of the disease surveillance system is notifiable disease reporting. Depending on the country concerned, notifiable diseases could be identified.

**“The main challenge for developing countries is how to get information from private clinics and hospitals”.** This is very critical. We cannot afford to miss that component. The catchment areas for disease surveillance system should be represented by different geographical areas as well as by diverse epidemiological conditions. No areas or pockets must be left out. The *modus operandi* to overcome this will depend on the general developmental stages of countries.

**“The responsiveness, robustness, utility, and success of the disease surveillance system depend to a significant extent on the commitment and interest of well-trained staff**

**working in the disease surveillance system”.**

It is also important that we have to create a decent working environment so the staff can work in full swing and with enthusiasm. The strength of the disease surveillance system depends on how well the feedback system is functioning. The feedback must be bi-directional. **“The feedback system should be nurtured and developed slowly but surely. A weak feedback system means a weak disease surveillance system”.**

Nowadays, apart from the specific disease surveillance system, public health surveillance and an event-based surveillance system are becoming popular. Event-based surveillance (EBS) is the mechanism by which we can get information for early detection of events or disease or signals related to contemporary events of public health importance. It may happen through channels outside of a routine surveillance system.

In fact, these are occurring routinely without being noticed officially by the Ministry of Health. The role of community-based associations and organizations is vital in the event-based surveillance system. We need to promote it steadily and systematically. Through this mechanism, community-based associations and organizations would become part and

parcel of the Ministry of Health. This is very desirable and it could reinforce many public health programs in the country.

The event-based surveillance system is very vital for the early detection of impending disease outbreaks, especially in remote and hard-to-reach areas. With an event-based surveillance system, we can also track important public events which can affect the health of the population. The disease transmission can happen together with some public events at the regional or provincial or township or village tract level. The existing disease surveillance system can easily be linked with an event-based surveillance system in a formalized way.

**“If we use the term public health surveillance, the domain will even become much wider”**. Before we set up the public health surveillance system, we need to have thorough brainstorming sessions among public health professionals, policymakers, clinicians, laboratory technicians, epidemiologists, social scientists, anthropologists, politicians, program managers of various health programs, and health administrators to work out the objectives, framework of the systems, and modus operandi. Officials from relevant ministries such as hotel and tourism, immigration and border affairs, religion, education, industries, home

affairs, etc. should be involved. It would be a very big undertaking, but we should go for it in a step-wise and phase-wise way.

The US CDS defined **“public health surveillance system comprised of the event-based surveillance system, which is much broader and general and indicator-based surveillance system”**. If we can set up a public health surveillance system, it would be the best scenario for the country. Basically, public health surveillance is for early detection of public health problems from simple to life-threatening to catastrophic health problems to the population of the country. **“No country can set up a full-fledged, comprehensive, and smoothly run public health surveillance system. We need to build up as we go along”**. This should be the ultimate aim of the public health domain. In this age of fast-developing information communication systems, it is possible.

Whatever systems that we are going to have in a developing country, the key issues that we need to pay attention to are,

- Constant monitoring of the data/information received in terms of completeness for geographic representation and seasonality or regularity;
- Immediate transformation of data

- into information and giving feedback;
- All data/information received in the disease surveillance systems must be considered in light of agent, host, environment, vector, time, place, person, in addition to facilitating and hindering factors or potential risk factors causing the “event”;
- Actions must be prompt if any suspicion of deviation from normal are noted;
- Feedback to data collectors/data transmitters must be regular, quick with clear-cut messages for the line of actions to be taken at the ground level;
- Feedback to the data collectors/data transmitters on the action taken at the central level on the data/information they have transmitted;
- From time to time, the framework of the surveillance system must be reviewed involving staff working at all levels of the surveillance system.

We should not forget that our disease surveillance system should also try to get information from community-based organizations, ethnic health organizations, camps of internally displaced persons, parents-teachers associations and school teachers, factories and industries, general practitioners, other concerned ministries, and departments, border area checkpoints, etc. The framework of the disease surveillance system must include

the provision for getting information from the above entities. **“The earlier the increasing number of cases are detected, the better will be the chance of successfully preventing and containing the outbreak”.**

The performance efficiency or effectiveness of the disease control system in the country is as strong as the disease surveillance system in the country. If the disease surveillance is weak, the whole disease control system will be weak. Therefore, it is important that staff involved in the disease surveillance system must be given short online training courses on a regular basis. If the disease surveillance system is performing well, we could reduce the incidence of many communicable diseases as well as prevent outbreaks of diseases. Even if there is an outbreak, we can control it successfully because we have a strong disease surveillance system.

**“The quality of the disease surveillance system can be enhanced by incorporating implementation research into it”.** The essence is that **“the disease surveillance system is the lifeline of the Ministry of Health”.** We all need to work together to achieve our common aim of reducing the incidence of communicable diseases and disease outbreaks.

6 Public health surveillance is the cornerstone of public health practice.

(“Public Health Surveillance: Preparing for the future”  
A book published by the US CDC)

Innumerable studies and articles are available on various perspectives of disease surveillance and public health surveillance. A forty-page book on **“Public Health Surveillance: Preparing for the Future”** by the US CDC is one of the best references we need to refer to if we would like to develop a public health surveillance system. **“In view of the high demand for resources, the developing countries may set up, in a step-wise and phase-wise way, to transform the existing disease surveillance system into a public health surveillance system”**.

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# 19

## Chapter

# RESTRUCTURING THE MINISTRY OF HEALTH

“The future is not a scenario written, which we only have to act out; it is a work which we have to create.

~ Roger Garaudy  
(French Philosopher)

The organogram or structure of the Ministry of Health and Sports, Myanmar, will be used as an example. The organogram or structure should not be static especially in developing countries. **“The organogram or structure may be a perfect one at the time of the last restructuring”**. Strictly speaking, (i) due to changes in disease epidemiology; (ii) transformation of social fabrics; (iii) directional changes in overall government policy; (iv) shifting in economic conditions of the country: good or bad; (v) changing pattern of the requirement of human resources for health; (vi) increasing demand from the population; (vii) rapid population growth and shifting population structure; (viii) new developments in the field of public health; (ix) rapid sophistication in many aspects of clinical domain; (x) outbreaks of new diseases, the occurrence of emerging, re-emerging diseases and pandemics of the novel virus of uncertain natural history; (xi)

emergence of advanced diagnostics and state-of-the-art treatment modalities, the organogram or structure review is needed every five years or so. In fact, the structure of the Ministry of Health has a huge influence on the work performance of the ministry as well as the health conditions of the population at large.

**“Too big a structure is not conducive to having good output from the Ministry”**. The minor structural change can be exercised as and when necessary. Some units need bigger structures while other units need smaller and nimble structures. It will depend on the quantum of work and the extent and trend of health and health-related problems that the unit is dealing with. **“Generally, we tend to forget to give attention to the structure of the ministry”**.

While adjusting the structural aspects, we should simultaneously do capacity-building activities for the staff to

fit with the new structure or functional requirement. The size and the nature of the structure is associated with the capacity and ability of the staff. Simultaneously, a budget allocation pattern to the new structure must be considered. Existing staff strength should be taken into consideration when a structural change of the Ministry of Health is considered. The current and future production capacity of human resources for health from the universities should be given due attention. The staff attrition quantum and pattern are important in undertaking a structural change of the Ministry of Health. The new structure should be conducive to achieving the short-term and long-term health priorities of the country.

Taking the Ministry of Health and Sports, Myanmar, as an example, its structure is too heavy which should not be the case. There are seven departments, namely,

- Department of Public Health;
- Department of Medical Care;
- Department of Human Resources for Health;
- Department of Traditional Medicine;
- Department of Sports and Physical Medicine;
- **\*Department of Medical Research;**
- **\*Department of Food and Drug Administration.**

There are also sixteen medical and health-related universities and fifty-two nursing and midwifery schools. All are currently functioning under the control of the Union Minister. There are over 1,177 hospitals including specialist hospitals: from 16 to 2,000 bedded hospitals. There are 1,904 rural health centers and 9,077 sub-rural health centers, mainly taking care of public health activities.

In fact, **two departments\*** need to be taken out from the Ministry of Health and Sports. The work of the ministry is unnecessarily heavy and thus its implementation activities are somewhat slowed. The nature of work of the Department of Medical Research and the Department of Food and Drug Administration is such that they should be taken out from the umbrella of the Ministry of Health and Sports.

They need to run their activities independently. They should not be controlled by the bureaucratic rules and procedures of the ministry. These two departments need less bureaucratic in-house rules to run it as their functions are scientific and highly technical. Reducing the workload will improve the efficiency of the ministry. **“The chiefs of these two departments should be appointed directly by the President of the country and their tenure should be the tenure of the incumbent government”.**

Out of the seven departments, the Department of Public Health is the main workhorse of the ministry to improve the overall health status of the population. All the hospitals are under the administrative management of the Department of Medical Care. The Department of Public Health and the Department of Medical Care cannot function in isolation. **“All the interventions are interrelated and intertwined at all levels of the Health Care Delivery System”**. This fact was clearly seen when controlling the SARS-CoV-2 pandemic.

At the state/regional level, health care activities cannot be demarcated clearly between public health and medical care. The activities are complementary to each other. Therefore, we need one chain of command and not two Directors-General or not two State/Regional Directors. **“These two departments should be combined”**. While restructuring any two departments into one department, the following generic issues must be reviewed and analyzed first. The workload and work pattern at different hierarchical levels need to be considered. The issues to be considered in detail are:

- Workflow pattern of the two departments at central and different hierarchical levels;
- Comparative analysis of workload of staff of the two departments at central and different hierarchical levels;
- Job descriptions of major categories of staff of the two departments;
- Comparative analysis of the division of labor among the staff of the two departments;
- Comparative analysis of workload of different divisions or units of the two departments at central and different hierarchical levels;
- Sanctioned, appointed/vacant positions in different divisions or units of the two departments;
- Comparative analysis of administrative work of the two departments at central and different hierarchical levels;

**“We will get many benefits by combining the Department of Public Health and Department of Medical Care”**. We may need only (i) one budget and finance division; (ii) one health information system or division; (iii) one monitoring and evaluation division; (iv) one human resource for health management division; (v) one international health division; (vi) one computerized system for human resource for health; (vi) one health literacy promotion division; (vii) one building maintenance division; (viii) one



“There are risks and costs to action. But they are far less than the long-range risks of comfortable inaction.

~ John F Kennedy  
(35th President of the United States)

motor vehicle management division; (ix) one supply chain management system; (x) one capacity building division for staff, etc. The functions become very focused and cohesive. We could also save big amounts of budget. As we are combining the divisions of the two departments, the new divisions become very compact and strong. As alluded to earlier, controlling big epidemics and pandemic becomes easier and successful. **“Many health programs can be integrated and unified. It is like hitting two birds with one stone”**. One beautiful advantage is that staff of two departments will be knowing each other which can lead to multiple benefits. The knowledge sharing, collective thinking, knowledge base and knowledge horizon of the staff can be increased and expanded.

Depending on the findings of the comparative analysis mentioned above, structural adjustments should be considered. We also need central level as

well as state and regional level Internal Review and Technical Assessment (IRA) units to oversee the overall performance of the ministry. The structural adjustments should be accompanied by a strong and responsive monitoring system. Following the major structural adjustment, minor structural adjustments should follow.

**“The structural adjustment of the Ministry of Health is a continuous process. It should be done very carefully, judiciously, wisely, cautiously, and shrewdly taking into consideration all inputs from concerned professionals working in different disciplines of the health system and major stakeholders of the health domain in the country”**.

Last but not least is national health policy, existing national health plan, and existing human resources for health, and existing health situation of the population should serve as background information.



# RINGING THE BELL FOR THE MINISTRY OF HEALTH

**I** urge us all, to invest in our health systems and swiftly ensure their transformation so they have the capacity to respond to the needs of all people, every day and to better respond to pandemics and other disasters when they do occur.

~ Carissa Etienne

(Director, Pan American Health Organization, PAHO, WHO, Washington DC)

**T**here is always room for improvement in the activities of the Ministry of Health. “**Ringing the bell means alerting the senior officials of the Ministry of Health to give attention to some of the key issues, problems, and challenges commonly seen in developing countries**”. As per my experience, there are some priority actions to take care of for the smooth running of the Ministry of Health. We cannot fulfill all the requirements in one go in any developing country.

However, the following basic minimum requirement should be fulfilled in order that the HCDS is functioning satisfactorily at an acceptable level. The requirements are mainly focused on the human resources for the health area

because they are the drivers running the HCDS. If we can improve the human resource perspectives, we are confident that the work of the Ministry of Health is under control and it can function very smoothly. **“All the requirements could be fulfilled in a step-wise and phase-wise manner”**.

It is necessary to form several teams or working groups to carry out the below-mentioned tasks as a matter of priority. Several brainstorming sessions, key informant interviews, focus group discussions, seminars, quick field visits, and meetings are required to carry out the tasks. In tackling the tasks mentioned below, the principle of **“fact-finding and not fault-finding or no finger pointing approach”** should be practiced. Teamwork, team

spirit, and team approaches are desirable. The requirements can be prioritized (administrative, management, logistics, operational, and technical) and re-grouped to start working on it. The requirements may be different from one country to another.

- All the **“SOPs and Guidelines”** (administrative, management, logistics, operational, technical) in hospitals and public health institutions should be updated and marked the date of updating. These should be made available in hospitals and other health institutions all over the country. Some of the **“SOPs and Guidelines”** have been in existence for more than five years or so. It is to be noted that updating business is continuous and never-ending. Some of the obsolete **“SOPs and Guidelines”** must be taken out from the system. A compendium of **“SOPs and Guidelines”** for the public health domain as well as for the clinical domain should be developed. Each and every updated **“SOPs and Guidelines”** should mention the references quoted. A standard format for **“SOPs and Guidelines”** should be developed. The quality of work of the staff could be greatly facilitated if updated **“SOPs and Guidelines”** are made available in hospitals and public health institutions.
- **“Human Resources for Health Computerized System”** should be updated on a real-time basis. Cross-reference with the production capacities of various universities in the country should be made. The availability of this **“Human Resources for Health Computerized System”** could greatly facilitate the forecasting of staff requirements for specific disciplines in clinical, public health, and para-clinical domains in the coming years. It could aid in the reformulation of human resources for health policy and strategies for the country. It would be very beneficial to the country concerned.
- **“Quick Review of Sanctioned/Appointed/Vacant Posts”** in hospitals, public health institutions, medical and allied universities, and departments under the Ministry of Health must be quickly made.
- **“Career Ladder”** of all categories of staff should be clearly spelled out. It is important to have a balanced **“Career Ladder”** without giving undue advantage to some groups of professionals. Otherwise, it will defeat its purpose. A firm and rewarding **“Career Ladder”** is a promising incentive for the staff to have full commitment and work hard.

- **“Job Descriptions”** of all categories of staff of the Ministry of Health should be reviewed and modified, if required. Generally, the staff usually do not care about their **“Job Description”** resulting in lapses in their performance. A qualitative Survey on **“Job Satisfaction”** and **“Key Informant Interviews”** may be carried out to depict the ground reality about job satisfaction of several categories of staff.
- The **“Frequency of Transfer of Staff”** should be kept to a minimum. When the transfer is made, a thorough briefing of the expected work in the newly assigned job be briefed by concerned senior staff. A review of the last three-year transfer of staff should be conducted. It could give concrete ideas for reformulation of the **“Transfer Policy”** of the Ministry of Health.
- **“On Entry Job Briefing”** must be seriously done and an information booklet must be provided for future references. Currently, it is not done in several developing countries due to several reasons.
- **“Health Information System”** should be computerized. If not, step-wise and phase-wise computerization must be done. This is the lifeline of the HCDS. It is equal to the Central Nervous System of the human body. The efficiency of the HCDS can be enhanced greatly if Health Information System is computerized.
- **“Disease Surveillance System including Sentinel Surveillance System”** generally needs a quick review in view of the occurrence of outbreaks of several diseases during this time of the ease of travel all over the world. Epidemic-prone diseases from other countries can easily creep in if our Disease Surveillance System is not performing well.
- **“Continuing Professional Development”** (CPD) programs should be institutionalized and practiced seriously for all categories of staff. Quality public health activities, as well as quality clinical care, can be obtained.
- **“Implementation Research Projects”** must be built-in in key projects and findings be applied without fail. The conduct of implementation research projects on management, administrative, logistics, and technical aspects of various programs would be very beneficial to the country’s HCDS performance. The conduct of implementation research projects must be a mandatory work of all the health programs run by the

Ministry of Health as research and development always go together.

- All the **“Strategies of Major Health Programs”** should be reviewed and modified as and when necessary. The strategies must be responsive to the changing epidemiological situations of communicable, non-communicable diseases and other conditions. Applying the old or obsolete strategies will be very costly and it would be a waste of resources.
- Responsible officials or program managers of each specific health program in the Ministry of Health should sit together with their staff and see the **“Challenges, Strengths and Weaknesses and Develop Realistic Plans”** to run the programs effectively and efficiently. Inter-programs integrated activities should also be identified and implemented accordingly.
- **“Criteria for Promotion of Staff”** should be strictly adhered to without prejudice or vested interest. It is a very complicated issue as many subjective social factors need to be considered in life. The nature of human beings is very complex. The Ministries of Health in the developing countries had a system of promotion for different categories of staff but due to changes in several perspectives of the work of the HCDS, it needs to be reviewed to suit the current situation.
- **“National Supply Chain Management System”** must be assessed using checklists and act accordingly. This is extremely important. Weak management of the national or sub-national supply chain system can be disastrous and the work of the HCDS can even come to a standstill.
- Develop **“Checklists for Quick Assessment”** for issues of importance for the laboratory system, radio-imaging system, radiotherapy system, cancer registry system, physiotherapy system, emergency room system, patient referral system, rural health center, sub-rural health center system, township health system, hospital care system, etc.. We need to promote checklist type of assessment in the Ministry of Health. It has several advantages. It is the least costly and findings could be obtained very quickly.
- **“Staff Performance Appraisal System”** should be developed. The current Staff Performance Appraisal System is not satisfactory and very subjective leading to many biases

During my nearly five years as Director-General of WHO, high-level policy makers have increasingly recognized that health is central to sustainable development.

~Gro Harlem Brundtland  
(Director-General of WHO)

and untoward scenarios. Reference could be made from the UN Agencies, although not perfect. This could also stimulate the staff to work seriously, harder, and with commitment.

- **“Quick Review of Budget and Finance System and Resource Flow Analysis”** should be made to increase the efficiency of the work of the Ministry of Health. The availability of the National Health Account document would be an advantage.
- **“Develop a Quick Checklist and Conduct Post Market Surveillance”** on food, drug, cosmetics, and equipment approved by the Food and Drug Administration Department.
- Generally, the National Health Policy and Strategies were formulated several years ago. The health, political, economic landscape, and social conditions might be changed

at the present time. If there is a need, **“Quick Review of the National Health Policy and Strategies”** should be contemplated.

If we take care of the above issues, health care services delivered by the Ministry of Health would be smooth and effective. As alluded to earlier, the above-mentioned issues should be prioritized and considered. Regional/provincial, township, and sub-township level contexts should be given due attention. **“Preliminary Products Obtained, if necessary, should be Pilot-Tested before Finalizing them”**. The above issues are common across most developing countries. Be that as it may, the ultimate success of the above endeavor depends on whether the staff are abiding by the set rules and follow them.

# 21

Chapter

## IMPROVING THE HEALTH STATUS OF THE POPULATION



“Population health: an approach aimed at improving the health of an entire nation. It is about improving the physical and mental health outcomes and wellbeing of people within and across a defined local, regional or national population, while reducing health inequalities.

(The King's Fund, UK)

**T**he ultimate aim of the public health domain is to have a healthy population in the country. Every country should, therefore, try to strategize to have a very big cohort of a healthy population. It is not an easy task but it is not impossible. It cannot happen quickly but we can achieve it if we have determination and enthusiasm. All stakeholders have to work closely as a team to reach a common goal.

If a big chunk of the total population is healthy, the country's future is secured and there will be a multitude of positive short-term and long-term benefits. “The population should not suffer from preventable diseases unnecessarily”. “A healthy population means a happy population, i.e., attainment of physiological, psychological, physical, and spiritual wellbeing”.

The determinants influencing the overall health status of a person or the population depend on several factors. Some factors are within our control and many factors are beyond our control. Within our control means personal level behavioral characteristics and habits of practicing healthy lifestyles. “Practicing healthy lifestyles” includes many entities. Beyond our control connotes the activities carried out by the Ministry of Health and related ministries, socioeconomic conditions, other policies affecting the health domain, economic policies, the political climate of the country, etc.

“We need to have healthy public policies in the country”. “The government should ensure that policies of all ministries should be healthy public policies”. The

social determinants of health (social, environmental, cultural, and physical) are influencing the health of the population. The role of the Ministry of Health is only one part of it but it plays a key and catalytic role. The discussion in this chapter is focusing on the role of the Ministry of Health from the public health perspective.

**“To meet this goal of a healthy population in a substantive and sustainable way, we need to plan systematically as a long-term undertaking involving all stakeholders”.** If we would like to be healthy at old age and prevent premature deaths, we have to sacrifice by not eating fatty, salty, and sugar-rich unhealthy foods and also refrain from indulging in smoking, drinking and forego certain enjoyable moments. **“The long-term benefits of practicing healthy lifestyles should be propagated throughout the country through the good services of community-based associations and organizations”.**

To achieve the healthy state of the population, the government (for the promulgation of national policies, national research policy, ensuring healthy public policies), the ministries (for issuing rules, regulations, national health policy, public health laws, occupational/industrial hazards related rules, regulations, and

laws), consumers unions/associations, trade associations, community-based associations, ethnic health organizations, UN agencies and organizations, INGOs, and local NGOs should work closely in collaboration with the population at large.

The health of the person can be affected or the disease-causing organisms or agents or entities can enter our body mainly through mouth, nose, eyes, ears, skin, sexual organs, and blood transfusion. The main portal of entry is the mouth, i.e., for food items (and sub-standard and spurious medicines), followed by the nose for respiratory disease-causing organisms and pollutants. We have to make sure that nothing untoward will happen through these portals of entry. The health literacy level of the population greatly controls this route for less disease transmission and spread. **“One of the major strategies to attain population health is, therefore, increasing the health literacy level of the population”.**

The role of the Food and Drug Administration Department is crucial in improving the health of the population. They have to make sure the availability of safe and quality foods, quality medicines, harmless cosmetics items, efficacious and effective vaccines, safe equipment,

and other biological products in the country. The role of the Departments of Customs, Home Affairs, Consumer Affairs, and Border Affairs is important for controlling all the imported commodities into the country, either legally or illegally. These departments should work in a well-coordinated manner so that only genuine, safe, and quality food items, medicines, and other products are allowed to go into the country. Adulterated and chemically tainted food items and other products should not be allowed.

If we can have this scenario, the incidence of many chronic (including cancers) and non-communicable diseases will go down. The quality of life would be improved. The quality-adjusted life-years (QALY) will also increase. The government should strictly control the import, production, and sales of tobacco, tobacco products, and alcohol. **“No sale of these items under the age of 18”** should be exercised firmly. Stringent actions must be taken against those who flout the rules.

Some of the important strategies to promote population health that can be considered are mentioned below. The positive impact of these strategies may be felt after years or even decades but the benefits are solid and sustainable.

**“At the personal level, we have to promote doing regular exercise from a very young age of a person. It should be promoted using various strategies as per the context of the country concerned”.**

The role of parents to let the children have the habit of doing simple free-hand exercise in their homes at an early age is very important. This is to nurture the exercise-loving habits of the children. In that case, parents must be health educated first about the benefits of doing exercise, in terms of physiological, physical, emotional well-being, and psychological satisfaction. We should not force the children to do exercise. The children should be well-informed about the benefits of doing exercise by the parents. **“The intention to do regular exercise should come from the children themselves”.**

Once they go to school, the Ministry of Education, Private School Associations, and Parents-Teachers Associations should take care of it. Doing regular exercise should be part of the physical education curriculum of primary, middle, high schools and even at the university level. The government should promulgate laws about this. Eating healthy foods, avoiding tobacco smoking,

shunning tobacco products, and aware of dangers of alcohol could be health-educated and propagated in schools and universities. We should also make sure that food stalls or canteens in schools should sell healthy foods only. Responsible officials from the Ministry of Education and Parents Teachers Associations present in all schools should take care of it. **“We can do many health-promoting activities at schools”**. We have to take full advantage of the twelve years of windows of opportunity available (up to twelfth grade). A habit of healthy lifestyles once formed will be hard to abandon. It could be confidently said that **“the best period to achieve population health is during school-going days”**. Monastic schools should also do the same as government and private schools.

The role of the Ministry of Health is crucial. The following key interventions should be carried out rigorously for having a healthy population in the coming years or decades. The following health programs are given priority because it covers big population groups.

- Increase vaccination coverage for childhood diseases. (Myanmar is currently giving 13 antigens: Bacillus Calmette-Guerin vaccine, hepatitis

B vaccine, diphtheria vaccine, tetanus vaccine, pertussis vaccine, Hemophilus influenzae type B vaccine, poliomyelitis vaccine, measles vaccine, rubella vaccine, rotavirus vaccine, pneumococcal conjugate vaccine, human papillomavirus vaccine, Japanese encephalitis vaccine);

- Strengthen the activities of programs for early prevention, detection, and treatment of chronic and non-communicable diseases (hypertension, cardiovascular diseases, diabetes mellitus, etc.). Myanmar has special community health clinics, running every Wednesday, in rural health centers located all over the country. These centers are doing early detection and treatment of chronic and non-communicable diseases;
- Intensify the activities of school health programs to have health-promoting schools all over the country and conducting regular school health surveys;
- Intensify the activities of population health literacy promotion programs. The Ministry of Health, Myanmar, has given 30,000 tablet phones to basic health services workers. (Please see chapter 2: **“Health literacy promotion: A far-sighted strategy”**);

Population health is an interdisciplinary, customizable approach that allows health departments to connect practice to policy for change to happen locally. This approach utilizes non-traditional partnerships among different sectors of the community - public health, industry, academia, health care, local government entities, etc. to achieve positive health outcomes.

(CDC, Atlanta, GA, USA)

- Intensify the activities of maternal and child health programs;
  - Intensify the activities of nutrition promotion programs;
  - Promote the activities of “Exercise is Medicine” programs;
  - Intensify the activities of alcohol and drug abuse control programs;
  - Intensify the activities of programs on prevention, early detection, and control of cancers;
  - Intensify the activities of adolescent health care programs;
  - Intensify the activities of communicable diseases prevention and control programs;
  - Intensify activities of communicable and non-communicable diseases surveillance programs;
  - Intensify the elderly health care programs;
- In order to effectively implement the above activities with great momentum, the following actions should be simultaneously taken care of by the Ministry of Health.
- Intensify capacity-building programs for basic health services workers; (They must be well-informed about the determinants of population health);

- Intensify implementation research activities on issues of importance related to population health; (This is an extremely important activity to know the knowledge, attitude, and practice of healthy lifestyles of the population living in different geographical regions of the country, various ethnic groups, different socioeconomic status groups, etc. Based on the findings, we may need to adjust and fine-tune our strategies for improving the health status of the population);
- Strengthen the health information system to detect any early deviation from population health status indicators.

It is to be emphasized that **“getting a very big cohort of a healthy population in the country cannot be obtained by the actions of the Ministry of Health alone. It needs combined and integrated effort by many partners, like-minded organizations, and associations”**. Cooperation from the population is absolutely crucial. Another point of interest is that the ongoing

interventions to improve population health should be monitored closely and make adjustments as necessary. It is a dynamic undertaking and not a static one. If we can do this, we could be able to achieve a very big cohort of a healthy population in the country.

We have definitions for population health. One is **“the health outcomes of a group of individuals, including the distribution of such outcomes within the group”**. For comparative purposes across the developing countries, we need to define what is a **“healthy population”** and the **“indicators to assess it”** should be developed. For a particular country, the concerned Ministry of Health can define it. One of the major determinants for achieving good population health is we need to have a very sound and realistic **“National Health Literacy Promotion Strategy”** for the country. We all should be striving towards having this strategy. It will take time to improve the health status of the population but it is an achievable goal.

# Annex I:

## INAUGURAL SPEECH

DELIVERED BY

**Dr. Myint Htwe**

Inaugural speech delivered by Dr Myint Htwe, on assuming the duties as Union Minister for Health (MoH), Myanmar, on 1 April 2016 to health professionals of six Departments under the Ministry of Health, and the Department of Sports and Physical Education, Nay Pyi Taw, Myanmar.



Good afternoon, Permanent Secretary, Directors-General, Deputy Directors-General, specially invited guests, Rectors, Medical Superintendents, State and Regional Public Health Directors and Medical Directors, Directors, Deputy Directors, Program Managers, and all officials present in this hall.

I appreciate and thank you very much for attending this event.

First of all, I would like to greet all of you with my warmest regards and good wishes. This is the start of our new journey of the MoH to deliver our services more effectively and efficiently to the specific needs of our population. Our main focus of attention will be on the population that we are serving. We will work together as a team to achieve our ultimate objective of improving the health status of the population.

I am glad to be back in the MoH after a physical hiatus of about 22 years. In terms of working relationships with officials of the MoH, I am still in close contact with many of you on a continuing basis by way of contributing technical suggestions and inputs through various avenues and means such as through the Myanmar Academy of Medical Science, Preventive and Social Medicine Society, Ethical Review Committee of Department of Medical Research, Liver Foundation, traveling with senior officials of the MoH to other countries as a member of the Myanmar delegation, attendance at several meetings, workshops, forums, and conferences being conducted by the MoH in the country.

I am here as per the duties assigned by the new government. I have pledged that I will do my utmost to the best of my capacity, capability and especially with sincerity and without prejudice, together with undivided support and collaboration from all the officials sitting in this room as well as all those MoH staff from states and regions in our country. I am hoping that my 17 years of country experience working in the MoH and 16 years of international experience accumulated while working in WHO Regional Office for South-East Asia will help facilitate in managing the MoH effectively and efficiently in achieving our common objective of making the MoH strong, dynamic and efficient for improving the health status of the population in our country.

The contents of my speech reflect the general direction and road map of what we intend to consider, inculcate and implement as a team in the coming years as per the current health scenario and the epidemiological situation prevailing in the country.



From the very outset, I would like to mention that the slogan of the National League for Democracy (NLD) is “Time for Change”. This is for the betterment of the country in terms of several perspectives. Health is no exception. People are longing and waiting for that change.

As per this slogan, we should not be afraid of changing things in technical, administrative, management, and logistics aspects for improvement in rendering our health services as well as sports and physical education services to the population. We will think of it together for strategizing it in a realistic and down-to-earth manner for the benefit of the population of our country.

The reason for “change” is not just for the sake of “change”. Here, I would like to quote what one CEO said during the take-over of his company by another company, “We didn’t do anything wrong, but somehow, we fail and lost”. The economic environment is changing and they did not pay attention to the changes happening around them. Likewise, the health scenario together with its determinants and demand from the population in our country is changing fast and the challenges facing us are also too many and some are unexpected and sudden.

If we are not observant and not adapting to the changing situation by modifying or improving the way we are working; the way we are planning; the way we are managing the programs; the way we are assessing our work, the way we are collaborating with partners, we will not be able to improve the health status of the population. We will not be able to meet our goals.

Therefore, we will do “out of the box thinking”, “innovative thinking and identifying newer approaches”, and “practicing epidemiologic thinking” altogether. In this new management, if there is a strong and reasonable indication for changes to be made in either administrative or management or logistics or technical matters, we should have no hesitancy to change it. But these changes should be bounded by a certain set of realistic criteria and rules. We will not change it haphazardly.

As we go along, we will streamline and fine-tune our programs and activities in a systematic manner so that it will be more realistic and efficient to serve our population effectively. I will also accord due attention to all of your suggestions and inputs in the process of change. What I mean to say is that irrespective of your positions, your suggestions and inputs will be treated equally in terms of importance and taken

care of to the extent possible. We will devise mechanisms so that all your suggestions and the voices can be heard together with the voices of the people.

We should always envision the face of the people, note the plight of the people, perceive from the perspectives of the people whenever or whatever health services, sports, and physical education services that we are going to render to them. Our focus of attention should be the population that we are serving. I will consult with my senior team to make it happen as a matter of routine habit at all levels of the health system. “One man show” and ignoring the suggestions given by the team members and people will totally defeat our purpose. We will practice combined and concerted effort together with constructive criticisms. Generally, people are reluctant or uncomfortable to receive criticisms. In fact, constructive criticisms are good for the recipient. If the criticism is destructive in nature or has an ulterior motive, we can just ignore it.

We will change our mindset in line with the current need or situation. To change our mindset overnight is impossible. However, if the majority of us are changing, that peer pressure can greatly facilitate changing our mindset in the right direction. Senior professionals including me have to set exemplary and selfless actions (I repeat senior professionals including me have to set exemplary and selfless actions) to become role models for others to follow suit. Otherwise, there will be a vicious cycle and we will never ever achieve our common objective of improving the health status of our population on our way to attaining Universal Health Coverage.

Here, I am referring to mindsets in terms of “sense of responsibility”, “sense of accountability”, “spirit of collaboration and coordination”, “spirit of positive attitude and positive thinking”, “unbiased decision-making”, “no more prejudice against something or somebody”, “inculcating team spirit and team approach”, “supporting and respecting each other”, “dutiful attitude” “fact-finding rather than outright fault-finding”, “giving sincere suggestions or ideas or advice from the constructive point of view” or “constructive criticisms”, “consideration of people-centered approaches”, “doing this for the sake of our country”, “initiating good ethical practice by applying principles of public health ethics, medical ethics, research ethics, sports ethics, and ethics in general”, etc., to mention a few. It is a tall order but we all have to try our best to do it as we go along. We will strive for achieving these desirable mindsets as much as possible and as soon as possible. I can assure you that together with senior professionals of the MoH, we will facilitate and promote changing the mindsets as we go along. To facilitate the change

in mindset, we will also simultaneously take care of the welfare of staff from several perspectives, to the extent allowable by the budget and other factors. We have to give priority to the welfare of staff working in remote and hard-to-reach areas. I will elaborate on this in the latter part of my speech.

With this changed mindset, the main principles that we are going to practice in managing the MoH are: (i) teamwork with a sense of team spirit, (ii) compromising attitude, (iii) sincerity and unbiased attitude, (iv) fact-finding and not fault-finding, (v) respecting each other (vi) viewing things from positive perspectives, and (vii) supporting each other.

In addition, we will do our utmost to upgrade and strengthen staff capacity and ability in doing things in public health and clinical domain and sports and physical education domain, especially at the grass-root level. We need to be at least at par with neighboring ASEAN countries in delivering effective and efficient health services, sports and physical education services, especially to those residing in underserved, remote, and border areas. In the context of this perspective, we will see that “a right person must be in the right place” in the MoH. A person trained in subject “A” should not be working in subject “B” area, which he or she has no technical ability. Only in exceptional circumstances, we will allow this to happen.

To effect these changes in a successful way, we will work as a team in a team-spirited manner and respect each other. Each one of us has a role to play as per our job description and the role of each of us is equally important. The analogy is that even the proper tightening of a small screw in a plane engine is important. The loose screw can make the plane crash. In other words, we will pay attention to the voices raised and suggestions offered by the community at large and the patients.

Starting from me, I will listen to the suggestions or ideas given by you and from all those staff working at all levels of the health system, sports and physical education system. This would be one form of change in management style in the MoH. My door is open to all of you, irrespective of your position, throughout my tenure in the Ministry of Health. I repeat “my door is open”. We should open up our line of communication. Only then policymakers will get enough information for making rational and ethical decisions. Team spirit and teamwork are important not only at the personal level but also at the departmental level such as among the departments, including our new member – the

Department of Sports and Physical Education, under the umbrella of the MoH. The proactive collaboration between the Department of Public Health and the Department of Medical Services is crucial. The two departments' requirements should be fulfilled by the Department of Health Professional Resource Development and Management and the Department of Medical Research and vice versa.

**A**nother collaboration that is equally important is between the Department of Traditional Medicine and Department of Medical Services and Department of Medical Research and Department of Sports and Physical Education. We will make this team approach happen as we go along so that all the departments are working in tandem. There must be a free flow of thoughts among the officials of the departments under the MoH. We will create regular and informal fora or platforms to do so. After all, we all are staff members of the MoH or closely knitted members of one family. The unrestricted collaboration with respect and good reciprocity are desirable characteristics as we go along the road map for achieving Universal Health Coverage.

**A**long this line of thinking, there must be no boundary in sharing of thoughts and views among the relevant ministries. Inter-ministerial collaboration is a must and must be practiced without fail on many health and health-related issues such as disaster management, environmental sanitation including bazaar sanitation and water sanitation, hospital and laboratory waste disposal, zoonotic diseases, school health, workers' health, prison health, occupational hazards, food safety, quality drugs, physical fitness of the community, etc. We will review and improve our mechanism of collaboration with other ministries.

**H**ere, I would like to point out that efficient administrative and good management skills are as important as technical skills. These skills cannot be obtained as easily and quickly as technical skills. We will nurture the administrative and management skills of our staff at all levels of the health care delivery system. We have to learn from each other and we should not be ashamed of doing so. In-house processes, standard operating procedures, guidelines, office circulars must be rational, realistic, and meaningful to make our management process efficient.

**T**hese should not become stumbling blocks in our work. If these entities are inappropriate, there should be no hesitancy to change them. In fact, these entities are made by us. These are also not etched in stone. Even if it is etched in stone, we will

use the new stone. In other words, these entities must be dynamic and realistic in line with changing situations or changing epidemiological conditions.

**R**ational decision-making is one of the determining factors to put our work on track in the right direction. We will promote this aspect. Decisions are always there, either small or big. Even in preparing this speech, I have to decide what to include and what not to include. We made hundreds of decisions every day. For important decisions in the field of public health, we have to follow the principles of public health ethics.

**I** just want to let you know that by the very nature of public health, decision making must be collective to the extent possible, taking into consideration relevant ethical principles together with short-term and long-term implications on the population i.e., population centered or implications on the population must be at the forefront of our decision-making process. This is also applicable in the field of sports. We tend to forget this perspective.

**T**his is important when we allocate resources for various purposes, selection of cost-effective interventions for a particular group of the population, getting support from external agencies, etc. What I would like to emphasize to you is that we should not go for donor-guided or donor-driven activities. We will seriously consider by applying the principles of public health ethics whether it is really necessary to accept it because we have a finite number of human resources. I do not want your precious time devoted to these so-called “not so relevant” activities.

**I**f the proposed offer is in line with our requirements or the need of the population, we will take the support or collaboration of the collaborating partners. We will carefully strategize to get the most out of it from our development or collaborating partners. I have already charted out our line of approach and these will be discussed and shared with development or collaborating partners when I meet with them.

**I** have noted that you all have been implementing the assigned services in your respective technical areas as far as the opportunity and enabling working environment allows you to do that. I, together with my senior team, will expand the opportunities and make the enabling working environment conducive and suitable so that you all can contribute more for the benefit of the population at large. “Enabling environment constitutes both physical and so-called mental or psychological environment”. Senior

management must be supportive and guide the work of program managers rather than fault-finding or hindering the activities.

With regard to this, one basic point that we need to be aware of it is that to perform a particular task correctly we need (i) knowledge base, (ii) experience, and (iii) enabling working environment. The knowledge base can be obtained very quickly through various means but the experience which you all have accumulated cannot be read in the books and it will take months or years to obtain it.

Therefore, my task is to harness your experience by creating an enabling working environment. I am, therefore, very much looking forward to your innovative thoughts, renewed and increasing quantum and momentum of contribution to our priority health programs and activities based on your vast experience which you have accumulated all along the years. I do not want your experience evaporated for no clear reason.

Before we start the process of efficiently managing our health system, the most important issue is: ‘Knowing the ground realities genuinely’. We will quickly review the scenario from a holistic perspective. What do we mean by ground realities? We must know what is really happening at the village or community level or service points at various hospitals in terms of “How are people getting the health and medical services from our rural health sub-centers, rural health centers, township health centers, and various categories of hospitals? What are the challenges and problems actually happening or facing by our staff as well as by the people?

These two questions can elicit many things which we need to consider in improving the performance of our health care delivery system including the hospital care system. We will specifically and quickly review the scenario including those in remote and underserved areas and will also consider developing intensified or special programs to cater to the needs of this group of population.

We do not want our health professionals to be arm-chaired epidemiologists and theoretical health planners. If these two categories of professionals formulate the health plan, it can result in the so-called top-notched health plan but it may not be implementable in real-life situations. It means that we all need to be proactively involved in sharing our real-life experience in the process of formulating a good health

plan together with state/regional medical directors and state/regional health directors. If the information required for formulating a good health plan is not available or incomplete, we will conduct a quick review using qualitative methods and also by using checklist questions.

In fact, true ground realities are known and can be reflected and depicted genuinely by staff working at the township level and below. We will get the information when health staff travels to various townships and village tracts in the country. Linkages and effective communication among staff working at different levels of the health system are crucial. I would be promoting in-country staff duty travels with clear-cut objectives and we will consider remedial actions based on their findings or recommendations.

One burning challenge which we will promote is “enhancing the feedback system”, both upstream and downstream. This feedback system is especially important for health information systems. Let the staff at the downstream level be aware that professionals at the central level are analyzing the data transmitted by them and sending them feedback. The side benefit is that the quality of data will eventually get improved as we go along because the professionals at the downstream level realize that the data that they have transmitted upstream are being utilized at the central level for decision-making and for many other purposes.

We will also develop a system or strategy for creating a sense of ownership of data by basic health staff in their respective townships or village tracts together with a short training on transforming data into information. This could finally ensure that the health data for the country will actually reflect the real health situation of the country. I have a package for initiating this activity.

As per the election campaign manifesto of National League for Democracy (NLD), the mission of health is to reach out to the health services so that people will be accessible to it easily. In other words, we have to go for Universal Health Coverage. To that effect, the following priority activities, as mentioned in the NLD campaign manifesto, will be given due attention to:

- (i) Expanding the coverage of primary health care,
- (ii) Reducing the mortality of pregnant women and under 5 children through the implementation of effective projects and programs together with improvement in

- the availability of required medicines and preventing nutritional deficiencies,
- (iii) Children will have good health habits through the conduct of intensified school health programs,
  - (iv) Intensified drug abuse prevention, treatment, and rehabilitation programs for adolescents in collaboration with civic societies,
  - (v) Intensified programs for rendering health care of the elderly and handicapped people with the objective of extending the life expectancy at birth to 64 years and above,
  - (vi) Intensified programs for prevention and control of communicable diseases, especially to reduce morbidity rates of TB, malaria, HIV AIDS, and hepatitis by way of providing required medicines,
  - (vii) Intensified programs for prevention, control, and treatment of non-communicable diseases (diabetes mellitus, hypertensive heart diseases) with the objective of reducing the morbidity rates,
  - (viii) Provision of quality medicines and initiating modern treatment practices in government health institutions, together with improving the clinical acumen and inculcating the ethical practice of doctors and nurses,
  - (ix) Allowing the registration of private health institutions according to rules and regulation so that they can provide quality health care services to the population,
  - (x) Collaboration with international agencies and organizations for development in areas such as the production of pharmaceuticals, medical education, treatment of diseases and research,
  - (xi) Improvement of health management information system based on reliable data and information,
  - (xii) Emergency health care and management to the population living in disaster-prone areas and nationals residing in hard-to-reach areas,
  - (xiii) Advancement of the domain of traditional medicines,
  - (xiv) Measures to prevent consumption of hazardous western and indigenous medicines, harmful food and unsafe drinking water, and
  - (xv) Increase in health budget while also reducing the treatment cost for diseases by the people. We will quickly do an overall review of performance in these areas together with program managers and appropriately strategize to further speed up the momentum of our work in a quality manner.

**A**s per the manifesto of the National League for Democracy, we will uplift the physical and mental state of young people and we will go for:



- (i) Opening sports training centers and institutes,
- (ii) Constructing and renovating of sports stadiums and arenas, and
- (iii) Promoting sports and physical education programs at schools.

**B**efore we start the process, we will do a quick review of the scenario of these sports training centers and stadiums, and physical education programs using a set of assessment criteria and framework. Based on the findings of the review, we will plan for the activities to be carried out in the first 100 days, six months, and one year. In fact, the health promotion activities of departments of the MoH are highly complementary to the recently incorporated Department of Sports and Physical Education. The joint actions of these departments will make the activities of the MoH stronger and effective. Today, I am going to highlight some of the generic issues concerning all health staff and principles focusing on improving the general perspectives on public health and the notion we have to abide by. Clinical aspects and detailed issues related to universities of medicine and other training institutions and hospitals, sports and physical education domains, will be dealt with separately when I meet the professionals from those domains early next week or so. I cannot call all of them here because of limited space. As this is my first encounter with you officially, I would like to convey some points of importance to all of you so that we can move ahead in unison with renewed strength, vigor, and commitment in the coming months and years.

**W**e used to think of the patient-centered approach in the clinical domain when we are treating patients. In public health, whenever we develop or set up, or implement a program or activity, the first thing that should come to our mind is our customers, i.e., the people and people-centered approach or population perspectives. How are they going to perceive or fare our services (public health and clinical) from their perspectives? Here, the role of public health ethics, findings of implementation research are important in rational and ethical decision making. Generally, we tend to forget these aspects as we are bogged down with all the technical details of delivering the health services, i.e., not considering from recipients' side or perspectives

**I**would like our professionals to think in the following way when performing the jobs. Job satisfaction of our staff is crucial. One form of job satisfaction that we could get is, for instance, when professionals of immunization programs are performing their duties, they should realize that because of their immunization activities, many of the children will not be suffering from vaccine-preventable diseases; their parents and families will

not have psychological stress because their children are disease-free; parents do not need to spend time and money for treating the disease; their children's growth will not be retarded because of several factors related to childhood diseases; etc.

Likewise, when professionals of MCH program are planning their program activities or discussing for improvement of the program or performing their routine duties, there should visualize pregnant women will have less stress and less problematic in delivering their children and nothing untoward may happen during the postpartum period because of their good services.

This form of envisioning can lead to job satisfaction of professionals and that they foresee that they are doing something good to the children and pregnant mothers, and something good for the country, etc. This line of thinking is similar to doctors working in hospitals where the benefits to the patients can happen very quickly.

Before I elaborate on the technical details on our overall direction, I would like to mention that we are going to pay priority attention to the welfare of our health staff and especially to those working in remote and hard-to-reach areas, after thorough discussion with responsible professionals of administrative and management section of the MoH and Directors working at state and regional levels and also with medical superintendents of big hospitals. We will streamline the modus operandi of taking care of the welfare of our staff.

This welfare issue is equally as important as program delivery aspects. I need suggestions in this regard from all of you as well. Welfare is a very wide domain and we will do our utmost best in a phase-wise and step-wise manner, subject to availability of funding and other issues. We will also make sure that funds are made available and must be available.

Another generic issue that we need to handle is, as much as possible, reducing the number of layers in decision-making. We will immediately review this process of decision making especially at the central level and make it realistic and efficient. We do not want to delay the decision-making process which would have several untoward implications. Decision-makers must also take full responsibility for what they have decided and that decisions are fair and square and no prejudice against anybody and with no vested interest.

We all are working for the country. Generally, we will give authority to technical professionals or program managers for technical decision-making, if it does not have a policy and untoward administrative implications. They need just to inform the relevant senior team for information.

For management and administrative decision-making, we have to discuss carefully among the concerned senior officials because it could have budgetary and other direct or indirect positive or negative implications. To facilitate our professionals especially program managers in making technically sound decisions, we will provide a generic and broad framework to them. All aspects will be considered. All responsible persons will be put on board to be able to contribute their views and ideas so that high-level decisions will have both short-term and long-term benefits.

We will also review together and consider giving more decentralization of decision-making to state and regional level directors. In fact, the main job of central level officials is to oversee policy and strategic direction, monitoring and review process, development of standard operating procedures and guidelines, etc. for different health programs. This is similar to the job of professors and clinical professors in the various clinical disciplines.

In this context, I would like to reiterate that we will review the decision-making processes in the MoH as a whole to make it more realistic, transparent, and fast. These are changes that we have to do by all means if we are to be successful in our work. We do not want to be quoted that “the case file is on the Minister or Director-General’s desk for two months”. Likewise, we do not want to be informed by development partners and external agencies that “we have not yet got the feedback from the MoH for months”. We have to reply at least something that action is being taken or being processed or something along that line. We need to inculcate this nature of responsiveness.

Here, I would like to ask the staff to use emails as much as possible to hasten our internal and external communications and exchange of important information. We will also see that efficient and fast wi-fi is available at least in central level offices first followed by state and regional offices. Until and unless this is happening our progress will be retarded significantly. I will discuss this with the responsible officials of the computer section of the MoH.

Having said that, we all should be aware of the fact that administrative and management aspects are as important as technical perspectives, especially in the field of public health, health institutions, and hospital management. Many of the glitches occurring in performing the health system activities or management of health institutions and hospitals can be removed, if we improve management and administrative issues.

It is all the more important at operational levels such as in states and regions, districts, townships, and below. For clinical domains such as hospitals at various levels, rural health centers and sub-centers, management, and administrative issues related to the smooth flow of medicines, equipment and supplies are crucial.

Therefore, we will consider seriously improving the supply chain management system. This system is currently running at a sub-optimal level of performance. One simple example is that there will be ample supply of quality medicines at the central medical store depot but it is not reaching its intended hospitals or centers in time for want of a signature of the responsible person or missing information sheet. We do not want this type of scenario to happen. If our supply chain system is efficient or following the standard operating procedures, we can save millions of kyats and also required quality medicines will be reaching their targeted sites in time for use by the doctors or health professionals at hospitals and health centers.

We all are aware of the weak performance of health system activities in remote and hard-to-reach underserved areas due to several reasons. Some of the reasons are beyond the purview and the control of the MoH. We will seriously discuss various ways and means, including innovative programs, with other relevant ministries for improving the situation in a phase-wise and step-wise manner. State/regional directors of respective areas will be closely involved. The use of mobile clinics and General Practitioners (GP) networks may be some of the options to be considered. This is also one of the top priorities in our mosaic of activities that we plan to do for our population residing in hard-to-reach areas. Your sage inputs are crucial in this endeavor.

Many activities of the MoH can be greatly facilitated by working in close collaboration with other relevant ministries, especially at the operational level. We also need to note that although the MoH is the main player in improving population health, collaborative support from other relevant ministries is also necessary. We will

develop and establish realistic mechanisms to have this collaboration as well as effective donor coordination. Here also, we will harness your practical experience in this process.

For effectively working with UN agencies and organizations, development partners, INGOs, and to get the desirable outcome and output, the existing Myanmar Health Sector Coordinating Committee (M-HSCC) and other mechanisms will be reviewed and make it more realistic and productive. The role of the International Health Division (IHD) is very crucial and we will strengthen IHD as soon as possible to serve better to the existing health programs and do effective donor coordination. This will be one of the priority activities in the coming weeks and months.

I would just like to tell you that I have already outlined on what we are going to do in the first 100 days preferably starting after our Thingyan holidays. These activities will be finalized after incorporating your inputs. These technical, administrative, and management activities concerning quick reviews will set the tone to make our foundation stronger. It will be relayed and discussed in detail with program managers, professionals from the curative domain, and professionals from training institutions at different levels of the health care delivery system when I meet them sometime next week.

I plan to have separate meetings with officials from (i) UN agencies and organizations, INGOs, big local NGOs and development partners, (ii) medical universities and training institutions, (iii) Myanmar Medical Association and its affiliated societies, Health Assistants Association, etc., (iv) Councils, (v) University of Public Health and University of Community Health, and (vi) state and regional hospitals and specialist hospitals. I will coordinate with my senior team at the MoH for planning these meetings.

I would like to reiterate that, as a matter of change in the style of management, we will listen very carefully and with seriousness, the “ideas and suggestions given by all of our counterpart staff” working at the ground level and also “the voices of the people”. Otherwise, whatever we decide at the central level will be absolutely fine and technically acceptable but it may not be implementable at the ground level.

To make this happen smoothly, we all should be equipped with “epidemiological thinking skills”. It is nothing but seeing and analyzing an issue or problem from different perspectives taking into consideration the epidemiologic triad of causation of disease or conditions “Agent, Host, Environment” together with facilitating and

conditioning factors. In the clinical domain, it is equal to deriving a correct diagnosis from among a set of differential diagnoses.

**T**hinking along this line of approach, do not react or act instantly when you receive a piece of administrative, management, or technical information, like a “knee-jerk reaction”. Please think carefully taking into consideration various perspectives and act rationally. The majority of the staff here in this room are public health professionals, epidemiologists, health administrators, and senior management officials.

**T**here are very few clinicians and full-fledged researchers in this room. What I would like to highlight here is that public health professionals need to work very closely, as a team, with relevant clinicians working in various hospitals as well as professionals working in training centers, universities, and the Department of Medical Research along our path to attaining Universal Health Coverage.

**T**he combined strength is far greater than the individual strength combined. It is not arithmetic but geometric. We will create a regular platform so that experience can be shared comfortably among these professionals. The performance of our health system can only be improved if we all work together as integrated teams in a team spirit manner.

**T**o move the MoH in a much more efficient way, each of us has a role to play and duties to do. If we fulfill the role to be played by each of us, the system can run smoothly. Thus, it is essential to know the priority activities and essential actions that we have to do in line with specific job descriptions. As far as I am aware of it, these job descriptions have not been reviewed for a certain number of years. We need to quickly review the job descriptions and adapt to contemporary needs. In epidemiologic terms, it is a quick dirty analysis of job descriptions of key categories of health professionals in the MoH.

**A**nother prime activity that we are going to do as soon as possible is doing a quick review of the implementation of recommendations made by all of you in recently conducted policy meetings, workshops, symposia, and fora. You have spent a sizeable quantum of time and racked your brains to have all these priority recommendations. I do not want them to be on the shelves or just evaporated for no apparent reason. In fact, our future directions have already been outlined in these recommendations made by all of you.

We will develop and set up a transparent, efficient, and doable system of work. It does not mean that we have to revamp the system. Systems are already in place and functioning at different levels of efficiency. We need to pinpoint the weaknesses in our health system and strengthen them accordingly. The system is as strong as its weakest point or link in the system. The systems that were developed before may be really good and efficient. But the point we need to be aware of is that the system together with its controlling environment is always in a state of flux.

From time to time, we have to review the system and modify its modus operandi to be in line with contemporary epidemiological conditions and the needs of the population. I repeat, “Not to revamp the system”. The system just needs to adapt to changing epidemiological situations. Your valuable advice in this regard is crucial. Here, I would like to put on record and thank previous Ministers, Deputy Ministers, and their teams for putting untiring efforts in improving the system. It would not be that difficult for moving ahead in further improving the system in line with the contemporary requirements.

Here, I would like to express the notion that the strength and performance of the public health domain, physical education domain, and the clinical domain are directly proportional to the level of the health status of the population in the country. In other words, we need to strengthen the domain of public health, sports and physical education, and the clinical domains simultaneously and collectively at all costs and not one after another. This can be done with the support and contribution of all of you. The decisions of the National Health Committee, the policy of MoH, relevant directives, circulars, standard operating procedures, and Guidelines must reach or permeate to the lowest level in the hierarchy of the MoH.

The policy and strategies of the MoH is generally reflected in the opening remarks of the Chair of the National Health Committee, the Minister, and the Deputy Ministers in the MoH. In that context, we have to devise ways and means of reaching out the information to all our staff by way of establishing a dynamic intranet system in the MoH or development of a compendium, or other means. Details will be discussed as soon as possible with relevant and responsible officials of the MoH for achieving it. We will urgently review the existing circulars, directives, and memoranda currently being

applied in performing our tasks. The relevant ones will continue and some may need modification and some may need to be nullified.

One pressing need is to do a quick review of the National Health Plan (2012 to 2016) or newly developed National Health Plan. To what extent we have been implementing it or to what extent we have achieved our targeted plan. While reviewing this, many issues will be exposed, i.e., the good as well as the bad or the facilitating factors as well as hindering factors. Together with this, we will see the extent of involvement of development partners, agencies and organizations, INGO and local NGOs, etc. in the activities spelled out in our National Health Plan. It is high time that we need to draw our new National Health Plan. I am sure it will be a very exciting job to do it.

We should also take not much time in formulating the new plan. There are a series of steps in formulating it. You all are very well experienced professionals and I hope that we can be able to have a very realistic National Health Plan taking into consideration the 15 points mentioned for the field of health and 3 points for the field of physical education, in the campaign manifesto of NLD. Here, we will get the support or involvement of retired public health professionals and clinicians, representatives from entities such as societies under MMA, MAMS, councils, associations, development partners, agencies and organizations, INGOs, local NGOs and professionals from relevant ministries. I will not elaborate on the details here as it is a bit wide and technical.

Together with the quick review process on National Health Plan, we will see the overall direction and rationale of the existing National Health Policy, which was promulgated in 1993, and draft National Health Research Policy. We will do a quick review of functions or terms of reference and output of several existing technical, management, and administrative committees of the MoH. Too many committees will also defeat the purpose. We will make the committees efficient, nimble, and realistic. Formation of Ad hoc Think Tanks, Task Forces, Scientific Working Groups, and Technical Advisory Groups may be considered. These will be called off after their tasks are completed.

I would like to reiterate that “too many such entities are not conducive to the efficient functioning of MoH or any organization” and it could actually slow down the pace of work of MoH. We will discuss this with you in the coming weeks so that we could have the best scenario or approach. Here, the important role of the Myanmar Academy of Medical Science must be reviewed and considered for increasing its involvement in terms of giving sage advice to the MoH. It is currently serving somewhat like a general



Think Tank for the MoH. We do not want to duplicate its work by forming another policy or strategic committee.

The arms and legs of the MoH are states and regional health teams together with state and regional and township hospitals. We will make them strong by all means. I have great confidence in their work. If they are strong and efficient, the MoH will be strong and efficient to serve our country. Capacity-building or real scenario review workshops will be held state/region-wise, involving township and district level staff of all categories, rather than at the central level. We will also involve professionals from the Department of Sports and Physical Education.

I have noted that many capacity-building workshops are being held at the central level. We will quickly review the scenario. We may even develop a system of healthy competition of performance using a certain set of criteria among the rural health centers, township health centers, township hospitals in respective states and regions. This area is too wide that we will discuss separately and I will share my views and thoughts when we meet state and regional Directors separately on Saturday 02 April 2016. Central officials from the Department of Medical Services, the Department of Public Health, the and Department of Medical Research will give a helping hand. These issues will also be considered in light of the recently approved organogram of the MoH. We may also need to review the appropriateness of our new organogram in light of the finite number of human resources available and the nature of the work of the MoH.

One caveat is that the work of the MoH could not be equated to a production factory. Therefore, changing the structure of the organization or organogram must be carefully considered and taking into consideration the pros and cons of changing it as well as long-term and short-term implications.

During my tenure in the Ministry of Health, I will also give special attention to (i) basic health staff working at district and township hospitals, township health units, rural health centers, and sub-centers in terms of their capacity building, their welfare, and modus operandi of activities being rendered, etc.; These professionals are really the backbone of our health system. If they are capable and committed to the work, our health system will be strong and efficient. (ii) performance of community-based health workforces such as community health workers and collaboration with community-

based organizations; (iii) role to be played by councils (medical, traditional medicine practitioners, nursing and midwifery, etc.), especially promoting the teaching and capacity-building activities of nursing and midwifery domain; and associations such as Myanmar Health Assistants Association and Myanmar Medical Association and societies under it, especially General Practitioners Society; They are part and parcel of the health system. They need to be put on board. We will systematically harness the important contribution made by these entities.

Serious attention will be accorded to health and medical services rendered at various states in the country where health development in various aspects is below the national standard. The central internal review and technical assessment unit in collaboration with state health and medical directors will continuously monitor the situation and necessary actions will be initiated as much as possible on a real-time basis. We will review and further strengthen the electronic communication system between central and offices in states/regions. The necessary actions will be implemented with support and collaboration from local government authorities.

The role of local government authorities and the General Administration Department will be solicited and harnessed as much as possible especially for public health activities in the communities. For difficult areas such as in hilly regions, we will temporarily think of having mobile health units and detailed strategies to this effect will be informed to concerned officials in due course of time.

We have a finite number of human resources in the MoH. In our road map towards Universal Health Coverage, the increasing importance of the role of GPs in the National Health Care Delivery System is now coming into prominence. The modus operandi of the Health Care Delivery System can be greatly improved and facilitated through the involvement of GPs who are the first-line point of contact with the population at large.

We will strategize appropriately through the several branches of GPs Society of Myanmar Medical Association (MMA). After all, some of our in-service medical doctors can be subsumed under GP, although they are rendering general and specialist services. We will also discuss with private hospitals association in this context and we will also promote public-private partnership in several areas.

Another area that is pivotal is to firmly set up a robust, dynamic, and real-time HRH computerized system covering both public health and the clinical field. If we have this system, we can correctly plan the production of health professionals from our training institutions. We will also know the attrition of our staff so that we will appropriately strategize for reducing the attrition and also for replacement. The internal and external brain-drain of health staff are faced by all developing countries. Myanmar is no exception. There are several advantages of having this system. I am not going to elaborate here also. This subject will be discussed for obtaining the best possible solution for containing this situation at specific meetings with concerned officials.

Other areas that we are going to give special attention are Health Information System, Hospital Information System, Health Education, and Health Promotion (IEC), School Health programs, strengthening rural health centers and township hospitals and township health centers from several perspectives, non-communicable diseases prevention and control, the status of availability of and other supplies in hospitals, overall health supply chain management system, emergency care at various state and regional hospitals, disaster management, capacity building programs in clinical domain, medical education, Hospital, and laboratory waste disposal system, and International Health coordination.

I am not saying that others are not important but these particular areas are very much basic and generic in nature. They are not only facilitating the effectiveness of performance of all program areas but also can result in a long-term beneficial impact on the country. For instance, HIS is like a central nervous system of the MoH. We will know what is happening so that we can respond effectively.

When we are referring to morbidity and mortality rates of diseases and conditions, we have to ask one big question, “To what extent are we sure that it is actually reflecting the real situation?” If the data are not reliable, we will not be able to set our target realistically. The whole planning process will be nowhere.

Similarly, a hospital information system is really important from several perspectives for the medical superintendents and clinicians working in the hospitals. The “Human Resource for Health Computerized System” is indispensable for the projection and production of different types of graduates from our health institutions. We will make this system very user-friendly and robust. We will make these systems in place firmly during my tenure in the MoH.

The health knowledge, attitude, and practice of our people can be effectively improved if our health education activities are simple, interesting, effective, and widespread all over the country. School health programs, physical education activities, and health education programs at factories can contribute significantly to population health in terms of reducing the incidence of non-communicable diseases as well as communicable diseases.

We will promote these three areas in collaboration with relevant ministries. We will also promote sports and physical education activities in our workplaces by having small gymnasiums, etc. The intention is to have snowballing effect on the family members and relatives of the staff. We will make the budget available or get some funding support through the mechanism of corporate social responsibility.

In the context of equity and rendering equitable health services to our population, we are going to give attention to “health of isolated population groups or migrants”, “health of internally displaced population groups” and “health of prison population groups”. Isolated population groups for big construction sites as well as prisons are located in several parts of the country. We have prison doctors also. The Department of Medical Services will need to develop a strategy for improving the health services to these population groups in collaboration with concerned ministries. I have information that external entities are ready to give a helping hand in terms of giving funding support to cater to the health needs of these groups.

The points of contact of a significant proportion of patients or population seeking care are rural health centers, township health centers, and township hospitals. In order that our rural population is getting satisfactory and quality health services, we will significantly strengthen these points of contact. This can also reduce the workload at state and regional hospitals. The Departments of Medical Services and Public Health will strategize it in a realistic manner.

We will systematically and effectively harness the support given by development partners, UN agencies and organizations, and INGOs. For that matter, we will discuss this with these entities as soon as possible. I have already developed a practical framework to initiate the process. To facilitate this matter, as I alluded to earlier, we will also meticulously strengthen the International Health Division as a priority activity. Along this line of thinking, we need to systematically strategize for harnessing the

services of the diaspora population of Myanmar doctors working all over the world. As per the available information, they want to give support back to our motherland by way of rendering several types of services when they visit Myanmar.

I have already thought of the framework to materialize this untapped resource systematically and officially. I will work with my senior management team, clinicians from different disciplines, Myanmar Medical Council, Myanmar Medical Association, and its affiliated societies to make it happen. Another area that deserves attention is ongoing meetings and capacity-building training workshops being conducted by the MoH. We will quickly review it and improve the scenario. I have already developed a practical framework to further improve the situation.

Generally, we will try to reduce these events at the central level and more will be conducted for health professionals working at district and township levels and below. The role of research or the Department of Medical Research is crucial if we are aiming at reaching a high level of performance of all our technical programs to serve the population and to improve the clinical acumen and treatment of patients. We need to have built-in small “implementation research” activities in our technical programs. Implementation research can quickly yield information on administrative, management, logistics, and technical aspects of the program. The findings will be considered together with the information emanating out of our monitoring and evaluation system of the MoH to streamline and improve program activities. We should also not be afraid of reducing or sun-setting some of the program activities or even cease the programs altogether if they are not required anymore or redundant. We will do it accordingly.

The collaborative activities that can be carried out by the Department of Medical Research with other departments under the MoH will be imparted when I specifically meet with the officials of respective departments next week. The Department of Medical Research is doing very well. But in this so-called “time for change” and “process of change” we have to think out of the box.

I would like not to have unnecessary red tape because of the fact that research is a highly specialized technical area like the clinical domain and teaching domain. The research scientists have many innovative and bold ideas but their ideas cannot be materialized if there are red tapes hindering their work. We will do our level best so that these red tapes are no more in existence.

The status of development of the research domain is equivalent to the status of development of the country. In collaboration with professors of the clinical domain, the Department of Medical Research should give a helping and supporting hand in inculcating research culture in Universities of Medicine and other universities under MoH. There are many faculty members who are interested in conducting research, including clinical research. We will further strengthen clinical research units in specialist hospitals, state and regional hospitals. The Research department will also give a helping hand for many activities of the Department of Sports and Physical Education.

I have many points of interest to relay to research scientists as I was involved in research as Chair of Ethics Review Committee, Department of Medical Research since November 2011 and also as Regional Advisor for Medical Research for almost 6 years in WHO SEARO from 1994 to 2000. The Department of Medical Research Ethics Review Committee had already reviewed and approved a total of 310+ research proposals since November 2011. These proposals were submitted from renowned universities in USA, Australia, UK, New Zealand, Korea, international NGOs, Master and PhD students studied all over the world, and from our local researchers. The research topics covered the whole spectrum in the field of health.

In this context, we will promote the strengthening of Ethics Review Committees (ERC) or Institutional Review Boards (IRB) in universities under the MoH and also capacity-building activities for its committee members. Strengthening the work of the Ethics Review Committee is one way of improving the quality of research. In fact, the quality of research is reflecting the developmental status of the country. We will, therefore, strategize to improve the quality of research so that our papers are accepted by peer-reviewed international journals. The national budget allocated to the Department of Medical Research will be increased. We will discuss in detail promoting the research domain in our country when I meet the officials of the Department of Medical Research very soon.

The central role of the Department of Health Professional Resource Development and Management must not be underestimated. The department needs to work very closely with the Myanmar Medical Association and its affiliated societies for capacity-building activities of professionals of different disciplines. The first and foremost activity of this department is that we are going to do an in-depth review and analysis of the HRH situation, both public and private sector, in the country.

Here, I would like to specifically point out as a matter of urgency that we need to further strengthen our University of Community Health and the University of Public Health, especially for updating the curriculum, methods of teaching, teaching-learning support system, library system, selection of relevant visiting lecturers, enabling environment for the students as well as for visiting professors, honorary professors, etc. As soon as possible, a brainstorming session will be arranged between the appointed visiting professors, honorary professors, and faculty members with the objective of getting more focused and innovative ideas leading to producing ethically minded, committed, and technically savvy graduates who can effectively serve the country.

Similarly, sessions for respective clinical disciplines including nursing, midwifery, and medical technology will be conducted in light of the recommendations coming out of the recently conducted 10th Medical Education Seminar. The recommendations coming out will be the final strategy in our roadmap to improve the medical education system in the country. The graduates are the backbone of our overall health care delivery system. Only then we can be able to effectively improve both the domain of public health and the clinical domain, which is our immediate aim.

I have pledged that our medical education system must come up again to the standard of teaching during my student days and when the Directors-General sitting here were medical students. I have a special interest in promoting this area because I have served as a demonstrator in two departments of the Institute of Medicine (1) in the seventies and eighties.

The MoH through the Medical Education unit will give full support from all aspects in implementing the recommendations coming out of these brainstorming sessions. We will also strengthen and accord special attention and support to the Medical Education Unit of the department. The role of this unit is very crucial in uplifting the medical education sector and for doing continuous monitoring of the medical education system of the country. Strengthening of the Medical Education Unit will be done in a phase-wise and step-wise manner.

A special review will be made on the curriculum of the Final MBBS part (1) Preventive and Social Medicine subject. I want the relevant professors and senior public health professionals and professors of Medicine to lead this activity in a realistic approach.

We need tripartite collaboration to successfully do it. Tripartite connotes professionals from public health, professionals from clinical disciplines, and professionals from the Medical Education Unit. In light of the current situation, another top priority activity of this department is to initiate and strengthen the teaching of medical ethics and ethics in general to students of all universities under the MoH. For the University of Public Health and the University of Community Health, we will go for the teaching of public health ethics also. The faculty members responsible for this subject should be professors and clinical professors.

**T**he impact of the teaching of medical ethics can create peer pressure among the medical professionals for adhering to the principles of medical ethics.

We will craft a proper and realistic road map to start the process seriously and immediately. The positive impact on our medical community will be enormous in the long run and the benefit goes to the population of our country. The overarching framework for human resources for health development in our country is Health Workforce Strategic Plan (2012-2016). We will thoroughly review and prioritize it for implementation in a phase-wise and step-wise manner. This activity will start immediately.

**F**ood and Drug Administration (FDA) area is extremely important for the population including all of us in this room together with our families. Any laxity in the performance of this department will have serious and untoward short-term and long-term implications on the population of Myanmar. We will also consider increasing the budget allotted to this department to expand its activities to be performed in a quality manner. I do hope that FDA can one day become an independent entity higher than the departmental level and the population will have great faith in having adulteration-free, dangerous and toxic chemicals-free and insecticide-free food, portable drinking water, safe cosmetics, etc.

**S**imilarly, in the future, the Department of Medical Research should be an independent organization or institute where there will be fewer bureaucratic rules. One generic issue I would like to highlight here is that many activities of the FDA can get useful input and good technical support from the Departments of Public Health, Medical Research, and Medical Services.

**W**e need to develop a realistic framework for outlining those collaborative activities in areas of sentinel surveillance, quality control, safety alerts,



evaluation of medical products and safety issues, post-marketing surveillance, etc. We will expand and strengthen our sentinel surveillance on food and drug issues in the community in collaboration with private organizations or associations and with school health programs.

We will also think of issuing a regular newsletter of this department for advocating and propagating important information to alert the public and also increasing the momentum of advocating the public on several fronts. The activities of this department require a lot of effective collaboration with other ministries.

We have to think of several guiding principles and Guidelines to get smooth collaboration. If we stick to these Guidelines, we will have fewer problems and our work will be efficient. As this department is relatively new compared with other departments in the MoH, we need to refer to well-established Guidelines of the FDA of some developed countries. We need to only adapt it to suit our requirements and do not need to copycat wholly. Another aspect that we are going to enhance the services of the FDA is by way of developing and updating regulatory guidance documents.

We also need to have the latest, dynamic, and computerized drug registration process including an expedited review process. The department has to deal with outsiders and pharmaceutical companies who naturally have vested interests. We, therefore, have to be extra vigilant in performing our duties by strictly following our internal guidelines and standard operating procedures.

We also need to emphasize on corporate social responsibility of pharmaceutical industries and companies. The specific technical activities related to this department will be discussed and guided in detail and to give further support to the department, when I meet the staff of FDA soon.

We will also give strong support and upgrade our traditional medicine field. Here the role of research is very important if we really want to promote the safe use of traditional medicines by the population. I would also like to ask concerning units of the Department of Medical Research to give a hand in this endeavor.

We will strengthen the research unit in the Traditional Medicine Department so that many clinical studies can be carried out to strengthen the domain of traditional medicine. We will give support to especially conduct basic research and

clinical trials on traditional medicines to strengthen them. Without research, the growth of the traditional medicine field will be retarded or even stunted.

**T**his department also needs to seriously strengthen further networking with countries where traditional medicines are very much developed and flourishing. Many over-the-counter medicines or health supplements in developed countries are based on traditional medicine ingredients. Here, we need to get advice from our respected traditional medicine sayargyis. Regular and realistic mechanisms to get valuable advice from them must be further strengthened and established firmly. Proper documentation of many aspects of traditional medicine is crucial if we are going to promote this area.

**I** am sure that the department has already embarked on this aspect. Here, the role of Universities of Traditional Medicine, Association of Traditional Medicine Practitioners and the traditional medicine hospitals is the sine qua non. We will discuss in detail our road map in traditional medicine with concerned officials of the department in the coming days.

**A**nother issue which I want your consideration and support is “we should try to cut the number of meetings” to the extent possible. We do not want you to invest too much of your precious time in attending meetings. However, high-level officials may need more meetings at the beginning of this new administrative machinery, because we want to set the right direction for our MoH to pursue further for improving population health. Most of our time must be devoted to monitoring and assessing perspectives and improving the performance of activities of programs. At the same time, we will not forget the welfare of our staff, especially the issues related to duty travels of the staff. After all, we are one family. We have to carefully consider the selection of right persons together with second or third in line persons to attend meetings such as Scientific Working Groups meetings, Technical Advisory Groups meetings, program managers meetings, training workshops, symposia, and fora outside the country. We need to promote, as a matter of importance, our upcoming young clinicians and public health professionals to strengthen “The Future of the MoH”.

**W**e will also have short debriefing sessions to relevant professionals from those who come back (both public health and clinical domain) after attending international meetings, workshops, training courses, and symposia. We will discuss

this matter with senior officials of the MoH in the coming weeks to strategize it. I will make these short debriefing sessions happen definitely for the benefit of all of us and subsequently to our population at large.

**A**s a former WHO staff, I would like to say that, we will cleverly manage our WHO country budget as well as other funding support from outside agencies and organizations in the best interest of the MoH for effectively serving the population. We will have one specific session with concerned professionals to discuss this subject. Your additional inputs will be much appreciated and I am eagerly waiting for your thoughts, inputs, and contribution in the coming days and weeks. In terms of the government budget, we will carefully and quickly review the current allocation and utilization pattern. We will try our level best to make the most out of it to get “value for money”. After all, these are the taxpayer money of the people.

**R**ational allocation of the budget using some set of generic criteria and guidelines will be practiced firmly and unbiased. These guidelines and criteria will be updated to suit contemporary needs and practiced accordingly. In this context, we will also update our “National Health Account”. Previously, it was developed by the now-defunct Department of Health Planning. We will also get technical support from WHO, as WHO has been advocating this aspect for many years.

**S**ome of the national budget lines will also be used for the welfare of staff starting from subsidized canteens, housing quarters, guest houses for staff attending the meetings to availability of gymnasium in some workplaces, etc. I will discuss these issues with senior officials of the MoH together with an administrative and budget section of the MoH later.

**I** plan to have a very strong consolidated National Center for Disease Control in Myanmar, which will serve as (i) a training institution, (ii) doing some research in collaboration with the Department of Medical Research, (iii) preventing, controlling, and containing disease outbreaks, (iv) working collaboratively with health education units in developing “good” health education pamphlets, (v) hosting a very good and informative website of its own for our professionals and laymen, (vi) doing innovative investigative procedures in collaboration with the National Health Laboratory, (vii) developing and updating guidelines and standard operating procedures for various entities, (viii) serving as resource repository and reference center, (ix) collaborating with like-minded

institutions in developed countries, South-East Asia countries and with relevant WHO Collaborating Centers. We should finally aim at becoming the WHO Collaborating Center on certain aspects of disease control.

**W**e will also strengthen public health laboratories at the township level. This initiative will be considered and developed jointly by the Department of Public Health in collaboration with the National Health Laboratory. But it will depend especially on staff availability and budgetary aspects. This is one of the effective measures to curb the incidence of communicable as well as to some extent non-communicable diseases. It could serve as one of the supporting pillars for sentinel surveillance of communicable and non-communicable diseases. The Department of Medical Research and National Health laboratory must work very closely for the benefit of the health of our population. I have heard that there are several administrative and management issues or teething problems emerging due to the new organogram of MoH being approved without proper preparatory works, especially at the state and regional levels. We will think together to overcome these challenges, problems, and issues as a first stage. I assume that this is the biggest hurdle that will retard our work, which has been going on for years somewhat smoothly and successfully. We need to solve these as a matter of urgency applying all the best possible means and approaches. If this is not working, we will think of other options. We will work collectively with sincerity and with good intentions for the sake of progress in the field of health in our country.

**A**fter all, we all are members of one family in the field of health. Regarding activities of the Department of Sports and Physical Education we will strategize for (i) promoting physical fitness of the population especially school children, (ii) initiating physical education activities of groups of the community, and (iii) establishing self-help townships physical fitness centers and community gymnasiums. As this is a new department for the MoH, I will first discuss and review the activities together with officials of this department and we will develop a realistic road map as soon as possible.

**I**n fact, I am just touching the tip of some of the important points that we need to be aware of and to start the process of tackling them systematically. These points are not exhaustive. We will develop a doable roadmap for our activities with your sage inputs. We have a full menu to start with. We have to prioritize matters or issues facing all of us and take action accordingly. There are several practical ways by which we can

strengthen public health and the clinical domain. We will discuss separately in relevant sessions. I am also distributing some articles written by me from the practical point of view to some concerned officials next week as food for thought for promoting health system performance, public health, research, clinical domains, etc. I hope, these articles will serve as useful inputs for promoting several domains in the medical field. I will meet separately with professionals from different domains and we will be sharing our views and thoughts candidly before we embark on our long journey to improve population health with full commitment, sincerity, and zest. I would like to ask you to do a quick read of relevant articles of your domain of work before we meet starting next week.

**M**y key take-home messages are:

- (i) we have to change our mindset,
- (ii) our actions and interventions must reflect the real ground realities and we will try to expose what is actually happening at the grass-root level and take action to the best of our capability and capacity,
- (iii) we need to listen to the voices of the people and our basic health staff working at the ground level,
- (iv) our approaches or interventions must be practical and people-centered or population-centered,
- (v) the welfare of our staff is as equally as important as technical program implementation and we will do our utmost,
- (vi) team approach and team spirit will be promoted or concerned persons and collaborating partners will be put on board and create a sense of ownership,
- (vii) we will practice fact-finding rather than outright fault-finding,
- (viii) we need to practice ethical decision-making,
- (ix) our actions must be transparent and answerable,
- (x) rational allocation of budget and appropriate utilization must be the order of the day,
- (xi) practice rational and realistic thinking,
- (xii) clinicians and public health professionals must be working in tandem,
- (xiii) noting the fact that our real and key players are health professionals working at the state / regional / township hospitals and health centers and rural health center levels and that we will give due recognition to them in various ways, and
- (xiv) making the foundation of our health system firm, robust, dynamic and strong as we go for the Universal Health Coverage with support from research and HRH domain.

**In conclusion:**

**L**et us work together as a team for the sake of improving population health and at the same time, we all should be proud of working as staff members in the MoH!. Necessary support and utmost facilitation will be rendered by our senior management team to further clarify the ideas and points I have alluded to in my speech and to make you proud of being a staff member of the MoH. There should be no hesitancy for changing or modifying the way we are working in line with the changing epidemiological situations for the betterment of the overall health status of the population on our path to attaining Universal Health Coverage.

**W**e have many things to do but we will carefully consider and prioritize and do the work in a phase-wise and step-wise manner with technical inputs from all of you. We will expose the ground realities and act accordingly. I am confident that we will be successful in achieving our objective of serving the population far and near equally and equitably.

**M**y last stance is if we work collectively with team spirit, we will never ever fail in our endeavor, and we will be successful in effectively serving the population of our country. **“So, let us move ahead in unison”**.



Thank you very much and I do appreciate your kind attention.

**Dr. Myint Htwe**

MBBS, DP&TM, MPH (Philippines), DrPH (Johns Hopkins)  
Union Minister for Health and Sports  
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## Annex II:

# VIEWPOINT ON THE TWO BOOKS

- (i) **Reflections of a Public Health Professional.** (30 chapters)
- (ii) **Health System Challenges: A developing country perspective.** (21 chapters)

The above two books have been written with the intention of systematically and effectively promoting the public health domain, especially in developing countries. The public health infrastructure, *modus operandi*, human resources for health, administrative, management, logistics, financial and budgetary aspects of the Health Care Delivery System should preferably be improved steadily in a step-wise and phase-wise way. As various types of resources are limited in developing countries, prioritization of work should be the order of the day. The ideas, discussion points and suggested approaches on several topics that were mentioned in the two books could serve as an input to the thought processes if one is going to contemplate improving the performance of the Health Care Delivery System.

The contents (51 chapters) of the two books are complementary and reinforce each other. It is only through well-planned public health strategies and interventions that we can improve the overall health status of the population. If the public health domain is dynamic, robust, and responsive, the number of patients going to the hospitals to undergo investigations and treatment for diseases could be drastically reduced. This could result in multiple benefits for the overall health domain of the country. In fact, the clinical domain is complementary and closely linked with the public health domain. These two domains must, therefore, work in tandem and support each other. Unlike clinical medicine, public health interventions will take time to see the results or impact. But the impact could be long-lasting and sustainable. It is with this perception that the two books have been written.

The research promotion part was also discussed and many ideas were put forward in the **“Reflections of a Public Health Professional”** book. The research is definitely a part and parcel of the Health Care Delivery System. The key aim of putting research chapters is to promote research culture among health professionals. It is only through the conduct of built-in Implementation Research and Health Systems Research that we can increase the effectiveness and efficiency of the Health Care Delivery System. It serves somewhat like a booster and rudder for the high-quality performance of the Health Care Delivery System.



The book titled **“Health System Challenges: A developing country perspective”** has been written as an experience sharing connotation in mind. Many practical challenges and ways to overcome them while managing the Health Care Delivery System are thoroughly discussed. Many developing countries have more or less similar scenarios or challenges. In order to open up the thought processes of public health professionals, **“What If Scenarios”** are added. This type of **“thinking aloud”** chapters could truly stimulate not only the minds of public health professionals but also their ability to practice **“future-oriented thinking”**.

As the chapters in the two books are closely linked, it is suggested that the reader should first have a quick glance at the chapters of the two books. In order to get more ideas and synthesize new approaches, each chapter should be thoroughly discussed and critiqued by a group of professionals. This could result in the realization of innovative ideas, strategies, and approaches suitable to the concerned country or health institution.

The inaugural speech given by the author on 1st April 2016 is generic and it covers many components of the health domain of a developing country. The facts are still valid at this point in time. The readers could synthesize and crystallize many ideas suitable to the concerned countries or institutions.

It is hoped that the small and humble contribution made by the author could be a bucket of water in the pond. However, that bucket of water could serve as a catalyst for promoting the public health domain in developing countries. The author hopes that through sharing of knowledge and experience among public health professionals, the public domain could be promoted and sustained at the higher hierarchical plane. ■

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