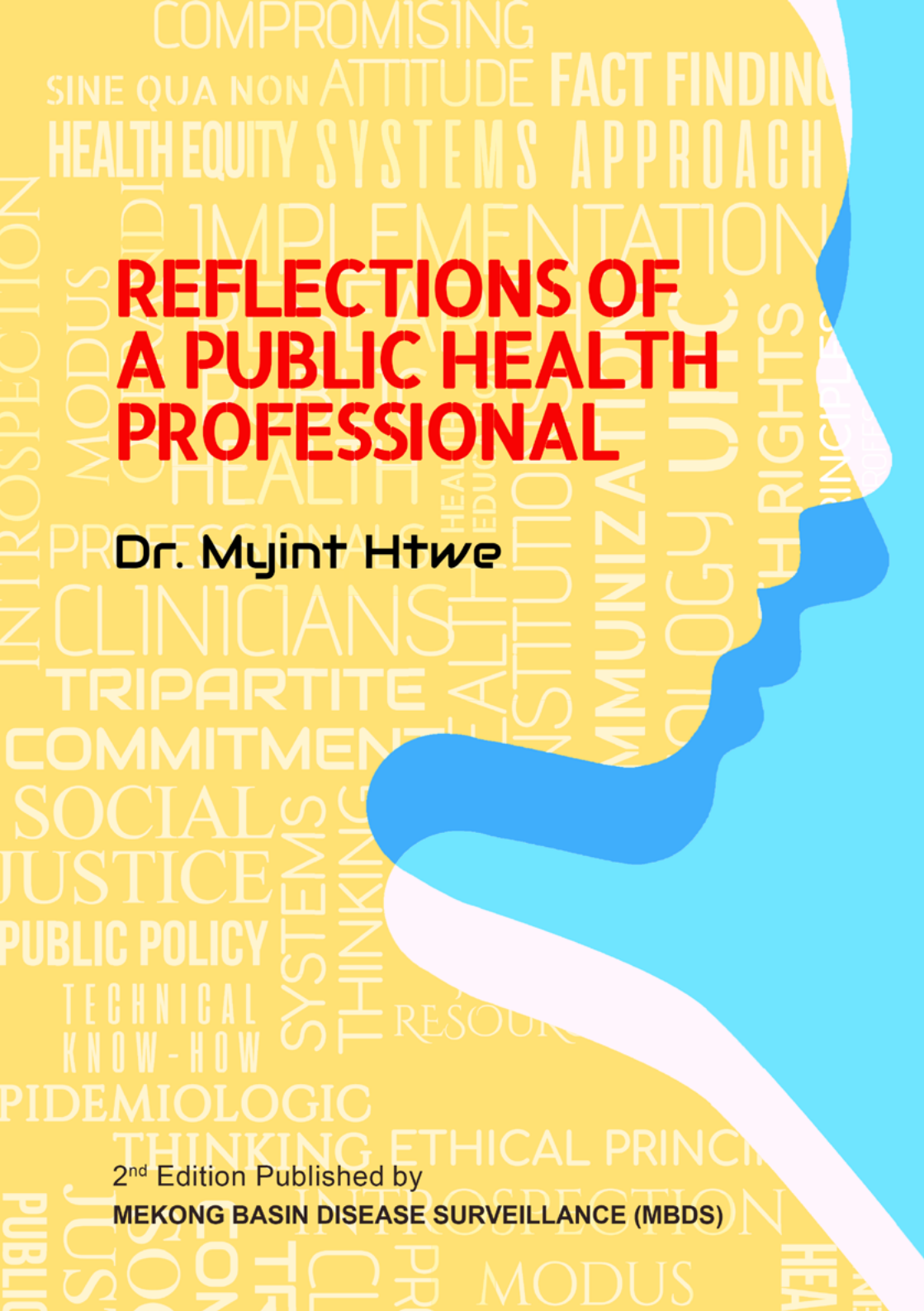

REFLECTIONS OF A PUBLIC HEALTH PROFESSIONAL

Dr. Myint Htwe

2nd Edition Published by
MEKONG BASIN DISEASE SURVEILLANCE (MBDS)

ISBN : 978-99971-0-247-8

Reflections of a Public Health Professional: 2nd edition

Published by
Dr. Moe Ko Oo
Secretariat
Mekong Basin Disease Surveillance, Bangkok, Thailand, 2021

Edited by
Dr. Soe Kyaw

Cover concept and publication design by
MEDIART MEDIA

Author alone is responsible for the views expressed in this publication.
For further information, please contact to author **Dr.Myint Htwe**
myinthtwe@globalhealthchallenges.com

Acknowledgement

H.E. Dr. Myint Htwe is a public health professional with vast experience in the health sector, both national and international health programmes. MBDS would like to acknowledge his contribution and invaluable effort in producing this book. General aspects of public health and research in this document had been organized from relevant articles and bulletins, including opening speeches and remarks made at workshops and training courses, and policy meeting materials. In this regard, MBDS is proud to publish this document, which is very important for the public health domain.

Topics such as public health approaches, policy analysis and rational decision making, research and health policy formulation, health care reform, universal health coverage, tripartite collaboration on public health strengthening, population health, health information system, etc. are included. This book also has been prepared through collective thinking on topics such as sustainable development on health, universal health coverage setting, and One-Health approach with multi-sectoral involvement.

This book is intended not only in strengthening public health development and coordination mechanism, but also in strengthening health research institutions and development of evidence-based interventions. It provides sub-national and national perspectives with Myanmar or a developing country setting. Regional/global insight has also been incorporated as indispensable experiences and references. This book aims to support health practitioners, public health professionals, researchers, policy makers, epidemiologists and program implementers for developing and implementing public health interventions.

Ideally, public health practitioners should always incorporate scientific evidence in selecting and implementing programs, developing policies, and evaluating the progress. 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)

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 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.

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
Union Minister for Ministry of Health and Sports
(2016 –2021)

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, 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 information, food and drug administration, human resources for health, and other areas such as health system strengthening and regional collaboration.

Foreword

The word “health” generally evokes images of doctors, nurses and hospitals. Public health as a discipline aims to reduce the need to encounter any of the above in real life by improving and protecting the health and wellbeing of the [public] community. It is founded on the conviction that simple preventive measures – both behavioral and programmatic – can save millions of lives. Use of seatbelts, for example, prevents fatalities from motor vehicle accidents, while vaccination averts deaths caused by vaccine preventable diseases. The discipline’s history is rich and admirable. Long before the discovery of microscopes, for example, John Snow deduced from the observation that cholera was caused by water contaminated by sewage. The solution – filtration of drinking water and proper sewage disposal measures - removed cholera from the industrialized world. Epidemiological research similarly led to the discovery that an iodine-deficient diet causes goiters and mental retardation. The subsequent introduction of iodized salt relegated goiters in the annals of medical history. These landmark public health discoveries and interventions have delivered immeasurable benefits to mankind. But if the principles informing them were important to advancing public health in the past, they are even more important today.

The pivotal links between public health and development – highlighted for decades by scientists – are now widely recognized at the highest levels of governments in WHO Member States across the world. Equally well recognized is the role that a strong, efficient and people – centered health system plays in ensuring the health and well- being of a country. These and other related aspects of public health and health research, elaborated upon by Dr. Myint Htwe at various fora and in several prestigious public health journals, have been compiled most effectively in this publication.

Dr. Poonam Khetrapal Singh
Regional Director
WHO Regional Office for
South-East Asia

In the following pages, Dr. Myint Htwe ably demonstrates his vast knowledge of medicine, research, epidemiology and public health. He convincingly emphasizes the value of science, law and health promotion to the discipline and effectively brings out its critical centrality to the public's health and wellbeing. Importantly, Dr Myint Htwe also highlights the efforts of thousands of health workers who toil ceaselessly to keep the public safe and healthy.

Having had the privilege of working closely for many years with Dr. Myint Htwe in the WHO South-East Asia Regional Office in Delhi, I am aware of his deep and abiding interest in public health. His professional acumen and concerns inform his selfless dedication to the discipline as a whole, while his contribution to the work of WHO has been of immense value to the organization and to the Member States of the Region. I am confident that Dr. Htwe's vast knowledge and experience will shape and steer health development in Myanmar towards a public health system that will deliver better health for all.

The range of topics covered in the following chapters is wide, and the insights reflected invaluable. They should be of use to public health professionals and institutions across the Region.

Dr. Poonam Khetrapal Singh
Regional Director
WHO Regional Office for South-East Asia

Disclaimer

The views expressed in this 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 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 web page.

Gratitude

With this web page, I am conveying my greatest respect and deepest gratitude to my late parents, U Shwe Tha Htwe (then the Director-General of Agriculture. Myanmar) and Daw Aye Yee, who had enrolled me in first class primary, middle and high schools. Because of that, I got a solid foundation in several perspectives. Last, but not the least, my whole hearted appreciation to my wife Dr. Nang Kham Mai (retired Township Medical Officer, Ahlone Township, Yangon Region, Myanmar) for her unlimited and constant support. I would also like to thank my daughter Nang Aye Thida Myint Htwe and son Sai Htoo Myint Htwe, who always give support in time of need.

Purpose

The purpose of writing this book is to share my hard-earned experience which I gained while serving in the Ministry of Health, Myanmar from 1976 to 1994, WHO Regional Office for South-East Asia, New Delhi, India from 1994 to 2010, and while working and interacting with the professionals in the Ministry of Health, Myanmar, Preventive and Social Medicine Society, Myanmar Academy of Medical Sciences, Myanmar Medical Association, Myanmar Health Assistant Association, Foundations, UN Agencies and Organizations, Institutional Review Boards, NGOs (International and Local), and Community-based Organizations until 2016.

My main intention of writing this book is to do fundamental knowledge transfer to my colleague public health professionals, field epidemiologists, administrators, researchers, representatives from like-minded agencies, associations, organizations, all concerned staff working in the health care delivery system, and policymakers in the country. Additionally, I would like to convey my experience to public health professionals and field epidemiologists working under similar epidemiological conditions like in Myanmar, such as in low and middle-income countries in the region and beyond. I do not want my experience to be evaporated for no clear reason. I wish this book will help generate more creative, constructive, and futuristic thinking from my counterpart public health professionals.

APPRECIATION

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

Preface

This book on general aspects of public health and research is a compilation of talks, discourses, opening and closing remarks given at workshops, symposia, training courses, forums and policy meetings during the last few decades. It also includes articles published in the Bulletin of Preventive and Social Medicine Society, Myanmar Medical Association, and the Regional Health Forum of the WHO Regional Office for South-East Asia. The articles on public health and research domains are based on my experiences during my career of 18 years (1976 to 1994) in the Ministry of Health, Myanmar, and 16 years (1994 to 2010) in the WHO Regional Office for South-East Asia, New Delhi, India.

On behalf of senior public health professionals in Myanmar, I am sharing my experiences with my public health colleagues and fellow researchers for promoting public health and research in the country. The articles have been from a practical and not theoretical perspective, and are based on ground realities. It is, therefore, specifically intended for upcoming public health professionals and young researchers, who will be the backbone of our country's health care delivery system. The book contains two parts, public health and research. Implementing public health interventions without the support of research render them incomplete and weak. These two parts are closely interconnected and reinforce each other. Research is one of the essential tools to make public health programs effective and efficient.

Through this book, I would like to convey my gratitude and special thanks to my immediate superiors, Vice Admiral Than Nyunt (then Minister of Health), Colonel Than Zin (then Deputy Minister of Health), Dr. Kyaw Win (then Director-General of Health), Dr. Nyunt Hlaing (then Deputy Director, Vector Borne Diseases Control, Department of Health), late professor Dr. Kyaw Tint (then Professor of Preventive and Social Medicine, Institute of Medicine I), and late professor Dr. Tin Maung (then Professor of Anatomy, Institute of Medicine I) for their valuable guidance on management, social, personal, administrative and technical matters, and also for encouraging my epidemiologic thinking skills throughout my career in the Ministry of Health, Myanmar.

I would also like to thank Professor B A Jayaweera from Sri Lanka (then Director-Family Health and Research, WHO, South East Asia Region), who gave extremely useful and invaluable technical guidance in the field of research, especially on research ethics, responsible conduct of

research and research management, at the time of my joining the World Health Organization in 1994.

Throughout my career in WHO and up to this point in time, I have interacted, either formally or informally with several Ministers, Deputy Ministers, Health Secretaries, Directors-General and senior officials in the Ministry of Health, Myanmar as well as in countries of South-East Asia Region, enabling me to draw invaluable advice and suggestions, which have been extremely useful. It would be impossible for me to thank them individually and to express my sincere gratitude.

I also thank all my seniors, friends and colleagues. It would be impossible to name them individually, who worked in the Department of Anatomy, Department of Preventive and Social Medicine of Institute of Medicine I, Vector Borne Diseases Control Headquarters, Department of Health and International Health Division, Minister's office complex, Ministry of Health, who interacted with me on several occasions on numerous technical issues, while I served in the Ministry of Health. These interactions greatly enriched my experience especially in the field of public health.

I would also like to convey my sincere thanks to Dr. U Ko Ko, Dr. Uton Muchtar Rafei, Dr. Samlee Plianbangchang (past WHO Regional Directors for South-East Asia Region), and Dr. Poonam Khetrapal Singh (then Deputy Regional Director and current Regional Director), who always guided me and shared their valuable experiences over the years. Last but not the least, I am grateful to my then advisors, Professor Caridad A Ancheta, Department of Epidemiology and Statistics, Institute of Public Health, University of the Philippines and late Professor Timothy D Baker, Department of International Health, School of Hygiene and Public Health, Johns Hopkins University. I would like to pay my gratitude and honor their guidance on me.

The ideas expressed in the articles are my personal and unbiased views and not necessarily those of the Ministry of Health and WHO.

Abbreviation

AAAH	Asia Pacific Action Alliance for Human Resource for Health
ACMR	Advisory Committee on Medical Research
APHA	American Public Health Association
APW	Agreement of Performance of Work
AR	Attributable Risk
ASEAN	Association of Southeast Asian Nations
AusAID	Australian Agency for International Development
BRICS	Brazil, Russia, India, China and South Africa
CBAs	Capacity Building Activities
CBHWF	Community-Based Health Workforce
CBO	Community-Based Organization
CCA	Common Country Assessment
CDC	Centers for Disease Control and Prevention
CEO	Chief Executive Officer
CIDA	Canadian International Development Agency
CIOMS	Council for International Organizations of Medical Sciences
COHRED	Council on Health Research for Development
CPD	Continuing Professional Development
CRIS	Country Research Information System
CSO	Civil Society Organization
CME	Continuing Medical Education
CPHE	Continuing Public Health Education
DALYs	Disability Adjusted Life Years
DFC	Direct Financial Cooperation
DFID	Department for International Development
DHF	Dengue Hemorrhagic Fever
DrPH	Doctor of Public Health
ERC	Ethics Review Committee
FDA	Food and Drug Administration
FESR	Framework for Economic and Social Reforms
FIMS	Financial Management Information System
GAVI	Global Alliance for Vaccines and Immunisation
GHWF	Collaborating Centres, Global Health Workforce

GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GPs	General Practitioners
GS	Global Strategies
HA	Health Assistant
HALE	Health Adjusted Life Expectancy
HELLIS	Health Literature, Library, and Information Services
HFA	Health For All
HINARI	Health Internetwork Access to Research Initiative
HIS	Health Information System
HIV/AIDS	Human Immunodeficiency Virus/ Acquired Immunodeficiency Syndrome
HQ	Headquarters
HRHD	Human Resource for Health Development
HRI	Health Research Institution
HRIS	Health Research Information System
HWF	Health Workforce
IAF	Implementation Activities Framework
ICMR	Indian Council of Medical Research
ICT	Information Communication Technology
IEC	Information, Education and Communication
IHD	International Health Division
INGO	International Non-Governmental Organization
IOM	International Organization for Migration
IRB	Institutional Review Board
JICA	Japan International Cooperation Agency
KAP	Knowledge, Attitude and Practice
LHV	Lady Health Visitor
LMIC	Low- and Middle-Income Countries
LMIS	Logistics Management Information System
M-HSCC	Myanmar Health Sector Coordinating Committee
MAMS	Myanmar Academy of Medical Science
MBBS	Bachelor of Medicine, Bachelor of Surgery
MBDS	Mekong Basin Disease Surveillance
MCD	Municipal Development Corporation
MCH	Maternal and Child Health
MDGs	Millennium Development Goals
MIS	Management Information System
MMA	Myanmar Medical Association

MOH	Ministry of Health
MPH	Master of Public Health
MPTM	Master of Preventive and Tropical Medicine
MW	MidWife
NB	Nota Bene
NCD	Non-Communicable Disease
NCDP	National Comprehensive Development Plan
NGO	Non-Governmental Organization
NH	National Health
NHRP	National Health Research Policy
NHS	National Health Service
NIH	National Institutes of Health
NLD	National League for Democracy
NYFEA	National Young Farmer Educational Association
OH	One Health
OR	Odds Ratio
ORI	Office of Research Integrity
PAHO	Pan American Health Organization
PAR	Population Attributable Risk
PH	Public Health
PHC	Primary Health Care
PhD	Doctor of Philosophy
PHLS	Public Health Leadership Society
PHN	Primary Health Network
PHSs	Public Health Supervisors
PI/ Co-PI	Principal Investigator/ Co- Principal Investigator
PMIS	Personnel Management Information System
PPP	Public-Private Partnership
PSM	Preventive and Social Medicine
PYLL	Potential Years of Life Lost
QALE	Quality Adjusted Life Expectancy
QALYs	Quality Adjusted Life Years
QIPP	Quality, Innovation, Productivity and Prevention
RACGP	Royal Australian College of General Practitioners
R&D	Research and Development
RCR	Responsible Conduct of Research

RHC	Rural Health Center
RR	Relative Risk
SARS	Severe Acute Respiratory Syndrome
SEANMEIN	South-East Asia Nursing and Midwifery Educational Institutions Network
SEAPHEIN	South-East Asia Public Health Education Institutions Network
SEARO	South-East Asia Region
SDGs	Sustainable Development Goals
SMIS	Service Management Information System
SIDA	Swedish International Development Agency
SWG	Scientific Working Group
TAG	Technical Advisory Group
TB	Tuberculosis
THO	Township Health Officer
TMO	Township Medical Officer
UN	United Nations
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNGA	United Nations General Assembly
UNICEF	United Nations Children's Fund
UNOPS	United Nations Office for Project Services
UHC	Universal Health Coverage
USA	United States of America
USAID	United States Agency for International Development
WB	World Bank
WHA	World Health Assembly
WHO	World Health Organization
WHR	World Health Report
WONCA	World Organization of Family Doctors

CONTENTS

REFLECTIONS OF A PUBLIC HEALTH PROFESSIONAL

DR. MYINT HTWE

PART A | PUBLIC HEALTH

PART B RESEARCH IN SUPPORT OF PUBLIC HEALTH

PART C INAUGURAL SPEECH DELIVERED BY DR. MYINT HTWE

PART A

PUBLIC HEALTH

PART A

CHAPTER. 1

GENUINE POWER OF PUBLIC HEALTH

“Health care is vital to all of us some of the time, but public health is vital to all of us all of the time”

- C. Everett Koop:
United States Surgeon General

> **"We need to be as well prepared to defend ourselves against public health dangers as we should be to defend ourselves against any foreign danger."**
>
> **- Hillary Clinton:**
> First Lady of the United States

Public health activities have been initiated for several decades even before the American bacteriologist and public health expert Professor C.E.A. Winslow in 1920 coined the definition of public health. Generally, people do not realize the benefit of the work of public health professionals and that, in fact, the overall health status of the population is maintained by good public health interventions. For many years, people have generally connoted public health as "environmental sanitation works and health education activities". This notion was widespread even during our medical student days in the early sixties.

People appreciate and are thankful to clinicians or general practitioners who treat them and help them to get well. This is understandable because people see the immediate outcome of services rendered by clinicians or general practitioners. Public health professionals are always at the backstage and people do not realize the genuine and enormous power that public health professionals (epidemiologists to program managers to basic health service workers) can exert in promoting population health in the country.

The scenarios cited below depict the genuine power of public health. Public health professionals carry out preventive and control activities for dengue and dengue hemorrhagic fever in a township or state or region as their routine duties. Because of that, hundreds if not thousands of children and adults will not suffer from dengue or dengue hemorrhagic fever, leave alone untoward socio-economic consequences and psychological suffering of the population at large. However, the situation just passed by without any noticeable effect or appreciation. Public health professionals give health education talks at schools, factories and

other workplaces. School children and factory workers, both blue-collar and white-collar workers, attend and the event is concluded. Similarly, the event just passed by without any noticeable effect. Nobody realizes the fact that the recipient population's knowledge horizon was broadened and knowledge base enhanced. A certain proportion of recipient population may have changed their risk behavior, eating habits, sleeping habits, exercise taking habits, social habits, and even sexual habits. This could result in many short-term as well as long-term benefits not only to them but also to the peer groups or population or family members.

Public health professionals do urgent preventive and control measures to tackle an outbreak of any disease or condition as soon as they get the hint or news. It is not an easy task. Detailed planning of outbreak control measures, round-the-clock monitoring of the situation, quick and effective networking, efficient reporting and communication, proper resources (man, money, material and time) coordination and mobilization, issuing instant directives or orders to frontline health workers, continuous or round-the-clock laboratory work, serious brainstorming of epidemiologists and relevant professionals of concerned ministries, conforming to International Health Regulations (2005), etc. have to be performed. Several collaborative initiatives among public health professionals ranging from community-based health workforce to the Minister of Health take place. It is like- planning to win a war.

The outbreak is controlled and is over. However, the event just passed by without being noticed significantly by the population at large. The team of public health professionals may sometimes get a pat on the back by higher authorities. The public is

IT IS ONLY THROUGH PROMOTING THE PUBLIC HEALTH DOMAIN THAT WE CAN ACHIEVE OUR GOAL OF HAVING A HEALTHY POPULATION IN THE COUNTRY.

not aware of the fact that we, public health professionals, have successfully prevented the suffering of hundreds if not thousands of people due to that particular disease in the population at large. The government saved millions of kyats that would have to be spent for treating that specific disease causing an outbreak. The increase in hospital workload had not occurred as the outbreak was controlled in time. Therefore, more time and more care can be given for managing hospitalized patients suffering from other diseases. Several deaths in the population and long-term sequelae may have been prevented from an outbreak of diseases such as Japanese encephalitis or bacterial or viral encephalitis.

AN OUNCE OF PREVENTIVE WORK BY PUBLIC HEALTH PROFESSIONALS IS WORTH SEVERAL POUNDS OF BENEFIT.

One of the flagship programs of public health is immunization, which is run by public health professionals. To implement immunization activities successfully, public health professionals have to consider various perspectives such as issues on logistics, efficient program management, administration, human resource management, cold chain system maintenance, monitor vaccine effectiveness, budget handling and allocation, coordination with local authorities, dealing with funding agencies and development partners, monitor adverse reaction following immunization, registering and recording, acceptance of the community, detailed program planning, etc.

Following this, immunization activities for vaccine-preventable diseases are fielded all over the country and successfully completed for a particular round of immunization.

1. Does the population at large realize that millions of children will not be suffering from several childhood infectious diseases because of the immunization program?

2. Can we imagine a scenario in a country where immunization activities are not running properly?

Definitely, there will be several outbreaks of infectious diseases in various parts of the country. What a chaotic situation we would be facing as well as disruption of normal life pattern, socioeconomic disturbances and psychological suffering of the population at large! Here, one can vividly notice the consequential role of public health professionals.

Public health professionals are also managing preventive and control interventions for communicable and non-communicable diseases and conditions. The benefits for the population, both in short-term and long-term perspectives, are enormous. The amount of money that could be saved by the government because of reduction of disease burden in the country is huge. Has the population realized the importance of public health professionals?

CONCLUSION

All the citations alluded to earlier reinforce the fact that services of public health professionals are the sine qua non in order to improve population health effectively in any country. It also connotes clinicians are dealing at the individual level whereas public health professionals are dealing at the population level. An ounce of preventive work by public health professionals is worth several pounds of benefit. Let us applaud loudly the sincere services of committed public health professionals, especially the basic health service workers and community-based health workforce (community health workers). In essence, it is only through promoting the public health domain that we can achieve our goal of "healthy population in the country".

(NB. This is the revised version of the article which appeared in the Bulletin of Preventive and Social Medicine Society, Volume 1 number 4, October 2015.)

PART A

CHAPTER. 2

IMPROVING THE DOMAIN OF PUBLIC HEALTH

“The care of the public health is the first duty of the statesman”

- Benjamin Disraeli:
Prime Minister of the United Kingdom

> **"You can't have public health without a public health system."**
>
> **- Paul Farmer:**
> American Medical Anthropologist

Promoting public health is one of the best approaches to improve and sustain the overall health status of the population. Unlike the clinical domain in which patients can be treated and get well immediately, improvement in public health domain takes time and can be achieved only through systematic implementation of public health interventions in a phase-wise and step-wise manner, involving several players. There are several approaches that can promote the public health domain of the country. Each has its own merit and significance either from a short-term or long-term perspective.

The following strategic interventions may be considered together with its inter-related factors. Each strategic intervention is composed of a certain set of activities to achieve its objectives. It may be prioritized in the context of the urgency of the specific scenario for implementation. Some of the interventions may have already been carried out but it is worth fine-tuning and reviewing it in the light of the changing epidemiological situation in the country.

The following interventions may be considered but not in order of priority.

1. We may do a quick review of the existing public health scenario from a broader perspective using a systems approach and systems thinking while strategizing it. One caveat is that we cannot apply in toto, the strategies used in developed countries for improving public health domain of developing countries. Each country's characteristics in terms of overall administrative machinery, political climate, socio-economic factors, customs, culture, and habits of the people need to be taken into account.

2. The strategic interventions finally selected should be considered in the context of various factors such as overall development policy of the government, national health policy, national health research policy, available human resources for health, modus operandi and performance of health care delivery system, available budget, and collaborative activities

of UN agencies, organizations, foundations, societies, INGOs and local NGOs, etc.

3. As an initial step, we may consider forming an independent "Think Tank for Promoting Public Health" and establishment of a "Policy and Strategy Analysis" unit. It can propose innovative and practical approaches for improving public health to all concerned parties through the Ministry of Health (MoH).

4. We may think of promoting and strengthening networking among public health institutions, public health associations/councils and civic societies in the country for mutually enhancing the capacity of all nodal points in the network.

5. We may conduct public health conferences and so-called Peoples' Health Assemblies as effective platforms for sharing contemporary views, innovative ideas and ground realities. It can also be a stimulating and nurturing environment for young public health professionals and also for developing and establishing essential public health functions in the country.

6. We may consider further enhancing the capacity of faculty members of Preventive and Social Medicine (PSM) Departments of the Universities of Medicine and the University of Community Health, as they are crucial players in sustaining the growth of public health in the country by way of ingraining basic concepts of public health and epidemiologic principles into the virgin minds of young graduates.

7. We may strengthen linkages of in-country networks with outside groups such as, WHO-sponsored SEAPHEIN (South-East Asia Public Health Education Institutions Network), or relevant WHO Collaborating Centers or other like-minded organizations and associations. Strengthening the network will be a strategic advantage to move the public health agenda forward in the country.

THE ROLE OF UN AGENCIES AND ORGANIZATIONS IS CRUCIAL IN PROMOTING PUBLIC HEALTH DOMAIN IN THE COUNTRY.

8. We may further reinforce the following measures for development of quality human resources for public health.

- Conducting quick reviews to see the appropriateness of preventive and social medicine or public health subject curricula for Final MBBS part I, MPH, MPTM courses, all reorientation public health training courses in the context of existing public health scenario, and overall health situation in the country. Contemporary topics of public health importance can be incorporated in the curricula based on analytical findings. This can result in long-term dividends.

- Aiming at getting quality, committed, ethically minded and competent public health professionals from our academic institutions and faculty development together with effective teaching-learning methods should be continuously improved without fail.

- A vigorous and enabling teaching-learning environment, together with the establishment of a good library system, is essential. WHO HINARI (Health Inter Network Access to Research Initiative) and HELLIS (Health Literature, Library and Information Services network) must be fully referred to it. Students should also be primed to inculcate a culture of utilizing library services and research, which is currently not happening.

- Field trips of Final MBBS part I students are very crucial as interest and enthusiasm in public health can be initiated or ingrained firmly into the minds of young medical students during field visits. Special attention must, therefore, be accorded to this activity.

- Dynamic and effective medical education units should be put in place immediately and also simultaneously allowing independent decision making in promoting the field of medical education in the country.

- Consider the possibility of teaching public health subjects throughout the MBBS course.

- Are we producing public health minded professionals who are in line with current needs of the country?" If the answer is affirmative, we are on the right track. If not, we may need to take remedial actions immediately.

9. We may conduct systematically planned and properly managed regular Continuing Medical Education (CME) courses (certificate must be issued for use as one of the factors for staff promotion) for various categories of public health professionals, including community-based health workforce (CBHWF), in collaboration with Myanmar Medical Association and relevant entities of MoH. Ongoing "Continuing Public Health Education" (CPHE) courses may be reviewed for streamlining and improvement.

10. We may consider producing a compendium of technical, policy and administrative directives issued by MoH concerning public health over the years as well as policy speeches of Chair of National Health Committee and also Ministers of Health delivered at several important events. This would be for easy reference and application by public health professionals working at different levels of the health system in performing their duties and responsibilities.

11. We may do a quick review of relevant resolutions of the World Health Assembly, the Regional Committee for South-East Asia, and Declarations of South-East Asia Health Ministers meetings. These resolutions and declarations contain

THE ROLE OF RESEARCH IN PROMOTING PUBLIC HEALTH IS THE SINE QUA NON.

key public health-oriented strategic interventions in various technical areas that a Member State needs to consider for implementation, as appropriate. Currently, these are not being given due attention.

PUBLIC HEALTH IS OF GREAT IMPORTANCE FOR THE COUNTRY. I WOULD LIKE TO SAY THAT THE GOOD HEALTH OF THE PUBLIC IS THE BEST FORTUNE FOR THE COUNTRY.

- Daw Aung San Suu Kyi,
Nobel Peace Prize laureate

12. Do we have a full-fledged Public Health Journal in the country? If not, it is not too late to consider producing it. We may even think of arranging platforms or forums or debates for in-depth discussions on public health issues of contemporary importance, from time to time. This will not only generate interest in the field of public health but it can also serve as an effective medium for sharing public health experiences among health professionals. It will also serve as eye openers for upcoming public health professionals. Public health professionals consist not only of medical professionals trained in public health but also those at the level of the community-based health workforce.

13. Clinicians need to be put on board in generating public health views on various diseases and conditions. They need to be stimulated to teach or deal with public health aspects of diseases and conditions even during bedside teachings and ward rounds. At a later point in time, we may consider producing a book titled “Public Health Aspects of Diseases and Conditions for health professionals in Myanmar”.

14. We may craft ready-made quick checklists, which are very useful to quickly assess the performance of staff and the scenario of public health activities being carried out at the ground level. Some examples of quick checklists are:

- To review the performance of (i) RHC and sub-center; (ii) Township Hospital; (iii) State/Divisional General Hospital; (iv) Specialist Hospital, etc.;
- To review the performance of (i) MW; (ii) LHV; (iii) PHN; (iv) PHSs I and II; (v) HA; (v) TMO; (vi) THO, etc.;
- To review the performance of (i) Hospital Laboratory; (ii) Medical Store; etc.;
- To review the performance of (i) Health Information System; (ii) Hospital Information System; (iii) Surveillance and Sentinel Surveillance System; etc.

These checklists must always be updated. By using checklists, we will know whether in-depth review or probing or further investigation is required on any issue. These could also be used as monitoring tools for improvement of an overall public health domain in the country.

15. Over the years, the WHO Regional Office for South-East Asia in collaboration with Member States has formulated overarching regional strategies on various public health subjects. Many of these strategies are very relevant and it is worthwhile to review them for possible application after appropriate modification in line with the needs of the country. Some examples are:

- Regional strategy for strengthening health information system;
- Regional strategic plan for health workforce;
- Strategic directions for strengthening community-based health workforce and community health workers;
- Regional strategic plan for strengthening health service management;
- Regional ten-point strategy for health system strengthening based on Primary Health Care (PHC) approach.

There are many strategies for countries in the South-East Asia Region on the control of various communicable diseases, family and community health, noncommunicable diseases control, immunization, research, mental health, maternal and child health, environmental health, health system, etc.

16. It is also worth reviewing the recommendations made at several WHO Regional Office-sponsored regional or inter-country meetings on various public health subjects where many officials from MoH attended. Some of the relevant recommendations in the area of public health may be considered for implementation in the country.

17. The role of UN agencies and organizations is crucial in promoting the public health domain in the country. All health and health-related UN agencies and organizations are working seriously to assist the country. The majority of activities are oriented towards promoting public health in the country. It is high time to see that these activities are not duplicated and redundant but cost effective, cost efficient and fulfilling the contemporary needs of the country. We may sunset some activities. The International Health Division of MoH in collaboration with various technical sections in departments under MoH could easily coordinate and improve the scenario effectively. It can benefit the country enormously. We may even think of forming a "Think Tank on International Health" which is a reasonable option to enhance the role of public health in the country. Strengthening the International Health Division is one way of promoting the public health domain for getting effective and coordinated support from UN agencies, organizations, etc.

18. The role of research in promoting public health is the sine qua non. We may consider giving serious attention for conducting "Implementation Research" where the findings can be immediately applied to improve technical, management, logistics, and administrative aspects of public health programs. Professionals of service departments and departments of medical research should sit face-to-face and jointly identify priority research areas on an annual basis. This can lead to the likelihood of increasing the utilization of findings of research being conducted in the country.

19. Reviewing, revising and enforcing Public Health Laws and Acts is one avenue by which we can promote the effective functioning of public health interventions. Some of the laws and acts are outdated.

20. The last but not the least is enhancing health promotion activities through effective health education of the population at large, factory workers, and especially all students of different grades. This activity is not only a strategic public health intervention but also a complementary and synergistic activity. It can simultaneously promote the domain of public health in the country by way of changing mindsets in terms of positive health behavior of the recipient population. It can result in wide-ranging beneficial effects and can yield long-term dividends.

CONCLUSION

The following generic and overarching facts can be considered holistically.

- We need combined, concerted and coordinated efforts to consider carrying out some of the points mentioned above in a phase-wise and step-wise manner.

WE MAY EVEN THINK OF FORMING A "THINK TANK ON INTERNATIONAL HEALTH" WHICH IS A REASONABLE OPTION TO ENHANCE THE ROLE OF PUBLIC HEALTH IN THE COUNTRY.

- Systems approach, systems thinking, and epidemiologic thinking should be applied in the context of National Health Policy and National Health Plan in promoting public health domain in the country.
- MoH is only one of the players in the field of public health. Other relevant players need to be primed and properly informed about the situation so that everybody will be on board, having the same wavelength, in improving the public health domain in the country.
- The role of teaching institutions under MoH is very crucial in promoting the public health domain in the country from a long-term perspective.
- How to efficiently and quickly produce competent public health professionals in the country is an important issue, which should be tackled on a priority basis.
- All in all, it would be beneficial to conduct a national-level public health seminar, involving all players and stakeholders, for an in-depth discussion on promoting public health in the country.
- Collective thinking, collaborative approach, respecting each other, and a compromising attitude are key to success in this endeavor of promoting public health in the country.
- In essence, promoting public health is key to improving the overall health status of the population of Myanmar.

(NB. This is the updated version of the article, which appeared in the Bulletin of Preventive and Social Medicine Society, volume 1 number 1, September 2014.)

PART A

CHAPTER. 3

TRIPARTITE COLLABORATION FOR PROMOTING PUBLIC HEALTH

“By working together, pouring our resources and building on our strength, we can accomplish great things”

- Ronald Reagan:
40th President of the United States

(Based on the lunchtime talk given at the University of Medicine I, 29 September 2014)
The purpose of this article is to give further insight into a range of issues requiring attention with the ultimate aim of improving the overall health status of the population by way of producing quality graduates from health institutions (medical, medical technology, public health and nursing).

TRIPARTITE CONNOTES:

(i) Clinicians including general practitioners;

(ii) Public health professionals ranging from epidemiologists and program managers to basic health service workers; and

(iii) Health institutions under the Ministry of Health.

Clinicians must be brought on board in improving the public health domain for reasons apparent to all of us. The reason being that due to the untiring efforts of public health professionals, hundreds of cases of Dengue and Dengue Hemorrhagic fever (DHF) and other mosquito-borne diseases would be prevented. It could go unnoticed by the community. However, the community or parents are thankful to a clinician if the child suffering from DHF is treated and cured. Involvement of clinicians in public health activities, therefore, is highly desirable.

It must be emphasized that clinicians and health institutions are equally as important as public health professionals in promoting the public health domain in the country. The most cost-effective way to improve the health status of the population, including high life expectancy and good quality of life, is by improving the effectiveness and efficiency of public health programs through various means. Only through good public health practice we can have a healthy population and decrease the incidence of communicable and non-communicable diseases. Because, causation of diseases is always multifactorial. Therefore, it could be justifiably said that good public health practice is equivalent to good population health.

Each of the tripartite players has a unique role and characteristics. Their collaborative action is synergistic and could lead to achieving multi-faceted benefits in geometric progression. When one considers how the tripartite could work effectively, the following principles must be applied: thinking out of the box; practicing epidemiologic thinking; mutual respect in networking; compromising attitude to achieve a common objective; fact-finding rather than fault-finding; using phase-wise and step-wise approach; and applying

systems approach and systems thinking.

The three players have also specific lead roles in an endeavor to improve the domain of public health. In their day-to-day work (teaching and curative services), clinicians need to emphasize not only curative but also preventive, promotive, rehabilitative and palliative aspects of diseases and conditions. "On Discharge Information Dissemination Units" must be established in big hospitals, where group talks and ready-made printed discharge information leaflets for common diseases and conditions could be explained by clinicians and distributed. It is the most appropriate time of giving health education as the patients are in a receptive mode. In addition, clinicians must be actively involved in public health activities of the Ministry of Health such as:

(i) Development of strategies and interventions for communicable and non-communicable diseases and other health conditions;

(ii) Formulation and reformulation of National Health Policy, National Health Research Policy, and National Health Plan; and

(iii) Annual program evaluation meetings of the Ministry of Health.

It could create a sense of ownership when these policies, strategies, interventions and recommendations are put into action. Clinicians and public health professionals should work in tandem in preventing and controlling outbreaks of diseases.

Health institutions with support from Medical Education Units may consider inclusion of the following topics, as appropriate, in the curriculum of medical, medical technology, public health and nursing subjects throughout the scholastic years. Some of these are:

(i) Basic epidemiological principles and methods;

(ii) Basic data presentation and analytical methods;

(iii) Basic research methods (quantitative and qualitative), research ethics, responsible conduct of research;

(iv) Public health ethics and medical ethics;

THE DEMARCATION LINE BETWEEN CLINICIANS AND PUBLIC HEALTH PROFESSIONALS MUST BE DISSOLVED THROUGH VARIOUS AVENUES AND MEANS.

(v) Basic management techniques (Delphi, Delbecq, brainstorming methods, etc.);

(vi) Basic medical statistics including indicators, mortality and morbidity statistics;

(vii) Disease transmission and principles of communicable and non-communicable disease control;

(viii) Presentation skills (by way of conducting mock or actual presentations, speeches, debates, panel discussions, symposia, and seminars).

These topics could be spread out across different scholastic years. In other words, subjects under the domain of public health should be taught throughout the scholastic years. The whole purpose of introducing these initiatives is to have public health-minded medical, nursing and medical technology graduates.

Public health professionals must also exercise free, provocative and futuristic thinking, thinking out of the box, epidemiologic thinking, and introspection in addition to possessing monitoring and evaluation skills. These could be considered and discussed in MPH and allied courses conducted by health institutions under the Ministry of Health.

DO WE NEED MORE HEALTH INSTITUTIONS TO IMPROVE THE DOMAIN OF PUBLIC HEALTH?

Building more hospitals is not the answer but establishment of Centers of Excellence such as National Cardiology Centre, National Nephrology Centre, National Endocrinology Centre, National Hepatology Centre, National Trauma and Orthopedics Centre, National Respiratory Centre, National Public Health Centre, etc. is desirable. Networking of these centers must be strengthened and public health perspectives must be equally emphasized in all these centers.

PUBLIC HEALTH AND RESEARCH DOMAINS ARE CLOSELY LINKED.

Promoting research culture in health institutions can lead to multiple benefits for graduate and postgraduate students because critical and analytical thinking skills are significantly improved by way of conducting research and use of library and internet services. Medical Education Units of health institutions and Department of Health Professional Resource Management and Development should create a conducive and enabling environment of learning for students. Clinical research units should also be created and the existing ones strengthened in regional and state level hospitals and specialist hospitals.

Collaboration between clinicians and public health professionals is required and mutual benefits could be easily obtained. Research thinking or research culture is not that strong in the country compared with nearby countries. Public health professionals should focus on implementation research whereas clinicians concentrate on clinical research. In fact, these two types of research are complementary. In support of this, availability

COMING TOGETHER IS THE BEGINNING, STAYING TOGETHER IS PROGRESS, AND WORKING TOGETHER IS SUCCESS.

- Henry Ford:
American industrialist who founded the Ford Motor Company

of research funding could be explored from pharmaceutical companies and major industries under the umbrella of Corporate Social Responsibility and also from budgets of the Ministry of Health. It is important to review the National Health Account regarding the trend and extent of allocation of budget for research activities at the health institutions under the Ministry of Health.

CONCLUSION

The aforementioned issues and challenges could preferably be discussed in detail and further explored by conducting national public health conferences. In other countries, Peoples' Health Assembly is held to obtain and expose the real scenario at the ground level as seen and felt by the recipients. The discussion points, issues, and challenges could serve as inputs for the national public health conference. The recommendations could be prioritized and implemented in a phase-wise and step-wise manner. All in all, combined, concerted and coordinated efforts of all those involved are essential under the policy and strategic guidance of policy makers. The demarcation line between clinicians and public health professionals must be dissolved through various avenues and means. It is hoped that this short article serves as an initiator or prime mover for developing a realistic roadmap jointly by clinicians and public health professionals for improving the domain of public health in the country.

(NB. This is the updated version of the article, which appeared in the Bulletin of Preventive and Social Medicine Society, Volume 1 Number 2, January 2015.)

PART A

CHAPTER. 4

ACHIEVING LONG-TERM DIVIDENDS IN POPULATION HEALTH

“And I believe that the best buy in public health today must be a combination of regular physical exercise and a healthy diet”

- Julie Bishop:
Minister for Foreign Affairs, Australia

> **"Public health service should be as fully organized and as universally incorporated into our government system as a public education. The returns are a thousand-fold in economic benefits, and infinitely more in reduction of suffering and promotion of human happiness"**

- Herbert Hoover:
31st President of the United States

The above statement is in the mind of each and every public health professional. We have been striving hard to uplift the health status of the population for decades through several means and avenues with varying degrees of success and failure. We have fielded numerous public health interventions and strategies, special and ad hoc health programs and projects under the umbrella of national health plans involving WHO, United Nations agencies, international and local NGOs, organizations, foundations, associations, local government authorities, civil society, bilateral agencies,government-to-government collaborative networks, etc. The government has also increased its budgetary allocation to health over the years, especially during last three to four years.

It is high time that to seriously review the role played by each of these players and their effectiveness together with the big question: "How many of our health programs are inefficient, less effective, redundant and duplicating in nature?" We need to sunset some health programs, which are no longer necessary in the context of the current epidemiological situation. We need to further intensify the programs which are indispensable and also strengthen the programs which are weak.

"Are we properly, rationally and appropriately allocating our scarce resources to health care delivery programs?" Here, we need to cross reference with updated National Health Accounts. It will definitely expose many interesting scenarios. The composite review

or so-called overall review of all program evaluation reports of the last three or four years will reveal critical and contentious issues that need to be tackled and resolved. This is the most cost-effective way of exposing the ground reality in a timely manner.

From the perspective of achieving sustainable long-term health dividends, we need to reinforce and give top priority to the following program or activities. We need to have:

(i) Strong and action-oriented health promotion programs all over the country;

(ii) Efficient and dynamic school health programs in all schools, in collaboration with the Ministry of Education and the Ministry of Sports and Physical Education;

(iii) Effective non-communicable diseases control programs in collaboration with civil society and community-based organizations;

(iv) Technically efficient as well as effective national immunization programs with proactive involvement of local governments and nongovernmental organizations and civil society;

(v) Compact and integrated national health plans with a built-in monitoring system; (The national health plans must also include the specific role to be played by various stakeholders for various activities and for different geographical areas).

(vi) Multi-media and radio (different major local languages) channels solely dedicated to contemporary health issues and health

HOW MANY OF OUR HEALTH PROGRAMS ARE INEFFICIENT, LESS EFFECTIVE, REDUNDANT AND DUPLICATING IN NATURE?

knowledge enhancement especially for remote and underserved areas of the country;

(vii) Research programs emphasizing on conducting "implementation research" in support of various health programs of the Ministry of Health;

(viii) Systematic and concrete collaboration on certain specific health related issues between the Ministry of Health and other relevant ministries (Industries, Transport, Agriculture, Social Welfare, etc.) under an agreed framework of collaboration;

(ix) Guidelines for modus operandi with international and local NGOs for effective collaboration at the ground level are essential as the number of these organizations is increasing over the years; and

(x) Regular and institution-based capacity building training programs for community-based health workforce (CBHWF) and workers of community-based organizations (CBOs), an essential workforce with less probability of internal and external migration.

" WE NEED TO SUNSET SOME HEALTH PROGRAMS, WHICH ARE NO LONGER NECESSARY IN THE CONTEXT OF THE CURRENT EPIDEMIOLOGICAL SITUATION"

It is hoped that implementation of aforementioned activities numbers (i), (ii) (iii) and (iv) will specifically result in a very large cohort of a healthy population, who can further propagate good health practices and healthy behavior to their counterparts.

We all need to strongly promote, especially the above four activities without reservation.

To facilitate the above activities, there must be a concomitant production of fully committed and fully qualified health professionals (public health, medical, nursing, medical technology) with reasonable incentivizing schemes in the course of their career. Systematic continuing medical education (CME), and continuing public health education (CPHE) programs in collaboration with Myanmar Medical Association (MMA), Myanmar Academy of Medical Science (MAMS) and various societies (such as General Practitioners Society, Preventive and Social Medicine Society) under MMA, must be established as soon as possible. We do have such programs in place but they are not running in a systematic and regular manner. From time to time, we may conduct a national-level seminar or conference on public health or even conduct a Peoples' Health Assembly involving representatives of civil society, local-level associations, community-based organizations, (CBOs), community leaders, political organizations, basic health care service workers, etc.

CONCLUSION

The above-mentioned points are some of the unrestricted thoughts, not exhaustive, which may be considered, as appropriate, by all those concerned and policy makers at the higher level. In conclusion, it could be said that positive thinking, team spirit, the collaborative and compromising attitude of health professionals, and application of phase-wise and step-wise approach to deal with a situation are some of the basic requirements for improving the performance of the health care delivery system. The abovementioned activities are a long-term investment which will yield long-term dividends for promoting population health all over the country.

(NB. This is the updated version of the article, which appeared in Bulletin of Preventive and Social Medicine Society, Volume 1 Number 2, January 2015.)

PART A

CHAPTER. 5

APPROACHES TO ACHIEVING UNIVERSAL HEALTH COVERAGE

“Universal Health coverage is an ambitious goal, but it is one that can create a healthier and more equitable world for all people”

- Tedros Adhanom:
Director-General of WHO

(This is the text of the talk at the academic session of the Myanmar Academy of Medical Science (MAMS) annual meeting (2014-2015) held on 19 September 2015 at the University of Nursing, Yangon.)

THE OBJECTIVES OF THE TALK WERE:

(i) To obtain critical views, comments and suggestions on Universal Health Coverage (UHC) from members of MAMS and special invitees representing a broad spectrum of disciplines;
(ii) To share non-directional practical views and thoughts in overcoming challenges along the path to achieving UHC;
(iii) To inculcate a spirit of sincere collaboration among stakeholders;
(iv) To emphasize the importance of applying innovative and holistic approaches in tackling issues related to UHC;
(v) To make clinicians and public health professionals more cohesive and team-spirited;
(vi) To create a sense of ownership of public health programs by clinicians and other stakeholders; and
(vii) To pinpoint the crucial role of training institutions in achieving UHC.

It should be pointed out that some of the predictors or controlling factors to achieve UHC are beyond the control of the Ministry of Health (MoH). Therefore, high importance must be accorded to inter-sectoral collaboration and coordination, which should not be underestimated. Without public-private mix and an acceptable level of health knowledge, attitude and practice of the population, the time required to achieve UHC can be unduly lengthened and the road to achieve UHC will not be smooth. In addition, program managers of various technical areas must always consider nine strategic areas/directions of UHC during planning and implementation of activities of their respective programs and projects.

WHAT ARE THE PRINCIPLES TO BE APPLIED IN CONSIDERING UHC ISSUES?

There are certain basic principles that may be considered if rational conclusions are to be drawn when discussing issues related to UHC. These are:

(i) To think out of the box or revolutionary thinking;
(ii) To apply epidemiologic thinking in sorting out issues;

(iii) To exercise systems approach and systems thinking;
(iv) To prioritize and consider phase-wise and step-wise approach in implementing programs;
(v) To practice "fact finding rather than fault finding";
(vi) To regularly undertake introspection;
(vii) To inculcate compromising rather than confronting attitude; and
(viii) To initiate an atmosphere of mutual respect especially in dealing with development partners.

WHAT ARE DESIRABLE BACKGROUND CONDITIONS REQUIRED TO ACHIEVE UHC?

Certain background conditions are desirable and should be created if we really want to achieve UHC. The goals and objectives of UHC must always be borne in mind by program managers during discussions with development partners, collaborating external agencies and entities, international and local non-governmental organizations as well as while conducting capacity building activities for professionals in MoH. Integrating, sun-setting, reducing or reinforcing program activities should be done as required. Issues of human resource for health must be tackled to the extent possible as per the "Health Workforce Strategic Plan (2012-2017)".

Current and future activities of MoH must be aligned with nine strategic areas/directions of UHC. It is strongly suggested that the number of meetings and workshops in MoH should be drastically reduced. Instead, priority recommendations made at recent meetings, workshops, seminars, symposia, forums and evaluation reports is essential. Some actions must be initiated based on the recommendations.

CLINICIANS MUST BE BROUGHT ON BOARD IN PUBLIC HEALTH PROGRAMS.

WHAT IS "HIGH POWERED INDEPENDENT TASK FORCE ON UHC" AND WHY IS IT REQUIRED?

MoH has been spearheading numerous public health promoting and health care activities all over the country through various programs and projects for the benefit of the population. Each activity is important and essential by itself. However, it cannot be denied that many activities are redundant, duplicated and not cost-effective in view of changing epidemiological conditions. All these activities need to be reviewed in the context of making them more concrete and cost-effective with UHC goals in mind.

In order to oversee and improve the scenario as mentioned above, it is desirable that a "High Powered Independent Task Force on UHC", with time-bound and concrete terms of reference, should be formed. The members must be technically savvy, dynamic and independent. Full decision-making authority on technical matters must be given to the task force. In order that the decisions are unbiased, chairmanship may be assigned on a rotating basis for each meeting and all members should preferably be at the same level, i.e., Director. Provision of full-time secretariat, budget and facilities are required.

The task force should report directly to the Minister or Deputy Ministers of Health only for policy matters and for final decision-making on controversial issues, if any. The decisions on technical matters should be the sole responsibility of the task force. This will make the task force more dynamic, responsive and responsible.

THE GENERAL OBJECTIVES OF ESTABLISHING THIS TASK FORCE ARE TO OVERSEE ACTIVITIES ALONG THE PATH TO UHC:

(i) Attaining an efficient health care delivery system;
(ii) Improving responsiveness and robustness of health information system related to UHC;
(iii) Rendering quality services to the population;
(iv) Rational resource allocation and utilization;
(v) Smooth collaboration and effective networking with other ministries and development partners;
(vi) Improving health care financing mechanisms; and
(vii) Weeding out redundant, duplicated, ineffective and inefficient program activities.

THE FACT OF THE MATTER IS:

(i) UHC needs continuing high-level commitment and push;
(ii) UHC cannot be achieved easily in a short period of time:

(iii) UHC is an ongoing and lengthy process;
(iv) Strategies of UHC always need to be reviewed, aligned and improved;
(v) Always need to consider long-term perspectives in tackling issues in UHC;
(vi) No ad hoc measures, no stop-gap measures, no symptomatic management, no face-saving measures, but go for root cause in improving UHC; and
(vii) Need to be sincere, unbiased and unfazed in exposing real scenarios along our path to UHC.

WHAT ARE THE MAIN GATEKEEPERS ALONG OUR PATH TO UHC AND WHAT ARE THE STRATEGIC AREAS/DIRECTIONS FOR UHC?

The activities of UHC should be implemented within the framework of the main gatekeepers of UHC such as overall government policy, decisions of National Health Committee, National Health Policy, Myanmar Health Vision 2030, National Health Plan, Health Workforce Strategic Plan 2012-2017, National Health Research Policy, National Population Policy and the nine strategic areas/directions for UHC.

THE NINE STRATEGIC AREAS/ DIRECTIONS OF UHC ARE AS FOLLOWS:

(i) Identify essential health package ensuring access to comprehensive quality health services for all;
(ii) Enhance human resource for health (HRH) management through implementation of health workforce strategic plan to address current challenges hindering equitable access to quality services;
(iii) Ensure availability of quality, efficacious and low-cost essential medicines, equipment and technologies including supply chain management and infrastructure at all levels;
(iv) Enhance effectiveness of public-private mix;
(v) Develop alternative health financing methods and risk pooling mechanisms to expand the fiscal space for health in order to alleviate catastrophic health care expenditure of the community and enhance financial protection;
(vi) Strengthen community engagement in health service delivery and promotion;
(vii) Strengthen evidence-based information and comprehensive management information system including non-public sector;
(viii) Review existing health policies and adopt necessary policies to address current challenges for UHC; and
(ix) Intensify governance and stewardship for the attainment of UHC.

It is high time that we sincerely ask ourselves, "Did we do anything concrete on the above nine areas of work or strategic directions of

UHC?" The answer is a definite "Yes", but not strong enough to have an impact. Therefore, we need to sort out issues and consider managing it appropriately in a phase-wise and step-wise manner, with built-in, simple monitoring mechanisms.

WHAT IS UHC?

UHC can be viewed from several perspectives taking into consideration different contexts in the country. The World Health Organization has mentioned that the goal of UHC is to ensure that all people obtain the health services they need without suffering financial hardship when paying for them. The main objective of UHC is for the quality of health services to be good enough to improve the health of those receiving services. This requires a strong, efficient, well-run health system meeting priority health needs; a system for financing health services; access to essential medicines and technologies; and a sufficient capacity of well-trained, motivated health workers. The full spectrum of essential, quality health services should be covered including health promotion, prevention and treatment, rehabilitation and palliative care.

In a nutshell, UHC means everyone gets quality health services, people are accessible to health services, and people will not suffer financial hardship due to payment for health services. WHO Director-General Dr. Margaret Chan also mentioned in her opening remarks at the WHO/World Bank Ministerial-level Meeting on UHC in February 2013, in Geneva, Switzerland, that "UHC is the single most powerful concept that public health has to offer. It is inclusive. It is the ultimate expression of fairness. It unifies services and delivers them in a comprehensive and integrated way, based on PHC".

WHO ARE THE KEY PLAYERS IN UHC?

It is to be emphasized that MoH is only one of the players providing quality and accessible health services, essential medicines and health knowledge to the population. Other ministries also play an important role for easy accessibility to health facilities, health, and social insurance, social assistance, health financing, health budget increase, etc. International and local NGOs, civil society organizations (CSOs) and community-based organizations (CBOs) also play an equally crucial role in various avenues for promoting health along the path to UHC. Development partners are involved in providing technical and funding support. Of all the players, we should not forget the role of communities in terms of collaboration and understanding, apart from possessing a reasonable level of health knowledge and information in accessing the health services rendered by the MoH.

HOW ARE WE GOING TO MAKE PLAYERS WORK HARMONIOUSLY ALONG OUR PATH TO UHC?

The principle of "combined effort is synergistic and progressive" must be the order of the day. The progression may be geometric rather than arithmetic. Each player involved in UHC has a common goal and similar objectives. Therefore, exercising mutual respect, plan together and chalk out the division of labor, practicing a compromising rather than confronting attitude, promoting networking, and jointly developing "Implementation Activities Framework (IAF)". These are some of the avenues that can lead to smooth collaboration among players along our path to UHC. Powerful and unbiased coordination is required.

The International Health Division of MoH can coordinate this aspect effectively. This "IAF" can easily be linked and integrated with existing development partners' collaborative action plans, and activities already identified in the National Health Plan. The outcome will be the country's Master Plan of Action to achieve UHC.

WHAT ARE WE GOING TO DO NOW ALONG OUR PATH TO UHC?

The issues and facts mentioned below are put forward for consideration. We need to promote the notion of tripartite

> **UNIVERSAL HEALTH COVERAGE IS ONE OF THE MOST POWERFUL SOCIAL EQUALIZERS AMONG ALL POLICY OPTIONS**
>
> **Margaret Chan:**
> Director-General of WHO

collaboration. Tripartite means clinicians including general practitioners; public health professionals ranging from epidemiologists to program managers to basic health service workers; and health institutions which include the University of Public Health, University of Community Health, Universities of Nursing, Universities of Medical Technology, Universities of Medicine, etc. Tripartite collaboration within MoH is a basic necessity and should be strengthened through the application of various means and avenues.

WHY ARE CLINICIANS CRUCIAL IN ACHIEVING UHC?

The demarcation line between clinicians and public health professionals must be removed. Several options to achieve this are available, viz., enhance involvement of clinicians in MoH activities such as:

(i) Development of strategies and interventions for communicable and non-communicable diseases control;
(ii) Formulation of national health policy, national health plan, national health research policy;
(iii) Annual program planning and evaluation workshops;
(iv) Relevant public health activities of the University of Public Health and University of Community Health; and
(v) Strategic and policy level meetings and workshops organized by MoH and collaborating UN agencies.

Clinicians must be asked to emphasize preventive, promotive and rehabilitative aspects of diseases and conditions in their didactic lectures and also during ward rounds in hospitals. A short preventive and promotive health talk by clinicians, on a rotation basis, in hospitals while discharging the patients will yield significant and long-lasting results as patients, including their attendants, who are in a receptive mode for getting information about the diseases/conditions they have been suffering.

In other words, clinicians must be brought on board in public health programs. People have more confidence in clinicians as the services rendered by them result in diseases being treated. Clinicians treat dengue hemorrhagic fever and patients get cured in a few days. However, it will take months to see the impact of public health approaches to preventing the occurrence of dengue fever in the community. But nobody notices the outcome of public health activities in preventing hundreds if not thousands of dengue and dengue hemorrhagic fever cases in the community.

We need to create a sense of ownership of clinicians in public health programs. Other advantages of involving clinicians are to acquire more bonding between clinicians and public health professionals and also in

obtaining innovative views and ideas from the clinical perspective, which is desirable. In addition, the positive impact of public health programs can be more noticeable due to the active involvement of the community.

HOW CAN WE INVOLVE GENERAL PRACTITIONERS ALONG OUR PATH TO UHC?

General practitioners are an important group of health professionals as they are widely distributed all over the country. It is crucial to strategize for greater involvement of general practitioners in public health activities of the MoH. Through the General Practitioners Society of Myanmar Medical Association, we should harness their services for supporting public health activities of MoH.

General practitioners are in close contact with the population and their bonding with the community is strong. They can be involved in health promotion activities of MoH, controlling disease outbreaks, reporting unusual occurrence of diseases, reporting notifiable diseases, and in special activities of MoH such as National Immunization Days, World Health Days, and management of disasters. Networks of general practitioners for effective collaboration with MoH can be created.

MoH may also consider conducting continuing medical education courses for general practitioners in collaboration with Myanmar Medical Association and Myanmar Academy of Medical Science. Courses such as basic principles of public health, prevention and control of diseases of contemporary importance, control of disease outbreaks, management of disasters, etc. may be considered. It is high time that the policy on involvement of general practitioners in MoH activities revisited because of the limited number of health workforce (HWF) in MoH.

WHAT IS THE ROLE OF HEALTH INSTITUTIONS IN ACHIEVING UHC?

For getting long-term dividends, the crucial role of health institutions in producing public health-minded graduates must not be forgotten. To achieve this, public health curriculum in health institutions must not only be dynamic but also attractive and contemporary. There is an imbalance in terms of the number of hours for subjects being taught in medical institutions.

Public health is only one of the subjects among (12) major subjects (medicine, surgery, obstetrics & gynecology, pediatrics, pathology, forensic medicine, preventive & social medicine, pharmacology, microbiology, biochemistry, physiology, anatomy). There are preventive aspects in almost all the subjects.

It is important to emphasize the importance of public health so that interest in preventive

aspects could be inculcated in the minds of young medical graduates. If we scrutinize the HWF of MoH, more than 50% or the majority are public health professionals. One quick solution may be that public health subjects be taught throughout MBBS scholastic years.

We need to strengthen the University of Public Health and the University of Community Health on a priority and urgent basis. Currently, the performance is not outstanding. We need strong public health professionals if we are to achieve UHC as per the target of 2030 and beyond.

Some of the public health topics that can be appropriately allocated and taught throughout MBBS scholastic years are basic epidemiologic principles and methods, basic data presentation and analytical methods, basic research methods (both quantitative and qualitative), bioethics which includes research ethics, public health ethics and medical ethics, responsible conduct of research (RCR), basic management techniques (Delphi, Delbecq, Brainstorming, etc.), basic medical statistics including morbidity and mortality statistics, basic principles of communicable and non-communicable disease transmission and control, principles of management of disease outbreaks, and natural history of diseases of public health importance.

HOW ARE WE GOING TO PROMOTE THE ROLE OF PUBLIC HEALTH PROFESSIONALS TO ACHIEVE UHC?

Public health professionals must exercise provocative, futuristic, out-of-the-box and epidemiologic thinking in their day-to-day management of public health activities. The MoH can arrange and create a formal and informal platform or forum to discuss contemporary and contentious public health issues of importance on a regular basis. Annual or biennial National Public Health Conferences and Peoples' Health Assemblies (state and region-wise) may be conducted in collaboration with development partners and especially UN agencies and like-minded organizations.

In order to enhance and streamline the performance of public health professionals working at different levels of health care delivery system, it is worthwhile to produce a compendium (either electronic or paper version) which will include, among others, standard operational guidelines for various purposes, important directives and circulars of MoH, basic rules and regulations pertaining to administrative and management issues, speeches of Chairperson of National Health Committee, Ministers of Health, and Deputy Ministers of Health made at several high-level policy meetings, important conferences, events, forums, and seminars. It should also be regularly updated.

Through this compendium, all professionals in MoH will be communicating to each other using the same wavelength and understanding. It will result in achieving a significant and positive impact along our path to achieve UHC.

WHAT IS THE ROLE OF PUBLIC-PRIVATE PARTNERSHIP (PPP) IN ACHIEVING UHC?

The role of the private sector in the health domain is expanding yearly and with increasing momentum. Partnerships can be either with local or external (abroad) entities. The impact of partnership can be augmented if networks of partners are formed within a set framework. The success of public-private partnership depends on stipulated and mutually agreed upon rules and regulations which should be unbiased or well balanced and all partners must be put on an equal footing. If we aim at a one-sided benefit or imbalanced benefit, the partnership will be disintegrated in no time.

Linkages with private clinics, hospitals, laboratories, information communication technology companies, and pharmaceutical industries in areas of telemedicine, tele-consultations, training, pre-hospital care, generic medicines, hospital information system, emergency care, ambulance services for easy referral and improving accessibility, health, and the social insurance system are just a few examples. We may need to urgently revisit policies and strategies of MoH on PPP in the context of prevailing conditions. The PPP can greatly facilitate in overcoming the challenges in achieving UHC.

WHY IS HWF A KEY PLAYER OR DRIVER TO ACHIEVE UHC?

The health workforce (HWF) is the driver of the health care delivery system to achieve UHC. Driving without a sense of direction or aimlessly or without control or guidance is detrimental to achieving our goal of UHC. Thus, proper training and reorientation courses for HWF are required to get quality HWF for rendering quality health services leading to quality UHC.

It is important to consider and take action appropriately on all factors, which can influence HWF to perform their jobs efficiently and effectively. We should aim at getting ethically minded, fully committed, motivated, technically savvy and cordial HWF. It is utopian but we must try our best to achieve it. It is a long process where training institutions are fully responsible for it. HWF should be managed strategically but it is easier said than done. The possible strategies are mentioned below for consideration as appropriate.

WHAT ARE THE POSSIBLE STRATEGIES AND SOLUTIONS FOR OBTAINING EFFICIENT HWF ALONG OUR PATH TO UHC?

In order to make health professionals perform their jobs efficiently and effectively, studies made on various perspectives on HWF need to be reviewed and improved appropriately. It is worthwhile to conduct quick qualitative studies by way of key informant interviews, focus group discussions and in-depth face-to-face interviews regarding the performance of health professionals. Functional analysis of the performance of HWF can be made. Based on the research findings, review and revamp staff selection methods; appointment system; transfer system; promotion system; supervision system; career pathways; monitoring and assessment system; and reward and punishment system of HWF.

Additionally, pre-service and in-service training programs could be reviewed from various perspectives and improved accordingly in line with the contemporary situation and requirement. All these actions can be supplemented taking into consideration key recommendations arising out of many meetings, workshops, and evaluation missions on HWF conducted earlier.

WHAT IS THE FRAMEWORK FOR REVIEW OF HWF IN ACHIEVING UHC?

The "HWF Strategic Plan (2012-2017)" has identified four pillars of human resource for health policy. These are:

(i) Strengthening leadership and management of human resource for health;
(ii) Improving availability of human resource for health;
(iii) Improving quality of human resource for health; and
(iv) Ensuring equity in human resource for health.

The "HWF Strategic Plan (2012-2017)" is very comprehensive and well written. It is desirable that the concerned department takes action on the strategic plan in a phase-wise and step-wise manner, subject to availability of funding resources. All along the process of achieving UHC, it is important to emphasize strategic direction number two of UHC, which is "Enhance health workforce management through implementation of HWF strategic plan to address current challenges hindering equitable access to quality services". Quality services connote public health services as well as hospital services.

WHAT SHOULD WE URGENTLY NEED TO DO FOR EFFECTIVE MANAGEMENT OF HWF?

We need to urgently review and determine various types of HWF needs state/region-wise in the light of UHC. A team led by the state/regional director should organize the review with technical support from the central level. Establishing a computerized HWF database system can facilitate many HWF issues. We need to ensure that HWF responds better to wants, needs and demands of the population. Equitable distribution of adequate, committed, competent, and ethically minded HWF is crucial along our path to UHC. In order to know the optimum mix and performance of HWF, professionals from the Departments of Medical Research, Public Health, Medical Services and Health Professional Resource Development and Management should jointly carry out "implementation research".

While carrying out UHC activities, it is advisable to continuously monitor HWF performance and make adjustments as appropriate. This function should preferably be taken care of by the state/regional team rather than by the central level. Changing trend of training needs of HWF must be taken care of by health institutions as per the need identified by state and regional HWF team. It is worthwhile to consider giving enhanced training support to HWF of community-based organizations and civil society organizations. MoH may need to review its policy for dealing with these organizations.

WHAT IS THE ROLE OF THE CENTRAL LEVEL TO GET QUALITY HWF FOR UHC?

The central level should focus only on overall monitoring and evaluation of HWF scenario, development of standard operating procedures and guidelines, and policy matters. The central level could systematically coordinate involvement of all stakeholders (INGOs, development partners, agencies, organizations and relevant ministries) in HWF matters. It is desirable that the central level should decentralize several HWF-related matters such as state/regional HWF planning depending on capacity and capability of each state/region. The central level should oversee implementation of "HWF Strategic Plan (2012-2017)" in coordination with state/regional HWF teams.

COMPOSITE ANALYSIS OF ALL AVAILABLE STRATEGIES AND ACTIVITIES OF MOH IN MYANMAR

There are numerous overarching strategies and activities currently being implemented in the field of health in Myanmar. Some activities are donor driven and some are just a matter routine continuation of ongoing activities. Many activities appear to be redundant and some are similar. It is a sheer waste of scarce resources if we continue to let it go. It could even be said that the conduct

of these activities is unethical. It is sensible to do a quick mapping of all strategies and activities of MoH. After weeding out unwanted, redundant, duplicated and non-essential ones, the remaining activities can be prioritized in the light of nine "strategic areas/directions of UHC" and station it in the "Implementation Activities Framework".

WHAT IS "IMPLEMENTATION ACTIVITIES FRAMEWORK" (IAF)?

It is, in fact, an activity tree to be considered along our path to achieving UHC. It includes responsible entities to implement, the source of funding, resource allocation, a timeline for each prioritized activity. Brainstorming among all stakeholders must be done in developing "IAF". The following principles ougwht to be applied while developing a realistic "IAF", viz., fact finding and not fault finding, compromising attitude, mutual respect, collaboration, down-to-earth and doable approach, no hidden agenda, sun-setting redundant and duplicated activities and involving all stakeholders on equal footing. Activities in IAF should be prioritized, interlinked, integrated and properly sequenced. "IAF" will serve as a concrete road map to achieve UHC by 2030 and beyond.

HOW WILL WE KNOW THAT WE ARE PROGRESSING WELL ALONG OUR PATH TO UHC?

The "High Powered Independent Task Force on UHC" alluded to earlier must oversee the modus operandi of activities currently being conducted and steer them appropriately. The activities and performance of existing "UHC and Service Delivery" Task Force may be reviewed and considered for possible merging into the "High Powered Independent Task Force on UHC". An unbiased and critical review of scenario on UHC without undue influence from higher officials is essential. Provision of built-in "implementation research" in programs is a sine qua non and must be incorporated. It would be beneficial to conduct qualitative research to elicit recipients' perspectives on UHC in order to streamline the activities in "IAF".

STRATEGIES TO ENHANCE FINANCIAL RISK PROTECTION

(In view of the vastness of this subject matter, it will be discussed separately)

Rational allocation and efficient utilization of the tremendous increase in the health budget currently are crucial in order to have a notion of "value for money". There is an urgent need to update National Health Account, which could serve as an important input to health planning process for UHC.

A composite review on social protection schemes, health financing mechanisms, health insurance schemes, community cost-sharing scheme (user fees), hospital trust funds, revolving drug funds, social security benefits, etc. must be conducted on a priority basis. All these entities have already been tested in Myanmar but best approaches are yet to be identified.

CONCLUSION

The following points are noteworthy in considering the approaches and strategies to achieve UHC, viz.,

(i) HWF is the key driver to achieve UHC;
(ii) MoH is only one of the players;
(iii) Inter-ministerial and inter-sectoral collaboration is a must;
(iv) Systematic collaboration and coordination with development partners, local and international NGOs, community-based organizations and civil society organizations are essential;
(v) PPP is an essential ingredient to achieve UHC;
(vi) Clinicians must be brought on board;
(vii) Role of training institutions is crucial;
(viii) Built-in implementation research is a sine qua non;
(ix) "High Powered Independent Task Force on UHC" could facilitate dramatically and quicken the process to achieve UHC;
(x) Overall government policy is a key predictor for successful UHC; and
(xi) Collective thinking, collaborative approach, mutual respect and compromising attitude should be practiced by all professionals along our path to UHC.

The strategies and activities to achieve UHC are interconnected and interdependent. Weakness in one nodal point can weaken the whole chain of events. All program managers should have a sense of ownership of UHC and work in a team-spirited manner to become one dynamic and cohesive entity. Under the insightful leadership of MoH, guided by our National Health Plan, Myanmar Health Vision 2030, National HWF Policy and HWF Strategic Plan (2012-2017), let us move ahead with the Nine Strategic Areas/ Directions for UHC. Concrete, cohesive and innovative strategies and activities for UHC should be identified and incorporated in our forthcoming National Health Plan, 2017.

The possible options and practical approaches mentioned above to achieve UHC could be considered in the context of prevailing and changing epidemiological, socio-economic and political situations and implementation can be done in phase-wise and step-wise manner.

FURTHER READING

1. Strategic Directions for UHC, Myanmar
2. Report of the Technical Consultation on Issues and Challenges: UHC in Myanmar, Nay Pyi Taw, 9-11 July, 2012
3. HWF Strategic Work Plan (2012-2017), Ministry of Health, Myanmar
4. World Health Report 2010 entitled Health Systems Financing: The Path to UHC
5. UHC: The Post-2015 Challenge by Dr Margaret Chan, WHO Director-general, Keynote Address at the Ministerial Meeting on UHC: The Post-2015 Challenge, Singapore, 10 February 2015
6. Research for UHC by Dr Margaret Chan, WHO Director-general, Remarks at the Launch of the World Health Report 2013, Beijing, China, 15 August 2013
7. More Countries Move Towards UHC by Dr Margaret Chan, WHO Director-general, Opening Statement at the International Forum on UHC: Sustaining UHC: Sharing Experiences and Supporting Progress, Mexico City, Mexico, 2 April 2012
8. Towards Universal Coverage by Dr San San Aye, PSM Bulletin, Vol 1 Number 1, 10 September 2014
9. Equity-oriented Health System: A Policy Challenge for Myanmar by Dr Than Tun Sein, PSM Bulletin, Vol 1 Number 1, 10 September 2014
10. Promoting the Role of GPs in PHC by Dr Swe Win, PSM Bulletin, Vol 1 Number 1, 10 September 2014
11. Role of GPs in Promoting Overall Health Status of Population in Myanmar by Dr Myint Htwe, PSM Bulletin, Vol 1 Number 1, 10 September 2014
12. Improving the Domain of PH in the Country by Dr Myint Htwe, PSM Bulletin, Vol 1 Number 1, 10 September 2014
13. Health security for the Poor: An Essential Ingredient for Poverty Alleviation by Dr Than Tun Sein, PSM Bulletin, Vol 1 Number 2, 1 January 2015
14. PH Approaches and Epidemiologic Thinking by Dr Myint Htwe, PSM Bulletin, Vol 1 Number 1, 10 September 2014
15. Empowering Health Personnel is Imperative in the Path to UHC by Dr Kan Tun, PSM Bulletin, Vol 1 Number 1, 10 September 2014
16. Long Term Investment for Uplifting the Health Status of Population by Dr Myint Htwe, PSM Bulletin, Vol 1 Number 2, 1 January 2015
17. Tripartite Collaboration to Improve the Domain of PH by Dr Myint Htwe, PSM Bulletin, Vol 1 Number 2, 1 January 2015
18. Strengthening Research Institutions in the Country in Support of improving PH Domain by Dr Myint Htwe, PSM Bulletin, Vol 1 Number 3, 1 June 2015
19. Are we Ready for Health Care Reform? by Dr Myint Htwe, PSM Bulletin, Vol 1 Number 3, 1 June 2015
20. What is needed to Achieve UHC? Aligning Structure of Health System with People Centered Development, Human Resource for Health, Presentation by Dr Myint Htwe at National Health Forum, Nay Pyi Taw, 28-29 July 2015

21. Message to MPH students by Dr Myint Htwe, PSM Bulletin, Vol 1 Number 2, 1 January 2015
22. From MDGs to SDGs, and Beyond by Dr Sid Naing, PSM Bulletin, Vol 1 Number 2, 1 January 2015
23. Myanmar's Experiences and Lessons Learnt on Policy Mapping of Rural Retention by Dr Nilar Tin, PSM Bulletin, Vol 1 Number 2, 1 January 2015
24. Community-based Health Care: The Bedrock of the Health Systems by Dr Wai Wai Han and Dr Saw Saw, PSM Bulletin, Vol 1 Number 3, 1 June 2015
25. Strengthening International Health Coordination at the Country Level by Dr Myint Htwe, PSM Bulletin, Vol 1 Number 3, 1 June 2015
26. Decision Making in Public Health by Dr Myint Htwe, PSM Bulletin, Vol 1 Number 3, 1 June 2015
27. UHC: Supporting Country Needs. WHO/HIS/HSF/13.1
28. The Path to UHC by Dr Margaret Chan, WHO Director-general, Statement to the Press at the launch of World Health Report: Health Systems Financing, Berlin, Germany, 22 November 2010
29. Best Days for PH are Ahead of Us by Dr Margaret Chan, WHO Director-general, Address to 65th World Health Assembly, Geneva, Switzerland, 21 May 2012
30. Sustainable and Equitable Growth through UHC by Dr Margaret Chan, WHO Director-general, Welcoming Remarks at the High-level Ministerial Forum on Sustainable and Equitable Growth through UHC, Tokyo, Japan, 6 December 2013
31. Opening Remarks by WHO Director-General Dr Margaret Chan at the WHO/World Bank Ministerial-level Meeting on UHC, Geneva, Switzerland, 18 February, 2013
32. Economic Dimension of UHC by Dr Margaret Chan, WHO Director-general, Opening Remarks at the World Bank Group – IMF Spring Meeting, Washington DC, USA, 11 April 2014
33. Mexico City Political Declaration on UHC (April 2012)
34. Bangkok Statement on UHC (January 2012)
35. Tunis Declaration on Value for Money, Sustainability and Accountability in the Health Sector (July 2012)
36. WHO Director-general address to 65th World Health Assembly, May 2012 Geneva, Switzerland

(NB. This is the updated version of the article, which appeared in Bulletin of Preventive and Social Medicine Society, Volume 1 Number 4, October 2015.)

PART A

CHAPTER. 6

ARE WE READY FOR HEALTH CARE REFORM?

“Our biggest achievement was health sector reform. The success was in making sure that primary health care was the center of gravity in our health system”

- Tedros Adhanom:
Director-General of WHO

> **"If we don't reform how healthcare is delivered in this country, then we are not going to be able to get a handle on that escalating healthcare costs."**
>
> **- Barack Obama:**
> 44th President of the United States

Health care reform is embedded within an extremely vast area of work and is a complex process. The objectives of initiating health care reform are to increase effectiveness, efficiency, accessibility, and responsiveness of the health system in order to improve health equity. There are several definitions of health care reform. The World Health Report 2008 emphasized four sets of reforms aiming to refocus health systems in light of renewal of primary health care:

(i) Universal coverage reforms to improve health equity (financing reform);
(ii) Service delivery reforms to make health systems people-centered;
(ii) Leadership reforms to make health authorities more reliable; and
(iv) Public policy reforms to promote and protect the health of the communities.

When initiating health care reform, one needs to view it from a very broad perspective (a holistic view) taking into consideration not only issues and influencing factors in the domain of health but also allied and relevant ministries apart from the political and economic system of the country. All these factors need to be considered in the context of national health policy and strategies and overall policy of the government. National health policy and its strategies are critically important for the country. National health policy and its strategies are generally formulated based on:

(i) A solid foundation of science;
(ii) Reliable data and information arising out of the robust health and hospital information system;
(iii) Ethical principles especially public health ethics; and
(iv) Health rights of the population with an overall aim of achieving social and economic well-being.

One should also be aware that reform is a continuous process and not a one-time affair. Several course adjustments or direction changes are needed depending on the contemporary epidemiological situation and factors which are sometimes beyond the control of the health sector.

Before we consider initiating health care reform process, we should seriously ask:

(i) "Is it really necessary to undertake health care reform?
(ii) "What is the quantum and area of reform that we would like to do?"
(iii) "Can we just improve and streamline the internal management system by way of strictly following in-house circulars and standard operating procedures, instead of doing full-fledged reform?"

Some examples are: providing regular platforms for sharing practical experience and other key information to adjust or improve a scenario; further enhancing built-in monitoring systems for different health programs, and taking additional care with regard to social welfare of the staff. Health care reform, by nature, is not simple and straightforward. It requires several preliminary information or documentation or evidence-based facts and figures.

The issue here is, "To what extent are available data/information valid and reliable for use in the reform process?". The background information must be made available through several plausible means and the data/information must be valid and obtained from reliable sources. It is not advisable to make a quick decision or superficial speculation, based on weak data and information.

It should be emphasized that speculation should not be made unless it is extremely necessary. Conducting health care reform without concrete, reliable and valid data/information is doomed to fail. It will not only defeat its own purpose but also further complicate matters. We need to invest several types of resources including "precious time of staff" in the reform process.

It is also not appropriate to do health care reform just for the sake of doing reform. The reason being that all issues or factors involved in health care are interrelated and closely intertwined. Therefore, a systems approach or systems perspectives must be applied together with epidemiological thinking2.

The professionals from different disciplines under the rubric of social science must be involved when one is considering implementing some health care reform initiatives. Experienced professionals from public health including those who are working in preventive and social medicine

ONE SHOULD BE AWARE THAT REFORM IS A CONTINUOUS PROCESS AND NOT A ONE-TIME AFFAIR.

departments of Universities of Medicine, University of Community Health, University of public Health, health economists, epidemiologists, statisticians, medical record professionals, policy makers, health program managers, health staff working at township level and below, sociologists, medical specialists, medical educationists, medical superintendents, hospital administrators, research scientists, systems analysts, officials of local governing bodies, etc. should be involved.

We should not forget involving representatives of civil society, community-based organizations, and communities, especially from remote and underserved areas. It may be mentioned that the People's Health Assembly, as is usually done in Thailand, can be considered as one of the options to further substantiate the ground realities in health care services before we formally start discussing the reform process. The process of health care reform can be equated to some extent to formulating national health plans.

One caveat is that whatever road map or approaches are identified or agreed upon, it is preferable to implement it in a phase-wise and step-wise manner supported by a dynamic yet simple monitoring and evaluation system. This is essential because we may have to change the course or direction of reform depending on the ground realities that will be exposed in the reform process.

Currently, many countries are pursuing universal health coverage (UHC). Some degree of health care reform may be necessary to ensure UHC with the aim of achieving:

(i) Better equity and social justice in health,

(ii) Unlimited accessibility to health services by people from all walks of life and especially those in remote and underserved areas.

In the process of reform, we should try to strategize or develop avenues or mechanisms for obtaining multi-sectoral and multi-disciplinary involvement as well as community participation. In fact, the crux of the matter is that health care delivery system must be more responsive, dynamic and robust after undergoing reform, besides achieving sustainability.

Whatever approaches or strategies and objectives are selected in the reform process, the cornerstone for reorientation of the health care delivery system needs to be considered focusing on "Primary Health Care" principles and also recognize the central place of health in development. "Political will and commitment" should be the driving force behind the reform process.

Some of the factors (not exhaustive) that should be taken into account in the reform process are (not in order of priority):

(i) Role of local governments and civil society;
(ii) Role of community-based health workforce and community-based organizations;
(iii) Extent of decentralization to be allowed;
(iv) Selection of cost-effective and cost-efficient health interventions;

(v) Ways of achieving optimal mix of human resources;
(vi) Defining and applying cost-effective innovative strategies to reach hard-to-reach areas or to reach the unreached population, i.e., poor, underprivileged, vulnerable and marginalized;
(vii) Consideration of sociocultural, economic and environmental determinants of health prevailing in different geographical areas;
(viii) Defining practical strategies to close the gap in morbidity and mortality rates of communicable and noncommunicable diseases in different geographical areas;
(ix) Balancing between curative and preventive care;
(x) Ensuring equitable distribution of human resources for public health and clinical domain;
(xi) Rational budgetary allocation depending on the need of different geographical areas - this depends on several factors;
(xii) Ensuring to achieve healthy public policies over the years through other development sectors;
(xiii) Promoting public-private partnership on several aspects;
(xiv) Noting the changing demographic profile;
(xv) Emerging and reemerging diseases scenario;
(xvi) Adequate provision for tackling unexpected outbreak of new diseases;
(xvii) Judicious consideration on various dimensions of health care;
(xviii) Applying strategies to promote people-centered care;
(xix) Procedures to contain cost;
(xx) Multidisciplinary health team at township level with task shifting;
(xxi) Establishment of community health clinics versus sub-rural health centers versus integrated community health services;
(xxii) Strategies for intensifying community health education programs;
(xxiii) Changing role of research institutions and role of them in promoting efficiency and performance of health care system;
(xxiv) Intensifying the role of implementation research to improve access, effectiveness, efficiency, equity and sustainability of services;
(xxv) Innovative strategies for use of Information Communication Technology (ICT) in curative as well as preventive services.

The above-mentioned issues are just the tip of an iceberg that need to be considered in the reform process. Those activities which are currently performing at a good pace, in a reasonable and favorable environment, must be reinforced with a view to sustaining them.

WHO had organized a regional meeting titled "Health Care Reform for the Twenty-first Century in the South-East Asia Region", from 20 - 22 October 2009, Bangkok, Thailand. The author made a key presentation on "The Strategic Framework for Health Care Reform for the Twenty-first century". The meeting agreed on the draft strategic framework. It was based on public health perspective and also on recommendations of WHO South-East Asia regional consultations and conferences and the challenges facing the Region.

The framework identified four major challenges for the health care delivery system, i.e.,

(i) High disease burden;
(ii) Low health expenditure;
(iii) Weak health system; and
(iv) Inefficiency.

In the reform process, we need to consider how to overcome these four challenges. The meeting also agreed on the four proposed reform areas such as:

(i) Governance (health policy, healthy public policies, decentralization, public-private partnership);
(ii) Health workforce management (community-based health workforce, education, and training, multidisciplinary health teams);
(iii) Community empowerment (education, volunteers as change agents, linking to income generation); and
(iv) Public health institutions and networks (innovative education, information communication technology in education and training).

These are four major areas on which the reform process should focus. It is desirable that these should be considered in the context of improving public health by way of strengthening the health care delivery system.

WE SHOULD NOT FORGET INVOLVING REPRESENTATIVES OF CIVIL SOCIETY, COMMUNITY-BASED ORGANIZATIONS, AND COMMUNITIES, ESPECIALLY FROM REMOTE AND UNDERSERVED AREAS.

While the reform process is going on, it would be advisable that the government further reinforces the momentum of implementing the ongoing national poverty reduction

strategies. This can greatly facilitate achieving the desirable outcome of the reform process. We may further emphasize on people-centered care which is characterized by:

(i) Equitable care - there must be no boundaries in getting care;
(ii) Engagement of all stakeholders;
(iii) Community empowerment;
(iv) Giving effective care, i.e., interventions should lead to better health outcomes, both quantitatively and qualitatively;
(v) Evidence-based preventive or curative care;
(vi) Efficient care; and
(vii) Ethical- where respect for human right is grounded.

CONCLUSION

The reform process will be successful if all those involved are fully committed and have a sense of ownership for achieving good population health, especially in remote and underserved areas. If there is a will, there must definitely be a way to attain our common objectives of improving the efficiency and performance of the health care delivery system in the country. Lastly, but not the least, it should be pointed out that the article deals only with certain aspects of the reform process.

NB: Reform is interchangeably used for health care reform.

FURTHER READING

1. Report of the Regional Meeting on Health Care Reform for the Twenty-first Century in the South-East Region, Bangkok, Thailand, 20-22 October 2009.
2. "The Strategic Framework for Health Care Reform for the Twenty-first century", key presentation by Dr. Myint Htwe at the Regional Meeting on Health Care Reform for the Twenty-first Century in the South-East Asia Region, Bangkok, Thailand, 20-22 October 2009.
3. Public Health Approaches and Epidemiologic Thinking by Dr. Myint Htwe, Vol 1 Number 1, 10 September 2014, e-Bulletin of Preventive and Social Medicine Society, MMA.

(NB. This is the updated version of the article, which appeared in the Bulletin of Preventive and Social Medicine Society, volume 1 number 3, June 2015.)

PART A

CHAPTER. 7

STRENGTHENING INTERNATIONAL HEALTH COORDINATION

“The world is a place that is so interconnected that what happens in another part of the world will impact us”

- Anthony Fauci:
Director of National Institute of Allergy and Infectious Allergy Diseases

Based on opening remarks made at the "Regional Seminar on Strengthening International Health Coordination at Country Level" Jakarta, Indonesia, February 2008 and "Regional Seminar on Strengthening Country Capacities in Management of International Health Activities" Kathmandu, Nepal, August 2010)

Strengthening country capacity in coordination and management of international health activities is becoming increasingly important because there are many players and partners operating in the field of international health, covering the whole spectrum of public health. New players are emerging rapidly, often with substantial funding support from various sources. These players have their own mandates and mission statements, guiding principles, various forms of modus operandi, different planning and budgeting cycles, and different levels of expertise and governing structures.

Currently, WHO, UNICEF, UNFPA, UNDP, UNOPS, other UN agencies, the World Bank, Global Fund, GAVI, USAID, DFID, GIZ, JICA, AusAID, SIDA, CIDA, foundations, international and national NGOs, philanthropic organizations, global alliances, etc. are working in the field of public health. Without proper coordination and systematic management, it can lead to:

(i) Duplication of efforts of several players resulting in wasting of resources;

(ii) Confusion of the recipient country due to competing priorities proposed by different players;

(iii) Priority proposals or activities of these players may not be in alignment with the national priorities and policies;

(iv) The inability of the recipient country to cope with increasing demand or requirements of various players as human resources that are available in the Ministry of Health (MoH) are finite.

All these factors must be taken into account when we consider strengthening country capacity in coordination and management of international health activities. The emerging players are enthusiastic and generally recipient countries welcome these newcomers. However, given the diversity of mandates and procedures, systematic coordination, prioritization and synchronization of activities of these players are crucial.

There are several relevant units or sections or divisions in different departments under MoH, which deal with coordination of international health affairs. They are the

eyes and ears of MoH. These entities should appropriately relay the information, through proper channels, to senior officials of MoH, concerned programme and project managers in MoH in terms of available technical materials and matters, opportunities of various kinds, resources, fellowship and scholarship offers, short-term and long-term training courses, and research funding grants, that would be useful to them. This is easier said than done. To make it happen, one should develop systematic in-house procedures and simple guidelines. In other words, programme managers must be fully aware of the abovementioned information of external and international players supporting the country.

To deal effectively and efficiently with multiple players and partners in the field of health is pivotal. Concerned officials of MoH should inform external partners about the country's health policies and priorities, national health plans, strategies and targets, nature and mode of work of MoH, etc. It is important to be transparent in this endeavour. External players and partners also need to thoroughly digest about this background situation, and also be sensitive to issues and special ad hoc priorities of MoH.

In this context, it will be beneficial to have a regular platform to frankly discuss these matters (with no hidden agenda) as well as the ground realities of the situation. If both parties have clear perspectives and a collaborative spirit, there will be mutually beneficial outcomes. Currently, the modus operandi of sharing information is in place but we need to strongly reinforce it and do systematic follow-ups.

WHO is the key player in shaping and responding to changes in the field of public health. WHO is one of the closest partners of MoH and is generally non-political. Both parties usually adapt basic principles of international health coordination. In 2003, the late Director-General of WHO Dr. Lee Jong-wok in his inaugural address to the World Health Assembly stressed that "We need to do the right things, in the right places and in the right way by the right people at

TO DEAL EFFECTIVELY AND EFFICIENTLY WITH MULTIPLE PLAYERS AND PARTNERS IN THE FIELD OF HEALTH IS PIVOTAL.

the right time". This statement can aptly be applied when we are dealing with partners in international health coordination. This message was received, loud and clear, by all delegations from 192 Member countries attending the World Health Assembly in Geneva, Switzerland in May 2003.

It is to be noted that significant changes in international health cooperation and coordination have taken place during recent years, with the emergence of several global public–private partnerships, novel arrangements for governance and financing mechanisms and increased investments in health resulting in changing the way health is resourced.

The increasing number of partnerships at global, regional and country level calls for strengthened international health coordination and harmonization. This is especially the case at the country level, where several development partners and players are working, i.e., the UN system, bilateral donors, global initiatives, INGOs, civil society and other stakeholders. Greater collaboration and coordination among these partners can reduce transaction costs for both recipients and providers; it can also ensure greater coherence and efficiency by focusing on respective comparative advantages and areas of expertise and strengths of partners, and it can ultimately ensure greater impact in the field of health development.

Accordingly, one example in our country is that the "approaches and management process applied by national programme managers of various technical programmes of MoH and staff working in the WHO country office need to reconsider the approaches and adjust them accordingly".

As a former staff member of WHO and also Chief of International Health Division of the MoH, the following examples are highlighted in the context of coordination with WHO. It is to be emphasized that officials of MoH need to give extra special and undivided attention when WHO biennial programmes are developed through a consultative process, involving WHO professional staff from the regional and country office, officials from the international health division, and especially the national programme managers handling different technical programmes in the country.

That is the time when we can review our programme needs rather than just continuing the previous biennial work plan. This is due to expected as well as unexpected changes in the epidemiological situation. Health challenges are always in a state of flux. This scenario is extremely important and a strong International Health Division of MoH can easily and aptly handle it.

The three prime movers, i.e., the Programme Planning and Coordination unit at the Regional Office, planning officers or public health administrators of WHO country office and officials from the International Health

Division including programme managers, need to have a very frank and practical discussion based on ground realities through sincere sharing of experience, information and contemporary knowledge.

This is the process where we can learn from each other, thereby increasing both our work effectiveness and efficiencies. To achieve this, the basic principles to be applied are “Be frank and sincere with no hidden agenda” and “Make compromises, based on ground realities, as much as possible, if we encounter any difficult situation or confrontation”

The coordinating role that the International Health Division can play is, to the extent possible, to make arrangements so that the right persons attend international consultations, meetings, workshops and seminars. This is one form of effective international health coordination.

The participation of specific and relevant officials will not only be beneficial to the country but will help in making a quality technical contribution to the meeting outcome and to the benefit of all participants and the sponsoring organization. We should also fully utilize the technical services and support rendered by WHO Regional Office and country office staff members.

We cannot afford to send many officials to attend meetings or workshops or seminars outside the country due to budgetary constraint. In view of this limitation in resources, it would be more cost-effective if the participants attending these meetings can give feedback or follow-up or share their experiences with their national colleagues by conducting a half-day meeting on their return to their own unit or department. This should be a compulsory activity. One side benefit of this would be that participants who attended the meeting would also be serious and attentive because they know that they have to conduct a feedback meeting on return.

To be more efficient in coordinating international health affairs at the country level, with a long-term perspective in mind, technical competency of professionals of MoH needs to be further strengthened together with updating and strict application of in-house standard operating procedures, guidelines and “dos and don’ts”. Development and establishment of a robust and dynamic computerized system of work activities in international health coordination in the MoH will provide unlimited benefit which could far outweigh the investment cost.

It is impossible to describe in detail the importance of international health coordination and the International Health Division in this short article. As the scenario is dynamic, the International Health Division should always be on the alert, do introspection and adjust its modus operandi to fit into the evolving situation. A strong International Health Division means strong MoH.

Other effective instruments relevant to international health coordination as well as in dealing with and getting more funding support from donors and stakeholders are resolutions of the World Health Assembly and the WHO South-East Asia Regional Committee, declarations of the South-East Asia Health Ministers' meetings, together with the updated Country Cooperation Strategy document. These resolutions, declarations, and Country Cooperation Strategy document contain many important issues and points, which can be referred to and used in discussing and negotiating with donors, partners and stakeholders.

In order to achieve effective results and fruitful outcomes from all external support activities by way of good international health coordination, national programme managers need to review from time to time, not only WHO-supported collaborative programmes but also activities funded by external donors. If we are aware of the underlying principles and rationale, we can progress significantly to achieve good and reasonable international health coordination in the field of health. There is, however, no single recipe to fulfill all the needs.

One important challenge is how to systematically and chronologically map all the collaborative health activities and roles played by various UN agencies, foundations, philanthropic organizations, international NGOs, local NGOs, and other partners working at the country level. In this process, it would be beneficial to analyze the comparative advantage of each player. It would reveal how each of these players is fulfilling the priority needs of the country. In addition, we can see how these activities are linked to one another, taking note of any duplication of effort and giving due attention to how these activities are being performed, facilitated and monitored by officials of MoH and allied ministries. This is important, as our human resource for health is finite and insufficient in many of our States and Regions.

Another key issue that demands attention is: "All collaborative health activities supported by partners in the country must not only be linked to one another but also closely and strongly associated with national health policies, strategies and plans of the country". In essence, international health coordination must be properly coordinated, well timed, synchronized, and synergistic to the extent possible at the country level.

With this perspective in mind, there is also a need to review in-depth the coordination of international health activities together with players and partners in the country from time to time, and to take necessary remedial actions based on the findings.

It should be pointed out that improving international health coordination is not a simple and straightforward task. The scenario needs to be reviewed thoroughly, taking into consideration several epidemiological perspectives, applying a systems approach or systems analysis, reviewing various linkages, controlled or uncontrolled factors, direct and indirect influencing factors, and also the context of the review process.

THIS IS A HISTORIC MOMENT IN GLOBAL PUBLIC HEALTH, DEMONSTRATING THE INTERNATIONAL WILL TO TACKLE A THREAT TO HEALTH HEAD ON.

- Gro Harlem Brundtland:
Director-General of WHO and Prime Minister of Norway

CONCLUSION

In conclusion, it could be confidently stated that:

(i) International health coordination is an evolving process in which adjustments and improvements should be made as we go along;
(ii) There is no single recipe to cater to the needs of all partners; and
(iii) Concerted efforts of all partners involved in collaborative health activities are needed.

We need to work together so that we can come up with practical, realistic and doable country-specific plans to improve the capacity for handling international health coordination at the country level. The need to strengthen international health units/divisions of the MoH, as well as building a dynamic and robust database for international health coordination activities occurring at the country level is essential if we are going to have a good road map to increase the capacity in the management of international health coordination.

FURTHER READING

1. Opening Remarks of Dr. Myint Htwe, Director, Programme Management, at the "Regional Seminar on Strengthening International Health Coordination at Country Level" Jakarta, Indonesia, 4-6 February 2008
2. Opening Remarks of Dr. Myint Htwe, Director, Programme Management, at the "Regional Seminar on Strengthening Country Capacities in Management of International Health Activities" Kathmandu, Nepal, 16-18 August 2010

(NB. This is the updated version of the article, which appeared in the Bulletin of Preventive and Social Medicine Society, Volume 1 Number 3, June 2015.)

PART A

CHAPTER. 8

GETTING THE MOST OUT OF WHO SUPPORT

“WHO’s work will be guided by three principles: We must do the right things. We must do them in the right places. We must do them right away”

– LEE Jong-wook:
Director-General of WHO

Based on the short talk to program managers of MoH at Nay Pyi Taw (July 2010). The article was written from the perspective of a WHO staff member at that point in time. The then Director-General of Health Dr. Win Myint - currently Deputy Minister for Health - chaired the session.

The World Health Organization (WHO) has three levels, the Headquarters in Geneva, Switzerland, the Regional Office for South-East Asia in New Delhi, India (SEARO) and the country office in Yangon. WHO professional staff working at all these three levels are supporting the Ministry of Health (MoH) in terms of providing collaborative technical and funding support by way of initiating several programmes and projects. Individual countries must also be proactive and take full advantage of this support to the extent possible for promoting the domain of public health in the country.

Therefore, close linkages and frequent communication between programme managers of MoH and the WHO Country Office staff is an essential first step. Monitoring and exchange of information regarding issues, challenges, implementation status, and completion of implementation must be maintained and communicated throughout. WHO country office staff are also getting technical support from SEARO and Headquarters as and when necessary. The MoH must be active and project its technical and financial needs. New initiatives for inter-country collaboration and networking must be proposed to WHO for coordination and support.

It is essential that programme managers of MoH and WHO country office staff should meet at least on a six-monthly basis, and discuss various issues of programme management and implementation, using an agreed upon "Framework for Discussion". It could lead to clear-cut action points from both sides and automatically pave a roadmap for successful implementation. It would also facilitate having a realistic WHO biennial work plan.

It is to be noted that WHO biennial work plans are flexible and dynamic and can be changed as per the requirement of the evolving epidemiological scenarios and also as per the guidance of the Ministers, Deputy Ministers and Directors-General of the MoH. However, the caveat is that frequent changes are not desirable as they can disrupt the ongoing process of work. Thus, proper and careful planning at the outset of developing the biennial programme of work is crucial.

WHO country office staff are always on standby to facilitate this change. In this process, they can get technical inputs

and support from the Regional Office and Headquarters, as appropriate. The WHO collaborative work plans need to be critically reviewed as we go along. The duty of WHO country office staff is to make the work plans more technically acceptable and the outputs or outcomes beneficial to the country.

We need to consider to what extent programme managers are proactively involved in the development of Country Cooperation Strategies and the WHO biennial work plans. We need to promote this process of active involvement by programme managers. The process must not be left to the WHO country office staff. Bottom-up planning is the principle for WHO work plan development. The most important part of WHO's biennial work plan is establishing a very simple, practical and doable built-in monitoring system for programmes and activities. The WHO work plan must also be in line with the contemporary epidemiological situation of the country and should not replicate the last biennial work plan.

Once the WHO regular budget is allocated, the chance of getting the funding is very high. However, when WHO work plans are developed, it is essential to review hundreds of activities that are being funded by other UN agencies, development partners, international NGOs, foundations, alliances, etc. This will ensure less duplication and redundancy of activities. This is an issue which requires urgent and special attention.

A workshop should be held to review the modus operandi of how these collaborative activities by all stakeholders are being worked out, developed and approved to be conducted in the country. It varies from country to country and we may take the experience of other Member countries in the WHO South-East Asia Region through the good offices of WHO-SEARO. It appears that there is not much coordination in this aspect.

CHARACTERISTICS OF THE WHO WORK PLAN

We should try to include, as much as possible, and reflect the following characteristics in the WHO work plan.

(i) It must be in alignment with the National Health Policy, National Health Plan and WHO Country Cooperation Strategies;
(ii) It should reflect the guidance and speeches delivered by the Minister, Deputy Ministers of Health, Directors-General of MoH and senior officials of the government;
(iii) Activities proposed must be concrete, action and output oriented;
(iv) Capacity building activities, reorientation courses, training workshops, technical seminars, annual evaluation meetings must be included;
(v) Development of guidelines, local advocacy materials, translation of guidelines on several technical matters, standard operating procedures, etc. into local languages;
(vi) Operational research and implementation research activities, where findings can be utilized for program development and management as well as for increasing the efficiency of various technical programs;
(vii) Program reviews, e.g., school health

program; cardiovascular diseases control program; health education program; zoonotic diseases control program; capacity building activities of all WHO collaborative programs.

(viii) Review of curriculum for nursing, paramedical, midwifery, public health, preventive and social medicine subjects, etc.;

(ix) Capacity building activities for teaching staff of medical schools, nursing and midwifery schools, etc.;

(x) Development of checklists for quick assessment of different activities or programs or performance of staff; and

(xi). Conduct of seminars or forums or symposia such as for medical education, research, public health or other technical subjects of contemporary importance for the country.

SOME SPECIFIC ACTIVITIES FOR CONSIDERATION.

Here are some specific activities, which could be considered for inclusion in the work plan.

(i) Development of a quick assessment tool using a checklist to assess any system or activity;

(ii) Analysis of indicators used in different programs and refinement of these indicators;

(iii) Checklists to review the performance of rural health centers and sub-centers, Township hospitals, district hospitals, and state/regional hospitals in terms of operational, administrative, logistics and technical aspects;

(iv) Checklists to review the performance of nurses, midwives, health assistants,

WE NEED A WHO – FIT FOR THE 21ST CENTURY – THAT BELONGS TO ALL, EQUALLY. WE NEED A WHO THAT IS EFFICIENTLY MANAGED, ADEQUATELY RESOURCED AND RESULTS DRIVEN, WITH A STRONG FOCUS ON TRANSPARENCY, ACCOUNTABILITY AND VALUE FOR MONEY.

Tedros Adhanom:
Director-General of WHO

township medical officers, township health officers, etc.;

(v) Implementation research on any program performance. (It will yield real issues related to efficiencies or inefficiencies or gaps in a program).

The reviews using these checklists can reveal ground realities very quickly and it is very cost-effective. WHO's Agreement of Performance of Work (APW) or Direct Financial Cooperation (DFC) mechanisms can be used for payment to whoever develops these checklists. It is better to outsource "development of checklists" to persons who have deep knowledge about the performance of the health care delivery system in the country.

IMPORTANT GENERAL INFORMATION FOR PROGRAM MANAGERS

WHO staff members are assigned in the country to serve the country and to fulfill the technical needs of WHO collaborative programs. These staff members should always consider how to achieve this in the most effective and efficient way. A series of brainstorming sessions can help in achieving these objectives. Another key function of WHO country office staff is to disseminate technical information to their counterparts in MoH.

After every meeting or workshop, we need to critically assess its usefulness and beneficial effect. WHO is apolitical and unbiased in its work and the support given by WHO will not be affected by political ramifications or changes occurring in the country. The WHO staff members are always ready to render full support to the MoH to the best of their capacity and capability.

It is also important to note that WHO's budget has a regular component which is given as regular budget to individual countries and there is a voluntary contribution component, which is managed by the Regional Office. The voluntary contribution funds are generally used for inter-country collaborative programs or activities and other contemporary priority programs or projects as agreed by the Regional Committee, South-East Asia Health Ministers meeting, and other high-level policy meetings of WHO.

CONCLUSION

Program managers must take full advantage of WHO funding support, although not very high, as it is somewhat flexible and accords priority on technical perspectives of various programs. The whole team of WHO country office staff, medical officers, scientists, regional advisers, coordinators, and Directors from SEARO are always on standby to assist the technical needs of Member countries. The main duty of program managers is to implement WHO collaborative programs in a timely and qualitative manner. Let us closely collaborate with WHO to improve the effectiveness and efficiency of the health care delivery system in the country.

PART A

CHAPTER. 9

GENERAL PRACTITIONERS: A STRONG WORKFORCE FOR PROMOTING PUBLIC HEALTH

“Given one well-trained physician of the highest type and he will do better work for a thousand people than ten specialists”

- William James Mayo:
A noted American physician and surgeon and one of the seven Founders of Mayo Clinic

(Based on the presentation made during the brainstorming session at the 58th Myanmar Medical Conference, Yangon, January 2012)

The purpose of selecting this title is to show some ideas so that in-service health professionals and private practitioners or general practitioners (GPs) can collaborate in various avenues for the benefit of the country. In this article, general practitioners are defined as "those doctors who are running small clinics or group practice in bigger clinics to cater to the health needs of the population with a fee for treating the patients". It may be recalled that a symposium on "Enhancing the Role of GPs in National Health System" was organized more than a decade ago, by the Myanmar Academy of Medical Science (MAMS) in collaboration with GP society of Myanmar Medical Association (MMA).

It is worth revisiting this subject area, as the current epidemiological situation of diseases and conditions, administrative structure of the Ministry of Health, and working conditions of GPs have changed significantly over the years, as has the demand and need of the population towards health care. Functioning of the health care delivery system and involvement of stakeholders in the field of health is different than in the past.

The increasing importance of the role of GPs in the national health care delivery system is now being recognized. The modus operandi of the health system can be improved and facilitated through the involvement of GPs who are the first line point of contact with the population at large. One important fact is that, to promote the overall health status of the population in any country, one needs to implement public health activities or interventions in a qualitative and systematic manner involving all players or stakeholders in the field of health.

ROLE OF GENERAL PRACTITIONERS IN THE CURRENT CONTEXT

A general practitioner is the physician who is primarily responsible for providing comprehensive health care to every individual seeking medical care, and arranging for all other health personnel to provide services where necessary (World Organization of Family Doctors, WONCA, 1991). There are several connotations about GPs as defined by various organizations or associations. They are a group of doctors who receive special respect from the community at large and they

play an important role in community affairs especially in the rural setting in Myanmar's context.

The interaction and relationship of GPs with patients is very strong in Myanmar. Therefore, preventive care, which is generally based on principles of partnership with the patients, can easily be worked out for long term benefit of the population. Nobody can deny the important role that GPs play in promoting population health. They are like saints for the population. There are several aspects to be considered in discussing their role in promoting the health status of the population: viz., the role to be played by the Ministry of Health (MoH) versus the role to be played by GP Society of MMA versus the role to be played by the GPs themselves.

In the field of general practice, there is always a dilemma between the emphasis given to preventive care and ongoing patient treatment care. A key role of GPs is the maintenance of wellness of a person as a positive state of health as well as incorporating prevention of illness, injury and disease and, therefore, reducing the burden of illness in the community.

In order for GPs to contribute effectively and systematically in the field of public health, GPs should work in close collaboration with MMA. GP Society of MMA is the prime mover to initiate "many strategic activities" which are of crucial importance in improving the health status of the population. These "many strategic activities" are, in fact, public health activities or interventions. MMA has been effectively supporting to upgrade the knowledge and performance of GPs by way of conducting numerous Continuing Medical Education (CME) courses such as emergency management in general practice, common clinical problems in general practice, community medicine, family medicine and diagnostic medico-surgical procedures, etc. These are very much conducive to improving the overall health status of the population either directly or indirectly.

One needs to broaden the scope and momentum of CME activities conducted by GP Society of MMA. These activities need to be considered along the principles of

THE POLICY OF THE MINISTRY OF HEALTH TOWARDS COLLABORATION WITH GPS MAY NEED TO BE REVISITED AND MODIFIED AS APPROPRIATE.

promoting public health without adversely affecting the clinical services rendered by GPs. As a matter of fact, GPs by nature will give priority to clinical aspects, which is acceptable.

CAN GPS IMPROVE THE OVERALL HEALTH STATUS OF THE POPULATION?

GPs generally live in the community where they are practicing, especially in the rural setting, thus enabling them to see patients 24 by 7.

(i) GPs provide multidisciplinary service individually or to the family as a whole;
(ii) GPs can provide integrated care: curative as well as preventive, promotive or rehabilitative, as per the need;
(iii) GPs understand socioeconomic and cultural components of individuals and the family;
(iv) GPs can provide individual and personalized care through long-standing friendship and understanding; and
(v) GPs have the total confidence of the patient.

With this wide spectrum of care, GPs can undoubtedly improve the health scenario of the people in their catchment area.

WHAT AND HOW CAN GPS DO TO IMPROVE THE OVERALL HEALTH STATUS OF THE POPULATION?

The major area that GPs can be involved in is health education in the context of sharing or educating the patients in the public health aspects of diseases that they are suffering from. Each and every disease has public health aspects in terms of prevention, promotion and rehabilitation. In fact, it will be very useful if we have a book devoted exclusively to public health aspects (prevention and control) of prevailing communicable and non-communicable diseases or conditions in Myanmar's context and quoting Myanmar-specific scenarios.

Advising or informing a TB patient on how to prevent the spread of TB bacilli (protected coughing using a handkerchief, careful management of sputum or secretions, etc.) to other family members or close contacts will definitely reduce the morbidity of TB in the family or community. Educating the TB patient to take regular and complete treatment on grounds of public health reasons will somehow reduce the incidence or emergence of drug resistance tuberculosis in the community. Disseminating important information to patients can subsequently benefit many others in the community. It will be beneficial to consider spending a few more minutes during the consultation to health educate the patient.

GPs, therefore, have the opportunity to promote health, and undertake opportunistic preventive care for those who are at high risk to infect others. Effective preventive care enhances the quality of life, reduces unnecessary morbidity and mortality, and improves health outcomes. Generally, GPs concentrate on giving quality treatment to patients without emphasizing public health aspects of diseases in view of time constraints and other factors. We need to

promote specific information transmission for each and every disease by the GPs. This is just one example of the important role that GPs can play in improving the health of the community.

The role of GPs is especially important in times of impending outbreak or outbreak of any communicable disease. It is desirable that GPs work very closely with officials of MoH, who should also recognize that GPs are important in preventing and containing any disease outbreak. Early reporting of unusual case occurrence to responsible officials of MoH is extremely crucial for early containment of an outbreak. This communication channel should be outlined very clearly at different levels of the health care delivery system.

Currently, there is no set communication channel. The guidelines or information concerning management of a particular impending outbreak or in times of outbreak must permeate effectively to the GP community. This could result in proper supportive management or assistance to an outbreak and MoH can contain the outbreak effectively in a short period of time. Mutual respect and reciprocity of benefit between officials of MoH and GPs must be firmly established and sustained using various avenues.

As per the culture of Myanmar, patients have tremendous respect and confidence in GPs who are treating them. Therefore, advice or suggestions given by GPs are always considered seriously, appreciated and practiced to the extent possible by the

IT IS MUCH MORE IMPORTANT TO KNOW WHAT SORT OF A PATIENT HAS A DISEASE THAN WHAT SORT OF A DISEASE A PATIENT HAS – SURELY THIS WAS OSLER, NOT HIPPOCRATES?

David Misselbrook:
Retired GP and author of Thinking of Patients

patients. During periods when patients are undergoing treatment at clinics, they are also in a receptive mode of listening and taking advice or guidance of GPs fully. GPs, therefore, should take full advantage of this situation. In this instance, a word of advice concerning preventive, promotive and rehabilitative aspects of communicable or non-communicable diseases should be given in simple, clear-cut terms.

When MoH or international agencies or organizations distribute public health or public health-related posters, or disease outbreak-related posters and pamphlets to the population, these should also be distributed to private clinics as a medium for health educating patients. The degree of "receptiveness to advice" is high during such outbreaks. It is also important not to give all information or many words of advice. Only key or strategic information must be given. There is a chance of information overload which can cause confusion.

Health education talks given to a group of people in the community by so-called popular or renowned GPs would be very effective in promoting the health status of the community. This type of group talks could be conducted in close collaboration with public health officials of MoH. This can also create a sense of cohesiveness and team spirit between GPs and officials of MoH. It would be very conducive to promoting and making the foundation of public health strong. It is such public health interventions that can help improve the overall health status of the population.

Topics like "Role of GPs in promoting health status of the population" and "Basic concepts of public health", etc. should be included in CME programs for GPs. These should be carefully prepared with the help of experienced public health professionals and senior GPs. The program should also be modified, updated and improved continuously. GP-oriented, affordable, user-friendly and less time-consuming CME programs are essential. When the internet system is good and fast, one may think of conducting very short online training courses including essential public health activities or functions that GPs can be involved in.

GPs must be well aware of different guidelines or standard operating procedures on the treatment of communicable and non-communicable diseases issued by MoH or WHO or other UN agencies especially on prevention, health promotion, and rehabilitation aspects. Practicing as per the guidelines will not only improve treatment success rate, but also facilitate their clinical practice. At the same time, it can reduce the incidence and spread of diseases in the community. This will finally result in the reduction of morbidity and mortality of diseases or conditions and thereby improve the overall health status of the population.

The important role that GPs can play in the health care delivery system should be recognized by GPs themselves. Some of the strategic roles that GPs can play are:

(i) Reporting any notifiable disease to the concerned health authority so that

preventive, control or containment activities can be initiated in time to reduce morbidity and mortality of a particular notifiable disease and thereby directly or indirectly raising the health status of the population.

(ii) GPs can be involved in government-initiated public health activities in the field such as for immunization (National Immunization Days), nutritional improvement programs, school health programs, relief efforts during disasters, control of acute respiratory tract infections, control of diarrheal diseases, cardiovascular diseases control, cancer cervix detection, cancer breast detection programs, etc.

GPs should consider themselves as frontline medical care providers and their clinical acumen as well as the understanding of basic concepts of public health is important. This could be achieved through CME programs of GP Society of MMA.

In our medical education system, "general practice" as a separate discipline or as a specialized subject is well accepted. One day it may be possible that so-called GP specialists can contribute as major players to the overall improvement of the health of the population as is seen in the United Kingdom. Improving the quality performance of GPs is one way, either directly or indirectly, to improve population health. As a stop-gap measure, one may think of compulsory credit courses for improving the clinical acumen of GPs for renewing doctor registration. But special and systematic preparation with long-term objectives must be made to ensure sustainability.

GPs may be invited to some national or state or regional or township level workshops or meetings on public health issues if MoH officials deem it appropriate. This can create a sense of team-work or team-spirit in carrying out public health activities in the field. It may be too optimistic but this is the direction one needs to take in the long run. One may also think of some motivational incentives for those GPs who are involved in health promotion and disease prevention activities in the community. They may be rewarded not necessarily in monetary terms but in esteem and professionalism. The role of GPs may be changed when the health insurance system is in place in the country, but it may take a while.

By nature of their work, a GP's primary interest is treating ill patients. This fact should always be kept in mind whenever we want GPs to be involved in public health activities of MoH. It is time for change. Involvement of GPs is crucially important in tackling local public health problems or promoting public health activities, especially in remote and underserved areas. Patients are more receptive to GPs and are more likely to follow their advice.

It is important that GPs should have a clear-cut concept of basic principles and functions of public health and how some of the public health activities can be incorporated into their work without affecting clinical practice unduly. One crucial aspect which needs to be considered as a long-term perspective is teaching preventive and social medicine subjects in every year of MBBS course. Thus,

newly graduated MBBS doctors have a good command of basic principles and practice of public health. This will facilitate promoting public health in their private clinical practice also.

CONCLUSION

We need to make a compromise between GPs' intention, which is emphasizing clinical aspects and public health professionals' objective, which is promoting public health interventions. GPs primary focus is on the individual patient while public health focuses on the community as a whole. We need to strongly promote the notion that GPs are part and parcel of the national health care delivery system and GPs involvement in government-initiated health care activities is extremely important and essential for overall health development of the country.

THE GP WORKFORCE IN MYANMAR IS HUGE AND THEIR INVOLVEMENT IN HEALTH PROMOTION AND DISEASE PREVENTION ACTIVITIES WILL HAVE A SIGNIFICANT AND POSITIVE IMPACT ON POPULATION HEALTH.

The policy of MoH towards collaboration with GPs may need to be revisited and modified as appropriate. To be systematic in doing so, the formation of local area networks of GPs is crucial under the umbrella of GP Society of MMA, so that like-minded associations or organizations can be involved.

All the above-mentioned suggestions or activities need to be considered in a holistic manner. Systematic planning could be made by GP Society of MMA in collaboration with officials of MoH and other relevant agencies so that the momentum of involvement of GPs in public health promotion activities in the country can be further enhanced. These

activities are well recognized and known to all of us.

One needs to make more efforts so that some of these activities may become part and parcel of GPs' work in the long run. The current challenge is to obtain maximum and optimal partnership between GPs and the public health arm of MoH. The partnership building may take time but efforts must continue to be made in achieving it.

MMA role is crucial in promoting the role of GPs in improving the overall health status of the population. As reciprocity, MoH may also give due attention to the overall needs of GPs if their serious involvement in public health activities is to be achieved. The GP Society of MMA has been playing a significant role in building the capacity of GPs. If more preventive aspects or preventive health care activities are included in the capacity building programs, it will be very beneficial to the country in terms of promoting the health status of the population. Whatever direction that is taken, the sustainability issue must always be considered without fail.

It is abundantly clear that GPs in Myanmar actually bear a great slice of the burden of health care provision. The GP workforce in Myanmar is huge and their involvement in health promotion and disease prevention activities will have a significant and positive impact on population health.

FURTHER READING

1. Proceedings of MAMS Symposium on "Enhancing the Role of GPs in National Health System." – organized by MAMS in collaboration with MMA, General Practitioner Society, January 2003
2. Report of the MAMS Task Force on General Practice, May 2001
3. A Shared Agenda in the New World: The role of GP consortia and public health and wellbeing and delivering effective health care. A colloquium sponsored by the NHS Alliance and QIPP Right Care Team and organized by Solutions for Public Health (NHS), January 2011.
4. Population Health and Public Health. The RACGP curriculum for Australian General Practice. The Royal Australian College of General Practitioners (RACGP), 2007
5. The role of General Practices in Prevention and Health Promotion. Policy endorsed by the 48th RACGP Council, May 2006
6. Putting Prevention into Practice.2nd edition, Melbourne: RACGP, 2006

(NB. This is the updated version of the article, which appeared in the Bulletin of Preventive and Social Medicine Society, Volume 1 Number 4, October 2015.)

PART A

CHAPTER. 10

PUBLIC HEALTH APPROACHES AND EPIDEMIOLOGIC THINKING

“Epidemiology has become an increasingly important approach in both public health and clinical practice. It plays major roles in developing and evaluating public policy relating to health and to social and legal issues”

- Leon Gordis:
Professor Emeritus of Epidemiology, Johns Hopkins University Bloomberg School of Public Health

> **"Epidemiology is like a bikini: what is revealed is interesting; what is concealed is crucial."**
>
> **- Peter Duesberg:**
> Professor of Molecular and Cell Biology,
> University of California, Berkeley

Public health approaches and epidemiologic thinking always go hand in hand. Practicing public health approaches without applying epidemiologic thinking is doomed to fail, program costing will be high, the impact will be less and sustainability of the program is questionable.

Public health approach connotes "considering the whole community or area or region or the whole country, involving all collaborating partners and stakeholders, working collectively with various disciplines and sectors, mindful of culture, customs and habits of people, and working systematically along set objectives and strategies, taking into account of epidemiologic triad (External agent, Susceptible host, Environment including Vector) in the context of time, place and person".

It is a comprehensive approach to tackling public health issues or problems or conditions. It is different from the clinical approach where the main objective is to treat sick people, cure the disease and rehabilitate them. Public health approaches are generally implemented in a step-wise and phase-wise manner based on a rational plan with clear-cut objectives and goal.

Improving the overall health status of the population can only be achieved if we apply public health approaches or interventions. Building more hospitals is only one of the supporting avenues to supplement public

health approaches. If the country has a strong public health domain by way of practicing good public health approaches, it is bound to achieve the objective of improving the health status of its population.

One additional point that is worth mentioning is, 'If public health approaches are practiced within the gamut of principles of public health ethics, it would become the best public health approaches ever practiced".

Epidemiologic thinking is more than an analytical thinking where a particular issue is considered from the perspective of getting results or inference by doing analysis on the available data or information. In fact, it is a very simplified and straightforward form of epidemiologic thinking. Epidemiologic thinking is a basic reasoning pattern of every seasoned public health professional or epidemiologist.

Epidemiologic thinking perceives a scenario from different perspectives or angles or planes, and comparing it with different or similar scenarios, observing various controlling or determining factors leading to the scenario at hand. It also includes noting trend pattern of the scenario at hand, identifying the most important controlling or determining or interacting or facilitating factor, and its impact on the surrounding environment.

Epidemiologic thinking is commonly applied in management and control of disease outbreak or epidemic, in-depth scenario review, program development and management, formulation of health policy and strategy, etc. The domain of epidemiologic thinking is wider than systems analysis. Epidemiologic thinking is essentially dynamic and reasoning pattern in epidemiologic thinking should also be in line with the changing epidemiological scenario.

Upcoming epidemiologists and public health professionals need to inculcate and nurture epidemiologic thinking through one-to-one intensive discussion, all-inclusive group discussion, brainstorming, debating, triangulation, in-depth focus group discussion, etc. Epidemiologic thinking is one form of skill, which all public health professionals and epidemiologists have to strive for, acquiring it over the years. There is always a room for improvement. A reputable epidemiologist or seasoned public health professional possesses sound epidemiologic thinking skill. We all should try to improve our epidemiologic thinking skill as we go along in improving the domain of public health.

(NB. This is the updated version of the article, which appeared in the Bulletin of Preventive and Social Medicine Society, Volume 1 Number 1, September 2014.)

PART A

CHAPTER. 11

RATIONAL DECISION MAKING IN PUBLIC HEALTH

“We should challenge ourselves to engage in ethical decision making”

-Jessica Sierra:
Trustworthy and Ethical Technology Program,
Deloitte

> **"The hardest decisions in life are not between good and bad or right or wrong, but between too goods and two rights."**
>
> **- Joe Andrew:**
> Global Chairman of Dentons

Public health professionals, program managers and policy makers of the Ministry of Health (MoH) have been taking decisions on several issues related to public health in terms of selection of various programs, special projects, strategies, interventions, resource allocation, production of human resource for public health, management of disease outbreaks, strengthening of rural health centers and sub-centers, identification of public health research agenda, retention of health personnel in rural and remote areas, prioritization on many issues in public health, etc.

Application of some of the public health principles can facilitate in taking rational and balanced decisions. It can also lead to fruition of overall objectives of MoH which were set as:

1. To enable every citizen to attain full life expectancy and enjoy longevity of life; and
2. To ensure that every citizen is free from diseases.

However, in addition to public health principles, public health professionals must be well versed with principles of public health ethics for facilitating the decision-making process. Because, decision making in public health involves the application of two principles, i.e., (i) principles of public health; and (ii) principles of public health ethics.

Public health ethics is a relatively new field of study, emerging a couple of decades ago, arising out of dissatisfaction with the traditional orientation of biomedical ethics.[3] It was also fueled by bioterrorism and infectious disease threats due to 9/11 and Severe Acute Respiratory Syndrome (SARS)9. In the field of ethics, we have generally four major areas:

(i) Bioethics (the study of ethical issues brought about by advances in biology and medicine);
(ii) Clinical ethics (analysis of ethical issues and dilemmas in clinical practice);
(iii) Research ethics (protection of research subjects in compliance with ethical principles laid down in Belmont report, Declaration of Helsinki and many WHO CIOMS guidelines); and

(iv) Public health ethics (practical decision making that supports public health policy and mandate)[6].

Medical and research ethics give more attention to individual autonomy whereas public health ethics focuses on a group of people or community. Three main ethical principles of research ethics are enshrined in Belmont principles:

(i) Respect for persons (autonomy and protection of those with diminished autonomy);
(ii) Beneficence and nonmaleficence (do no harm and maximize possible benefits and minimize possible harms); and
(iii) Justice (giving persons what they deserve and fair distribution of burdens and benefits) are also considered as part of public health ethics but are balanced against other considerations that are unique to public health[6].

In essence, public health ethics can be seen as principles and norms for guiding the practice of public health and as a process of identifying, analyzing and resolving ethical issues in public health6.

Public health ethics is complex and evolving. The public health team generally comprises general public health professionals, epidemiologists, social scientists, health economists, sociologists, etc. General public health professionals place emphasis on policy and strategic perspectives, epidemiologists on evidence, health economists on utility, environmentalists on future generations, and sociologists on social justice.

Managing public health ethics issues related to policies of government (health institutions), population (communities with different characteristics) and individuals (with different background experiences) needs a certain amount skill and must be handled very carefully. Public health professionals must, therefore, consider beyond the abstract and must be grounded in the real world. Otherwise, there will be unnecessary ethical tensions in taking decisions related to public health.

When public health activities are implemented, some of the individual liberties or autonomy may be lost. Therefore, a framework of ethical analysis in public health is necessary to guide public health professionals for ethical decision making[8]. Public health ethics focuses on public health issues related to populations, institutions, communities, and geographical areas. Many of us are familiar with bioethics, clinical ethics, and research ethics.

In fact, we are practicing public health ethics to some extent in our decision-making process on several public health issues. However, many public health professionals are not very familiar with the application of principles of public health ethics in their decision-making process during the course of their work.

Simply put, public health ethics is the application of relevant ethical principles and moral values to public health such as in justifying public health programs and public

health policy formulation, selection of public health interventions from among various possible alternative courses of action. Decision making in public health is not solely dependent on technical perspectives but also on certain distinctive characteristics of public health.

One important fact in public health is interdependence of people and events. It means that health status of the individual is closely linked to the health of the population. Therefore, consideration of ethical perspectives on public health issues is equally important and should be part and parcel of the decision-making process.

National health policymakers also need to consider ethical principles not only in formulating but also in implementing health policies in their specific national context, customs, and cultures5. When public health ethics is applied, one must look beyond public health and also see how social and economic determinants are affecting public health. It is crucial that ethical principles and values underlying decision making in resource allocation of public health projects and programs must be clearly stated and documented.

The rationale given by the government on decision-making in public health will depend on the overall policy of the government, national health policy, socioeconomic situation of the country and may be different from that of international agencies, foundations, nongovernmental organizations and professional associations.

Decision making in the public health domain should not be done by one person. By the very nature of public health, decision making in public health must be done collectively taking into consideration relevant ethical principles and moral values together with long-term and short-term implications on the recipient population.

There are several examples by which public health ethics is considered in managing a public health issue, management of outbreaks and disasters, public health policy making and public health intervention selection. Several criteria are used in dealing with a scenario to achieve what we call practicing good public health ethics.

Professionals in the field of ethics have proposed several ethical frameworks on public health. The six-step ethics framework proposed by Nancy E Kass seems to be applicable in most situations. The framework will guide public health professionals regarding ethical implications of proposed public health policies, programs, projects, strategies, interventions and initiatives. Taking into consideration the six-step ethics framework[8], public health professionals should further explore along the following lines.

(i) What are public health goals of proposed programs, projects, and interventions? Are they in line with the national health policy and plans? Are they targeting the real need of the specific population groups or community?
(ii) How effective are programs, projects,

and interventions in achieving the stated goals? Are there other programs, projects and interventions more effective and efficient than the proposed ones? Will recipient population groups be treated equally or receive the benefits equally?

(iii) What are the known or potential burdens of programs, projects and interventions on the community?

(iv) Could these burdens be minimized? Are there alternative approaches?

(v) Are programs, projects and interventions implemented fairly?

(vi) How can benefits and burdens of programs, projects and interventions be fairly balanced?

Another example is ethical issues in pandemic planning[4], which can be applied in a generic manner to contain most pandemic or epidemic communicable diseases. Ethical issues are related to health risk assessment, resource allocation, hospital management decisions including rationing of antivirals, allocation of hospital beds and vaccinations, identifying occupational risk levels and staff duties and roster, inclusive planning and decision making, etc.

We must take all these into account based on a clear ethical framework so that all those involved in the management of a pandemic will have a fair share of responsibilities. To facilitate discussion of a scenario, the following set of management principles could be applied, i.e.,

(i) Act on the best available evidence or information;

(ii) Ensure transparency in decision making;

THE MOST IMPORTANT DECISIONS YOU MAKE ARE NOT THE THINGS YOU DO, BUT THE THINGS YOU DECIDE NOT TO DO.

-Steve Jobs:
American business magnate

(iii). Maintain transparent and regular communications;
(iv) Be sensitive to cultural requirements;
(v) Practice inclusive decision making on equal footing;
(vi) Be accountable and responsible; and
(vii) Responsiveness in the decision-making process[4].

Five general ethical considerations that could be applied in developing a public health response to any pandemic are[14]:

(i) There must be a balance among rights, interests, and values;
(ii) Use best available evidence but remain flexible and unbiased;
(iii) Seek transparency, public engagement, and social mobilization;
(iv) Inform, educate and communicate; and
(v) Justify resource constraints and justifications.

PUBLIC HEALTH SHOULD ACHIEVE COMMUNITY HEALTH IN A WAY THAT RESPECTS THE RIGHTS OF INDIVIDUALS IN THE COMMUNITY.

Ethical consideration in preparedness planning for pandemic influenza made by the University of Toronto Joint Centre for Bioethics, Pandemic Working Group was an excellent example for public health professionals to follow. It can be applied in several similar instances.

The full set of ethical analysis framework, as proposed by Garre-Bernheim R, et al, encompasses three sections:

(i) Analyze the ethical issues in the situation;
(ii) Evaluate ethical dimensions of alternate course of public health actions (utility,

justice, respect for individual interests and social value, respect for legitimate public institutions); and

(iii) Provide justification for a particular public health action (effectiveness, proportionality, necessity, least infringement, public justification)[12].

In the United States, the Centre for Health Leadership and Practice, Public Health Institute, had initiated the development of Principles of Ethical Practice of Public Health with involvement of Centers for Disease Control and Prevention (CDC), Public Health Leadership Society (PHLS), American Public Health Association (APHA), and public health academia and ethicists. The 12 ethical principles were written with the American public health system in mind. It was formally adopted by APHA Executive Board in February 2002[13]. In fact, the codes were directed towards institutions and were based on several ethical concepts such as human rights, distributive justice, beneficence, interdependence between humans versus autonomy, confidentiality versus information sharing, etc. (http://www.apha.org /codeofethics).

Many of the statements can be applied in situations observed in developing countries. It is desirable that we should have such a code of practice or ethical principles in public health in Myanmar's context. The code cannot be static because the world is changing and so are new ethical challenges in public health are emerging.

The principles of ethical practice of public health in a pandemic situation were based on the following values and beliefs, which are applicable in developing countries also[13]. These are:

(i) Humans have a right to the resources necessary for health;
(ii) Humans are inherently social and interdependent;
(iii) The effectiveness of institutions depends heavily on the public's trust;
(iv) Collaboration is the key element in public health;
(v) People and their physical environment are interdependent;
(vi) Each person in a community should have an opportunity to contribute to public discourse;
(vii) Identifying and promoting fundamental requirements for health in a community are of primary concern to public health;
(viii) Knowledge is important and powerful;
(ix) Science is the basis for much of our public health knowledge;
(x) People are responsible for acting on the basis of what they know; and
(xi) The action is not based on information alone.

Public health professionals should consider the following 12 Principles of Ethical Practice of Public Health13 before taking decisions on any public health issue.

(i) Public health should address principally fundamental causes of disease and requirements for health, aiming to prevent adverse health outcomes;

(ii) Public health should achieve community health in a way that respects the rights of individuals in the community;

(iii) Public health policies, programs, and priorities should be developed and evaluated through processes that ensure an opportunity for input from community members;

(iv) Public health should advocate and work for empowerment of disenfranchised community members, aiming to ensure that the basic resources and conditions necessary for health are accessible to all;

(v) Public health should seek information needed to implement effective policies and programs that protect and promote health;

(vi) Public health institutions should provide communities with the information they have that is needed for decisions on policies and programs and should obtain the community's consent for their implementation;

(vii) Public health institutions should act in a timely manner on the information they have, with the resources and the mandate given to them by the public;

(viii) Public health policies and programs should incorporate a variety of approaches that anticipate and respect diverse values, beliefs, and cultures in the community;

(ix) Public health programs and policies should be implemented in a manner that most enhances the physical and social environment;

(x) Public health institutions should protect the confidentiality of information that can bring harm to an individual or community if made public; (Exceptions must be justified on the basis of high likelihood of significant harm to individuals or others).

(xi) Public health institutions should ensure professional competence of their employees; and

(xii) Public health institutions and their employees should engage in collaborations and affiliations in ways that build the public's trust and institution's effectiveness.

We cannot simply apply the principles of medical ethics to public health, which deals with large groups of the population rather than with an individual person or patient. It is to be noted that public health laws and public health ethics are complementary because public health laws may be a useful starting point for consideration of public health action[6].

CONCLUSION

In conclusion, if we apply principles of public health ethics in public health practice, we can:

(i) Rationally prioritize and justifiably conduct appropriate public health interventions;

(ii) Have greater transparency in public health decision making to earn public trust and confidence and thus collaboration with the communities can be easily achieved; and

(iii) Augment scientific integrity and professional competency in the field of public health[6].

All these factors will greatly facilitate achieving the objectives of MoH in addition to successfully implementing the strategic directions of national health policy. We should, therefore, apply principles of public health ethics as one of the important tools for decision making in public health.

REFERENCES

1. Carl H Coleman, Marie-Charlotte Bouesseau, Andreas Reis, The Contribution of Ethics to Public Health, Bulletin of World Health Organization, August 2008, 86 (8)
2. Public Health Ethics, CDC, Atlanta, GA, USA (PHEthics@cdc.com)
3. Public Health Ethics - Selected Resources: Ethics in Pandemic, National Collaborating Center for Healthy Public Policy, Quebec, May 2010 (www.ncchpp.ca)
4. Torda, A. (2006). Ethical Issues in Pandemic Planning. Medical Journal of Australia, 185(10 Suppl.) S73-S76
5. Carl H Coleman, Marie-Charlotte Bouesseau, Andreas Reis, Alexander M Capron, How should Ethics be Incorporated into Public Health Policy and Practice? Bulletin of World Health Organization, July 2007, 85 (7)
6. Good Decision Making in Real Time: Public Health Ethics Training for Local Health Departments. Facilitator's Manual, Centers for Disease Control and Prevention, US Department of Health and Human Services. August 1, 2012.
7. James C Thomas, Michael Sage, V James Guillory, A Code of Ethics for Public Health, Am J Public Health. 2002 July; 92 (7): 1057-1057
8. Nancy E Kass, An Ethics Framework for Public Health. Am J of Public Health, 2001 November, 91 (11)
9. Bernheim, RG. Public Health Ethics: The Voice of Practitioners. Special Supplement to Volume 31, Number 4: The Public's Health and the Law in the 21st Century, The Journal of Law, Medicine & Ethics.
10. Childress, JF, Faden RR, Garre RD et al. Public Health Ethics: Mapping the Terrain. J Law Med Ethics. 2002; 30: 170-178
11. Gaare-Bernheim R, Neiburg P, Bonnie R. Ethics and the Practice of Public Health. In Goodman R, et al (eds). Law in Public Health Practice. Oxford University Press, 2002, 2007
12. Principles of Ethical Practice of Public Health, version 2.2, Public Health Leadership Society, 2002
13. Ethical considerations in Developing a Public Health Response to Pandemic Influenza, World Health Organization, 2007.

(NB. This is the updated version of the article, which appeared in the Bulletin of Preventive and Social Medicine Society, Volume 1 Number 2, January 2015.)

PART A

CHAPTER. 12

QUICK ASSESSMENT OF HEALTH INFORMATION SYSTEM

“Information is the lifeblood of medicine and health information technology is destined to be the circulatory system for that information”

- David Blumenthal:
An academic physician and
health care policy expert

(This article is based on two presentations made by the author at the inter-country consultation on "Strengthening of Health Information System in Countries of South-East Asia Region", WHO-SEARO, New Delhi, October 2001 and inter-country workshop on "Data Management for Evidence-based Decision Making", Bangkok, Thailand, December 2001, and concluding remarks at the inter-country workshop on "Strengthening Use of Health Information at the District level", Bangkok, August 2009).

Health information system (HIS) of the country can be equated to the nervous system of the human body. The human body cannot function properly unless the nervous system is transmitting appropriate electrical impulses through the medium of different chemicals and enzymes in the human body. Likewise, the proper and systematic functioning of HIS requires good linkages and coordination of its components, starting from data collection forms, data gatherers at the peripheral level of the health system to strategic decision makers of the Ministry of Health (MoH).

If HIS is not generating timely, valid and reliable data/information (either underestimated or overestimated data), we will not know the real health situation or actual performance of the health care delivery system. We may be formulating strategies and developing health programs or projects based on weak or speculated data/information. This could result in unnecessary wastage of resources in the implementation of programs and projects.

Having efficient HIS per se is not sufficient unless data sets are appropriately transformed into information by the competent staff and due consideration is given and actions taken by concerned program managers. In other words, generated information must be utilized for decision making in technical, administrative, logistics and management aspects of health programs at different levels of the health care delivery system. This data culture must be inculcated to the extent possible among all public health professionals (from epidemiologists to basic health service staff) working at all levels of the health care delivery system.

Dynamic, robust, responsive and efficient HIS is a basic prerequisite for the effective functioning of the health care delivery system. It must be supported by establishing strong functional linkages with the computerized human resource for health

information system. One point to be noted is that HIS is different from Management Information System (MIS), which is wider in scope. MIS has many sub-systems like Service Management Information System (SMIS), Logistics Management Information System (LMIS), Personnel Management Information System (PMIS), Financial Management Information System (FIMS), etc.

This article is confined only to a quick assessment of general HIS and to some extent to the hospital information system but not to its allied systems such as vital registration system, disease surveillance system, sentinel disease surveillance system, non-communicable disease surveillance system, etc. These will be discussed separately.

In order to know the functional efficiency of general HIS, the following checklist may be applied under the rubric of;

(i) Policy and general issues
(ii) Data collection and transmission
(iii) Data presentation and utilization

The specific time frame for reviewing the scenario must be made in advance. It is better to review the scenario for the last three years. The wording of the checklist questions may be appropriately modified when translated into the Burmese version.

POLICY AND GENERAL ISSUES

(i) Are there ministerial policies, strategies, guidelines or standard operating procedures for staff handling HIS?
(ii) What is the overall organizational structure of national HIS? Is it concrete and compact?
(iii) What is the status of functional linkages (practicability, utility, feedback, and specific responsibility) with allied information systems such as Hospital Information System, Management Information System, Sentinel Disease Surveillance System, etc.?
(iv) What is the trend and quantum of financial and human resources available for HIS over the years?
(v) What regular capacity building activities were conducted for HIS staff at all levels of the health care delivery system during the last three years and are these well recorded? Was any review or assessment conducted on these records for future planning?
(vi) What are the career ladder and future prospects of HIS staff?

DATA COLLECTION AND TRANSMISSION

(i) Was any review or revision made recently on data collection and reporting forms? If so, details should be studied for any action taken.

(ii) How are medical records in hospitals kept and used?

(iii) Was any quick review made on data management of hospital information system? If so, review it in detail.

(iv) How are data from the private sector and NGOs incorporated into national HIS?

(v) How are data collection and reporting forms filled and by whom and whether staff have been regularly trained and oriented?

(vi) How are data in collection forms stored? Is software used for storing and transmitting data user-friendly or not?

(vii) What is the framework of overall data transmission system?

(viii) Are data sieving points available in the overall data transmission system?

(ix) Is there a built-in mechanism for checking validity and reliability of data generated by HIS and how is it being done?

(x) Is there a feedback mechanism from respective data sieving points to the level below?

DATA PRESENTATION AND UTILIZATION

(i) How are data presented or depicted (health profiles, fact sheet) at the lowest level of the health care delivery system? This is extremely important as data gatherers will appreciate the utility of data and they will be more serious in getting valid data.

(ii) As this is an action-oriented level, are there standard operating procedures in place for data presentation?

(iii) How are data being analyzed and how is the generated information documented and used?

(iv) Is there a mini, six-monthly or annual meeting to analyze and review the health situation (including hospital administration and disease pattern

HAVING ACCESS TO INFORMATION WHEN IT'S NEEDED IS CRITICAL.

Hal Wolf:
President and CEO, Healthcare Information and Management Systems Society

data) state/region-wise, as was done regularly in the vector-borne disease control program decades ago?

(v) Are data analysis workshops being conducted as part of capacity building activity for HIS staff working at all levels of the health care delivery system?

(vi) How is documented information utilized by decision makers and program managers of different health programs?

(vii) How are survey data/information and program evaluation findings considered in light of the data generated from routine HIS, i.e., synchronization, cross-referencing and triangulation of data and information?

CONCLUSION

The above questions may depict a snapshot scenario of HIS in a short period of time. Based on the findings, doable and quick-win strategies could be formulated. It is also noted that Myanmar HIS has thoroughly reviewed and assessed in March 2007 involving MoH, Ministry of National Planning and Economic Development and Ministry of Immigration and Population. We need to review to what extent actions had been taken based on the findings of the trilateral assessment.

HIS in a developing country may not yield affirmative responses to many points in the checklist. However, one could, at least, pinpoint weak areas for taking priority remedial measures for improvement in a phase-wise and step-wise manner. In essence, the true health situation of the country can be documented with confidence only if HIS is robust, responsive and efficient.

REFERENCES

1. Presentation made by Dr. Myint Htwe at the inter-country consultation on "Strengthening of Health Information System in Countries of South-East Asia Region", WHO-SEARO, New Delhi, 16-19 October 2001. (SEA-HS-219)
2. Presentation made by Dr. Myint Htwe at the inter-country workshop on "Data Management for Evidence-based Decision Making", Bangkok, Thailand, 3-7 December 2001. (SEA-HS-221)
3. Concluding remarks made by Dr. Myint Htwe at the inter-country workshop on "Strengthening Use of Health Information at the District level", Bangkok, Thailand, 10-12 August 2009. (SEA-HS-326)

(NB. This is the updated version of the article, which appeared in the Bulletin of Preventive and Social Medicine Society, Volume 1 Number 1, September 2014.)

PART A

CHAPTER. 13

MESSAGE TO MPH STUDENTS AND JUNIOR PUBLIC HEALTH PROFESSIONALS

“When you want to change things, you can’t please everyone. If you do please everyone, you aren’t making enough progress”

- Mark Zuckerberg:
CEO of Meta

(The article is based on three talks given to MPH students, University of Public Health, Yangon and MPTM students, University of Medicine, Mandalay in 2011, 2014 and 2015 respectively).

You are now entering the field of public health and becoming a member of the public health team. You will notice that public health is an exciting and dynamic subject because it is continuously growing from all perspectives. New and unexpected events are evolving all the time. Later on, you have to deal with these events applying the knowledge and wisdom that you are going to accumulate from this MPH course.

I would say that you have made the right decision to enter this vast field of public health. In fact, MPH is just a basic degree in public health and would serve as a strong foundation or platform on which you can further move forward to any area of specialty that you are interested in. You have several avenues that you can further specialize in, such as epidemiology, occupational health, environmental health, international health or global health, public health nutrition, population dynamics, health care financing, health policy, public health ethics, biostatistics, health system development, tropical public health, etc., after you get your MPH degree. I would like to advise you to try to seriously build up and strengthen your foundation in public health during the course of your study.

You are future leaders in public health in the country. You will be shaping the domain of public health in the country. If you are strong, the domain of public health will be strong. The majority of health professionals in the Ministry of Health are public health professionals.

I would like to put forward one important statement to all of you so that you can always keep it in mind. I am sure that no one can deny this axiom, i.e., "The key to improving the overall health status of the population in any country is the quality implementation of an optimal mix of cost-effective public health interventions within the framework of the efficient health care delivery system."

Throughout this MPH course, you will be equipped with necessary technical know-how, public health principles and approaches, epidemiological methods, epidemiological thinking skills, critical or analytical thought processes, deduction skills, and communication skills in the context of the wide spectrum of subjects in the field of public health.

Epidemiological thinking skill is nothing but

viewing or analyzing an issue or scenario from different perspectives, angles, planes, and also comparing different scenarios in the context of epidemiologic triad composing of time, place, and person, in addition to, agent, host, environment and vector factors. Epidemiological thinking skills are necessary to solve public health problems, control or contain diseases or conditions or outbreaks in the country.

What you are now going to learn and how serious you are in this learning process will determine and influence your career ladder to a considerable extent. In future, you may be working in strategic and higher positions in the Ministry of Health or as a faculty member in Preventive and Social Medicine Departments of Universities of Medicine, University of Community Health, University of Public Health or other public health institutions. At some point in time, you may have several opportunities for working in WHO (Headquarters, Regional Office, Country office), or health-related UN agencies (UNICEF, UNFPA, UNDP, Global Fund, GAVI, World Bank, etc.), or bilateral organizations and agencies, or foundations, or INGOs in and outside the country, or as a freelance public health professional. A career as a public health professional is always dynamic, forward-looking and exciting.

The following are some of the basic tenets that you need to follow in your career.

(i) Identify a specific technical area of interest in the public health domain in pursuing your career;
(ii) Inculcate epidemiological thinking skill;
(iii) Practice a habit of networking and sharing of experience;
(iv) Manage and store files systematically in your computer for ease of retrieving them in case of urgent need (otherwise it would be very stressful);
(v) Attend local and international seminars, conferences or talks and debates as much as possible;
(vi) Seriously improve your English language proficiency (both writing and speaking);
(vii) Remove line of demarcation of disciplines or job at workplace (perform to the best of your capacity and capability on whatever your superior asks you to do without reservation);
(viii) Inculcate an attitude of fact finding rather than fault finding;
(ix) Always have a compromising attitude;
(x) Practice the habit of repeated readings;
(xi) Be research minded; and
(xii) Apply public health principles and principles of public health ethics whenever you make important decisions in your work.

The spectrum of public health is very wide. Our brain capacity is limited and finite and knowing everything is impossible. However, you must be well versed with the basic principles of public health and epidemiology, social and cultural aspects of any public health issue, various epidemiological methods, issues and challenges in public health in the context of public health ethics. The most reliable, encompassing, enriching, and real-time sources of public health information are available in websites of (i) WHO, UNICEF, UNFPA, UNDP, UN, WB, (ii) Ministry of Health, and (iii) CDC, NIH, ORI, IOM, and APHA.

I am going to tell you about an information gold mine that you can use for your reference throughout your career in public health. The following documents must be kept handy and you should try to go through them quickly to know their essence of it. These are:

(i) National Health Policy;
(ii) National Health Research Policy;
(iii) National Health Accounts;
(iv) National Health Plans (2011-2016) and strategies;
(v) Current organogram of the Ministry of Health;
(vi) Annual reports of various public health programs and key program evaluation reports of the Ministry of Health.

When you are preparing a thesis, presentation or case study or doing research or preparing a position paper or concept note, the following sources of information would prove very useful. It is important that you should know the location of the information source, what to read and what to refer to. Otherwise, you will not only face with a stressful situation but also, your work output will be incomplete, ambiguous, technically weak and not up-to-date.

As you are a public health professional, you must be well acquainted with the modus operandi of WHO, UNICEF and UNFPA and their work plans in general. These three UN agencies work very closely with the Ministry of Health.

The following documents from WHO are a good source of information:

(i) World Health Assembly (WHA) background technical documents and resolutions. These are like information gold mines;
(ii) SEA Regional Committee background technical documents and resolutions;
(iii) WHO Director-General speeches (www.who.int);
(iv) Declarations of WHO South-East Asia Health Ministers' meetings;
(v) Meeting reports of Scientific Working Groups (SWG) and Technical Advisory Groups (TAG) of WHO on various technical subjects;
(vi) SEA regional strategies and global strategies (GS) from WHO HQ in several technical subject areas: e.g., Global Strategy on Diet, Physical Activity & Health (2004); Global Strategy to Reduce Harmful Use of Alcohol (2010); Global Action Plan for Prevention & Control of NCD: 2013-2020; Global Strategy for Prevention & Control of Sexually Transmitted Infections: 2006–2015; Global Strategy on Containment of Antimicrobial Resistance; Global Technical Strategy for Malaria: 2016-2030; Global Strategy for Women's, Children's and Adolescents' Health: 2016-2030; Global Strategy and Action Plan for Ageing and Health; Global Strategy for Containment of Antimicrobial Resistance; Global Strategy for R&D Epidemic Preparedness; etc.(www.who.int & www.searo.who.int)

Another excellent source of information is World Health Reports (WHR), first published in 1995. These are the expert assessment of global health, including statistics relating to all countries, with a focus on a specific

subject. It provides countries, donor agencies, international organizations and others with information to help make policy and funding decisions. Some topics covered by WHRs are:

1995: Bridging the Gaps
1996: Fighting Disease - Fostering Development
1997: Conquering Suffering - Enriching Humanity
1998: Life in the 21st century: A vision for All
1999: Making a Difference
2000: Health Systems: Improving Performance
2001: Mental Health: New Understanding, New Hope
2002: Reducing Risks, Promoting Healthy Life
2003: Shaping the Future
2004: Changing History
2005: Make Every Mother and Child Count
2006: Working Together for Health
2007: A Safer Future: Global Public Health Security in the 21st Century
2008: PHC: Now More Than Ever
2010: Health Systems Financing: The Path to UHC
2012: No Health without Research
2013: Research for UHC

In addition, WHO has published reports on specific technical subjects such as: Preventing Chronic Diseases- A Vital Investment (2005), World Malaria Report (2010), Public Health-Innovation & Intellectual Property Rights (2006), Violence & Health (2002), Global Status Report on Alcohol & Health (2014), Preventing Suicide: A Global Imperative (2014), Global Status Report on Road Safety: Time for Action (2013), Road Traffic Injury Prevention (2014), Disability (2011), World Malaria Report (2013), Final Report of World Conference on Social Determinants of Health (2011), World Health Statistics (yearly), and World Report on Ageing and Health (2015). Another good source of information is Global Health Observatory (www.who.int/gho/)

Background technical documents of World Health Assembly (WHA) (conducted annually in May in Geneva, Switzerland) are very comprehensive and serve as excellent references. These documents are, in fact, reports by the WHO secretariat. The Health Assembly adopts also produces a number of resolutions. These documents are a very rich source of information and whenever you have an issue or paper to prepare, please get information from it. Whenever you need to write a strategy or develop interventions on any public health issue, these resolutions can provide you with good ideas.

Similarly, background technical documents and resolutions of the WHO Regional Committee for South East Asia Region (conducted annually in September in one of the countries of the WHO South East Asia Region and also in the Regional Office at the time of election of the WHO Regional Director - every five years) are a valuable source of information in the regional context. In collaboration with Member countries WHO-SEARO regularly produces regional strategies. These are an excellent source of technical information for you. Some example of regional strategies are: Regional Strategy on Occupational Health and Safety in SEAR Countries (2005); Ten Point Regional Strategy for Strengthening Health Information Systems (2006); Regional Strategy for Tobacco Control (2012); Regional Strategy on

Universal Health Coverage (2015); Regional strategy on strengthening health workforce education and training in South-East Asia Region (2014-2019) (2015);.

WHO-SEARO regularly conducts South-East Asia Health Ministers meetings, which have resulted in several Declarations in the regional context, viz.

Dhaka Declaration on "Strengthening Health Workforce in the Countries of SEA Region" (2006);
Thimphu Declaration on "International Health Security in SEA Region" (2007);
New Delhi Declaration on "Impacts of Climate Change and Health" (2008);
Kathmandu Declaration on "Protecting Health Facilities from Disasters" (2009);
Bangkok Declaration on "Urbanization and Health" (2010);
Jaipur Declaration on "Antimicrobial Resistance" (2011);
Yogyakarta Declaration on "Ageing and Health" (2012);
Delhi Declaration on "Combating High Blood Pressure" (2013);
Dhaka Declaration on "Vector Borne Diseases Today" (2014);
Dili Declaration on "Tobacco Control" (2015).

Whenever you are considering policy and strategic matters, it would be useful to refer to these Declarations. Apart from these, there are several Declarations, Charters and Frameworks at the global level. These are:(healthydocuments.org), The Declaration of Alma Ata (1978);Ottawa Charter of Health Promotion (1986);Declaration on Occupational Health for All; Jakarta Declaration on Health Promotion into 21st Century (1997);Doha Declaration on TRIPS Agreement and Public Health (2001);Moscow Declaration on Prison Health as Part of Public Health (2003); Commission on Intellectual Property Rights, Innovation and Public Health (CIPIH) (2003); Bangkok Charter for Health Promotion in the Globalized World (2005); Oslo Ministerial Declaration- Global Health: A Pressing Foreign Policy Issue of Our Time (2006);The Kampala Declaration and Agenda for Global Action (2008);UNGA Resolution 63/33 on Global Health & Foreign Policy (2009);Framework Convention on Tobacco Control (2000);Ministerial Declaration on Global Public Health (2009);Rio Political Declaration on Social Determinants of Health (2011);Moscow Declaration on Healthy Lifestyles & NCD Control (2011);Beijing Declaration of BRICS Health Ministers' Meeting (2011);Nightingale Declaration for a Healthy World; The Addis Ababa Declaration on Global Health Equity: A Call to Action (2012).

After this MPH course, you will be assigned to different geographical areas and in different work positions in the Ministry of Health. After some years of service, you will be holding key and senior positions in the Ministry of Health. I want to emphasize that you will be one of the key players in the field of public health in the country and that you will be shaping the country's health system. Please use your epidemiological thinking skill and principles of public health ethics at that time to make rational decisions.

My take home messages to you are: "Read and Read and Read" and do repeated readings; knowing "what to read" and "where to look for" are important (our brain capacity is limited); do systematic arrangement of reading materials in your

READ 500 PAGES A DAY.
THAT IS HOW KNOWLEDGE WORKS.
IT BUILDS UP LIKE COMPOUND INTEREST.

- Warren Buffet:
American business magnate

computer; English language proficiency is key to success; develop a compromising attitude; and be non-discriminatory in your area of work.

Last, but not the least, but very crucial is to improve your English language (written and spoken) skill because you will soon be attending international meetings, interacting with many staff from UN agencies, foundations, organizations and international NGOs. If you are not good at English you will not be able to express the subject matter clearly, although your knowledge on that subject is far above other participants. Please keep this point in mind. Fluency in English is also essential for postgraduate studies, either within or outside the country.

Your future is bright; you have ample opportunities or career options waiting for you; your work arena is wide; your work horizon is unlimited; consider seriously but rationally as to what to do; always be down to earth, low profile, sincere, and team-spirited; and always foster positive thinking and an unbiased attitude.

My final message to you is "Always think aloud first and discuss with your counterparts in making technical decisions in the field of public health".

Throughout the MPH course, you will be burning the midnight oil. But the investment you are going to make is worth it. I wish you good luck. Be a quality MPH degree holder to serve the country.

(NB. This is the updated version of the article, which appeared in the Bulletin of Preventive and Social Medicine Society, Volume 1 Number 2, October 2015.)

PART A

CHAPTER. 14

REVIEWING AND REVISING NATIONAL HEALTH PLAN: A PRACTICAL PERSPECTIVE

“We need to have a plan equal to the challenge”

- Jim Yong Kim:
President of the World Bank

(Based on presentations made at the consultative meeting on "Reviewing and Revising Health Policies and Plans" 15-17 June 2013, Department of Health Planning, Nay Pyi Taw).

The ultimate purpose of reviewing and revising the National Health Plan (NH Plan), strategies and activities with reference to National Health Policy (NH Policy) is to obtain cohesiveness among the two entities. This would facilitate in:

(i) Streamlining the framework of implementation together with adjustment of monitoring and evaluation processes;
(ii) Improving and streamlining administrative, logistics, management and technical efficiency of different programs;
(iii) Avoiding duplication of work and thereby achieving efficient utilization of scarce resources especially human resource for health;
(iv) Achieving effective and efficient program management by senior officials of the Ministry of Health (MoH); and
(v) Most importantly, the review process will greatly facilitate the development of next NH Plan.

BASIC TENETS FOR REVIEW OF NATIONAL HEALTH PLAN

Although the words "review" and "development" are somewhat different in nature, the review process and its outcome will greatly assist in the development of NH Plan. The two processes are complementary. If the NH Plan is reviewed mid-way, it will be very beneficial for any mid-course change in direction. It is, therefore, recommended to do a mid-way review of NH Plan. The basic tenets for this review are:

(i) NH Policy and NH Plan must be closely interlinked;
(ii) The spectrum of NH Plan must be within the framework of NH Policy and other relevant policies of the country; and
(iii) NH Plan must be cohesive by itself and comprehensive enough to cover the demand and need of the country's contemporary health situation.

NH Plan must be reviewed in a very systematic and careful manner. The technical team should represent a wide spectrum of professionals consisting of broad-minded

health planners, health administrators, senior researchers, senior epidemiologists, health economists, sociologists, policy researchers, policy analysts, public health ethicists, biostatisticians, program managers, and possibly collaborating partners and stakeholders. For ground reality checks and to elicit the modus operandi at the peripheral level, it is worthwhile to include senior and experienced basic health care workers.

Careful selection of members of the review team is crucial. Otherwise, the whole process cannot move smoothly due to the tenacity and absolute stubbornness of some individuals. The members should give their technical views with an open mind, not affiliated to the program or project or agency they are working for. They should be able to give balanced and unbiased decisions, devoid of vested interest and also with a "sense of compromising attitude".

The whole process must be carried out in a good environment and the work area must be conducive to deep thinking or peaceful work environment. There should be less outside interference such as calls from MoH or request to attend other meetings. Such interference will disturb the thought process and disrupt the discussion momentum of team members.

Some of the basic techniques that can be applied in the process of review of NH Plan are management and qualitative research methods such as brainstorming, nominal group technique-Delbecq, Delphi, focus group discussion, key informant interview, in addition to epidemiologic and basic statistical methods. If the method selected is simple, there will be less stringent assumptions. The assumptions are sometimes highly biased. Mid-course correction of NH Plan is allowable and preferable. Mid-course correction is very cost effective.

INITIAL STEPS

Before we initiate the process of reviewing NH Plan, it would be advisable to do a quick review of NH Policy itself. NH Policy was formulated in our country since 1993. Since that time, the following scenarios have emerged:

(i) Changing epidemiological conditions of diseases and conditions;
(ii) Changing pattern of human resource for health;
(iii) Increasing quantum of external aid and changing funding scenario;
(iv) Increasing involvement of UN agencies, foundations, organizations, new international and national NGOs, civil society organizations, community-based organizations, and the private sector in the field of health;
(v) Directional changes in overall policy of the country;
(vi) Increasing demand for health from the people;
(vii) Changing disease occurrence pattern and population structure;
(viii) Research findings are pointing towards "change"; and
(ix) The increasing importance of border

area health work and high momentum of inter-country collaboration.

The evidence of the above conditions must be substantiated by available data and information and the findings should be submitted to the National Health Committee. It is important that the findings are prepared in the form of policy briefs with clear cut supporting evidence. If the report is prepared in a highly technical manner, it will defeat its purpose. The mandate to review NH Plan and strategic policy guidance to this effect should come from the National Health Committee. Based on the findings, a situation can unexpectedly emerge that we may even need to reformulate NH Policy. But reformulating NH Policy is costly, time-consuming, and labor intensive. Many sensitive and undesirable issues or weaknesses might also emerge during the review process. It can lead to either positive or negative implications for some programs of MoH.

Generally, review of NH Plan involves the following key steps.

(i) Forming Steering Committee and Technical Working Group comprising of professionals from different disciplines with clear-cut, time-bound Terms of Reference for this process;
(ii) Information gathering and critical and holistic review on the information obtained applying epidemiological thinking skill, systems approach, and analysis; and
(iii) Develop overall framework and approaches for the review after thorough brainstorming on the methodology to be used.

PRELIMINARY QUICK REVIEW OF EXISTING SCENARIO IN THE CONTEXT OF NH PLAN

(i) Quick review of available data and information from annual reports of various technical programs, routine and survey data, situation analysis reports and relevant research findings.
(ii) Quick review of internal and external evaluation reports of various technical programs and projects.
(iii) Quick review of relevant policies or health-related policies of other ministries
(iv) Quick review of overall policy framework of the Government.
(v) Quick review of works of development partners, international and national NGOs.
(vi) Quick review of World Health Assembly and WHO South-East Asia Regional Committee resolutions and Ministerial declarations.
(vii) Quick review of Millennium Development Goals and Post-millennium Development Goals, health-related UN General Assembly commitments and resolutions.
(viii) Quick review of speeches of Chair of National Health Committee and recommendations of National Health Committee.

GENERIC REVIEW OF NATIONAL HEALTH PLAN

The following preliminary generic criteria that can be used to review/assess NH Plan are:

(i) Relevant to the current needs of the country (in terms of problem magnitude, specific population affected, urgency, severity, imbalanced priority, etc.);
(ii) Able to achieve its intended objectives within the stipulated time frame;
(iii) Cost effectiveness;
(iv) Specificity and concreteness;
(v) Feasibility (in terms of capacity to implement in the context of human resource for health, time frame, etc.);
(vi) Completeness; and
(vii) Untoward implications or unwanted effects.

Each of the above variables can be categorized by giving a score (0 for not relevant, and 1, 2, 3, in terms of degree or strength, or dichotomous response such as "Yes" and "No" can also be applied), although it may be subjective to a certain extent. The scores given by professionals can be averaged out so that outliers and skewed scoring can be avoided. The detailed process can be fine-tuned and modified when the actual process is considered. Several options of scoring are available.

CRITICAL AND IN-DEPTH REVIEW OF NATIONAL HEALTH PLAN IN TERMS OF: (NOT EXHAUSTIVE).

(During the consultative meeting on "Reviewing and Revising Health Policies and Plans" conducted at Department of Health Planning in June 2013, the author presented the actual scoring process and also showed how to do critical and in-depth review of one specific program in NH Plan.)

The following eight parameters can be assessed by applying the above seven criteria, as appropriate. The eight points mentioned below should be applied for each and every program in the NH Plan.

(i) Cohesiveness and linkages between general and specific objectives
(ii) Cohesiveness and linkages between strategies and activities
(iii) Cross-referencing and analysis of strategies versus specific objectives
(iv) Cross-referencing and analysis of priorities versus situation analysis findings
(vi) Cross-referencing and analysis of priorities versus monitoring indicators
(vi) Cross-referencing and analysis of monitoring indicators versus targets
(vii) Cross-referencing and analysis of situation analysis findings versus programs and project activities
(viii) Cross-referencing and analysis of quantum of specific activities versus resources allocated.

CRITICAL AND IN-DEPTH REVIEW OF NATIONAL HEALTH POLICY VERSUS NATIONAL HEALTH PLAN

The assumption we have made here is that NH Policy (1993) is a reference health policy and it is still relevant and valid. In fact, overall policy of the country, speeches by head of State, speeches by Chair of National Health Committee and Health Minister and relevant decisions of parliament must also

be referenced and considered. In fact, overall NH Plan and its key strategies, health plan of collaborating partner agencies, organizations and associations must be reviewed and analyzed simultaneously with reference to all the policies, speeches, and decisions mentioned above.

(i) Cross-referencing and analysis of NH Policy versus directions of NH Plan
(ii) Cross-referencing and analysis of NH Policy versus objectives of NH Plan
(iii) Cross-referencing and analysis of NH Policy versus objectives and strategies of each program of NH Plan
(iv) Cross-referencing and analysis of NH Policy versus strategies and major interventions/activities of UN agencies, organizations, foundations, international and national NGOs, civil society organizations, and special programs of Global Fund, GAVI, 3MDG, etc.
(v) Cross-referencing and analysis of NH Policy versus WHO Country Cooperation Strategy, activities of GAVI Alliance, Common Country Assessment and United Nations Development Assistance Framework (CCA UNDAF) if applicable
(vi) Cross-referencing and analysis of NH Policy versus areas in NH Plan.

PLAN YOUR WORK AND WORK YOUR PLAN.

Napoleon Hill:
An American self-help author

CRITICAL AND IN-DEPTH REVIEW OF NH POLICY VERSUS IMPORTANT POLICY RELATED ISSUES (NOT EXHAUSTIVE)

(i) Cross-referencing and analysis of NH Policy versus allied ministries' health-related activities
(ii) Cross-referencing and analysis of NH Policy versus healthy public policies existing in the country
(iii) Cross-referencing and analysis of NH Policy versus all major internal and external evaluation mission findings
(iv) Cross-referencing and analysis of NH Policy versus National Health Research Policy
(v) Cross-referencing and analysis of NH Policy versus national health information system data set being transformed into information
(vi) Cross-referencing and analysis of NH Policy versus Head of State speeches, National Health Committee decisions, Minister and Deputy Ministers' speeches, and health issues emanating from the parliament
(vii) Cross-referencing and analysis of NH Policy versus key findings/decisions of senior national officials from country tour notes

GENERAL OVERARCHING REVIEW ON APPROPRIATENESS OF NATIONAL HEALTH POLICY

(i) Cross-referencing and analysis of NH Policy with reference to recent key reports on major disease outbreaks, special evaluation reports, etc.
(ii) Cross-referencing and analysis of NH Policy versus key research findings related to policy
(iii) Cross-referencing and analysis of NH Policy with Framework for Economic and Social Reforms (FESR)
(iv) Cross-referencing and analysis of NH Policy with National Comprehensive Development Plan (NCDP) 2011-2030

WHAT SHOULD THE REVISED PLAN GENERALLY LOOK LIKE?

The revised plan should have the following basic characteristics:

(i) Rational and forward looking;
(ii) Activities are concrete and implementable with available resources (especially budget and human resource);
(iii) Activities in plan are conducive to ease of action;
(iv) Absence of duplication of work of different programs of NH Plan;
(v) Absence of duplication of work with stakeholders' work plan;
(vi) Work plans of different stakeholders are complementary and in synergy with the NH Plan activities;
(vii) Monitoring and evaluation processes are simple, robust, responsive and with

provision for action or follow-up; and

(viii) Compact and well-integrated activities to tackle contemporary health situation and need of the country.

CONCLUSION

NH Plan should be like a strongly rooted big tree with a strong trunk, healthy branches, twigs, fruits, cones, flowers, buds and leaves where program managers of different technical programs, collaborators, development partners and stakeholders can nurture each part, representing the activities of different programs, in line with their policies, strategies, mission and vision statements. After the review and analysis of NH Plan, the toughest decisions faced by decision makers are:

(i) Should we prioritize and how should we prioritize programs in NH Plan?

(ii) Should we prioritize activities and how should we prioritize activities in each program? and

(iii) How should we allocate budget, using a certain set of criteria, among different programs?

For long-term beneficial effects, an oversight committee with concrete terms of reference should be formed to oversee implementation of NH Plan throughout. Reviewing NH Plan in the context of NH policy is a huge undertaking and we should not underestimate it. Systematic preparatory work must be done and a holistic approach must be applied. A sizeable quantum of financial resources is required in addition to availability and involvement of professionals with vast experience in doing this type of review. The process will be beneficial to the country if available data and information are reliable and valid.

The whole process of review calls for a team approach and team spirit. This is absolutely essential. Fact finding and not fault finding should be the order of the day because many deficiencies will be exposed during the process. External technical and funding support may be required. Broad participation from many health-related disciplines is important. The overall framework and roadmap of activities must be chalked out from the very outset together with responsible entities. The development of a Gantt chart type of framework will greatly facilitate the process. It is a holistic process and all concerned must be involved without predetermined notions and also without vested interest. The review process is a big undertaking but with collective wisdom, we can do it successfully.

REFERENCES

1. Htwe, M. Health Research Policy Formulation, Implementation, and Evaluation. SEA/SWG-FPS/K (WHO-SEARO document).
2. Htwe, M. Issues in Health Policy

Research. Regional Health Forum. WHO South-East Asia Region. Volume 4, Numbers 1 & 2, 2000.

3. Htwe, M. Formulation, Implementation and Evaluation of Health Research Policy. Regional Health Forum. WHO South-East Asia Region. Volume 5, Number 2, 2001.
4. Htwe, M. Epidemiologic Methods Used in Policy Analysis. Meeting of the Scientific Working Group on Formulation of National Health Research Policies, and Strategies. SEA/SWG-FPS/J, Jakarta, Indonesia, December 1999.
5. Htwe, M. Overview on Health Policy Research and Issues for Discussion in the Inter-country Meeting on Health Policy Research. WHO-SEARO. November 1995. (SEA/HPR/Meet/19).
6. Htwe, M. Technical discourse number two "Formulation/Reformulation of National Health Research Policy and Strategies in a Country". Talk delivered at the Department of Medical Research (lower Myanmar) on 15 December 2010.
7. Htwe, M. "Reviewing and Revising Health Policy and Plans" "Criteria to Review National Health Plan", "Actual Review of Disease Control Program as an example" Consultative Meeting on Reviewing and Revising Health Policy and Plan, Department of Health Planning, Nay Pyi Taw, 15-17 June 2013.

THE WHOLE PROCESS OF REVIEW CALLS FOR A TEAM APPROACH AND TEAM SPIRIT. THIS IS ABSOLUTELY ESSENTIAL.

PART A

CHAPTER. 15

ROLE OF MYANMAR MEDICAL ASSOCIATION IN "HUMAN RESOURCE FOR HEALTH DEVELOPMENT"

“Human resources are natural resources; they are often buried deep. You have to go looking for them, they are not just lying around on the surface”

- Ken Robinson:
Professor Emeritus of Arts Education
at the University of Warwick

(This article is based on the talk during the brainstorming session of Myanmar Medical Association Annual Conference in January 2011)

A technical talk was delivered at the Myanmar Medical Association (MMA) to share experiences in the area of "Human Resource for Health Development (HRHD)" for possible consideration in the context of one of the ongoing activities of MMA. The ideas expressed here are personal views and need to be considered in the context of various determining or influencing factors, some of which are beyond our control. It is to be emphasized that ultimate determining factors for HRHD are the overall policy of the Government, the national health policy of the country and, to some extent, the mission and vision statements of MMA.

MMA members are, in fact, part of the health team in the country and are responsible for moving the country's overall health agenda forward in the years to come. While considering and developing HRHD strategies of MMA, it is essential to initially review the country's HRHD scenario in a broader perspective using systems approach and systems thinking. We cannot replicate interventions or strategies used in developed countries to improve HRHD issues in a developing country. Myanmar has its own characteristics of HRHD which should be taken into full account by MMA. Nobody can deny that MMA can play a critical role in supporting the activities of MoH in HRHD activities. Health workforce (HWF) is somewhat like the "driver" who will run the car called 'Health Care Delivery System". A competent HWF is, therefore, essential for obtaining good health outcomes.

Some of the issues or pointers which are mentioned here may have (i) already been done or (ii) in progress or (iii) in the planning stage or (iv) yet to be considered by MMA.

The aim of this article is to achieve the following perspectives:

(i) MMA HRHD strategies will become complementary to and supportive of HRHD activities of MoH;
(ii) MMA HRHD strategies will have strong linkages with National Health Plan and its implementation process;
(iii) MMA HRHD strategies will have either direct or indirect links with the HRHD policy of MoH; and
(iv) MMA HRHD strategies will be forward-looking, responsive, dynamic and broad

enough to cater to contemporary and future needs of the country.

Our ultimate aim should be to obtain an (i) adequate number of competent, ethically minded, committed and motivated health professionals; and (ii) effective health workforce management in the country.

Generally, the following scenarios are encountered in the field of HRHD.

(i) Shortages of HWF (due to weak HWF planning and weak human resource policy);
(ii) Insufficient updates in norms and standards of HRHD in various perspectives;
(iii) Weak competency and commitment (due to lackluster performance of training institutions);
(iv) Misdistribution of HWF (due to weak HWF placement policy); and
(v) Ineffective HWF management (due to the weak performance of HRH unit in MoH).

HOW CAN MMA BE INVOLVED?

Several causal and determining factors of key HRHD issues can be favorably supported and facilitated by MMA in collaboration with MoH. However, MMA needs to identify and prioritize these factors. The following suggestions were proposed to MMA to increase its effectiveness in HRHD:

(i) MMA can network with South-East Asia Public Health Education Institutes Network (SEAPHEIN), South-East Asia Nursing and Midwifery Educational Institutions Network (SEANMEIN), WHO Collaborating Centres, Global Health Workforce (GHWF), Asia Pacific Action Alliance for Human Resource for Health (AAAH) and national training institutions involved in HRHD together with MoH;
(ii) MMA needs to have a clear mission statement on HRHD in the country;
(iii) MMA can be systematically involved in need-based, job-oriented training before deployment by MoH (pre-service training courses);
(iv) MMA can spearhead continuing professional development (CPD), in both clinical and public health domains, in line with rapidly expanding technological advances; and
(v) MMA can do a quick situational analysis on HRHD by way of conducting quick desk-top reviews, quick surveys, Focus Group Discussions, Key Informant Interviews and brainstorming on HRHD issues with MoH officials. The situation should be reviewed holistically.

STRATEGIC AREAS OF HRHD

MMA may screen the below-mentioned strategic areas jointly with MoH and select those areas which MMA is comfortable and capable of implementing. (It is subjected to approval of MoH). Some of the issues are also very sensitive and could lead to negative implications.

(i) Strengthening the collection, sharing, analysis and utilization of HRHD data in the country: (a) develop national

HWF data-base; and (b) periodic assessment of HWF situation, including geographical imbalances and in-country and international migration;

(ii) Policy development, regulation and legislation;

(iii) Scaling up HWF production (a) undertake HWF need analysis to get the optimum skill mix and numbers to meet the health challenges (b) develop plans to upgrade existing training institutions and establish new training institutions;

(iv) Knowledge generation and management (a) take stock of existing training facilities (b) develop health learning materials to facilitate training of HWF (c) HWF related research to bridge the knowledge gap and generate new evidence for HRHD planning and (d) conduct systematic continuing medical education or continuing professional development programs;

(v) Capacity building on HWF management (a) develop nee- based job descriptions/ duty lists, tools and guidelines for assessment, regulation and management of HWF;

(vi) Quality assurance in training;

(vii) Increasing investment in HWF (a) National Health Account studies on HWF development;

(viii) Improving the work environment of HWF (a) assess current work environment of HWF (b) identify a minimum set of standards for working environment;

(ix) Development of a community-based HWF (a) develop and implement appropriate training programs for CBHWF.

MODUS OPERANDI

The following process can be followed. MMA cannot work alone. It needs close collaboration and support of MoH. Partnering with MoH and other relevant training institutions in the country is essential. The following steps are proposed:

(i) MMA needs to review its existing strength and resources and consider working closely with experts (retirees who are experts in the field of HRH) in the country.

(ii) Formation of MMA Technical Advisory Group (TAG).

(iii) Several in-house forums in HRHD should be conducted.

CONCLUSION

We need combined, concerted and coordinated efforts to consider carrying out some of the points mentioned above in a phased or step-by-step manner. While considering the discussion points mentioned above, systems approach, systems thinking and epidemiologic thinking should be applied. The role of the University of Public Health, public health branch of MMA, Universities of Medicine, Community Health, Nursing, Paramedical, and training schools in the country are also very crucial as prime movers. Their inputs are essential. It is preferable that the main operational strategies are identified together with MoH. Finally, it is proposed that an action-oriented national-level seminar be conducted for in-depth discussion on Human Resource for Health Development.

UNLESS YOU INVEST IN PEOPLE, YOU ARE NOT GOING TO SEE GROWTH IN THE LONG TERM, THE MEDIUM TERM, AND MAY BE EVEN THE SHORT TERM.

-Jim Yong Kim:
President of the World Bank

FURTHER READING

1. Regional Strategic Plan for Health Workforce Development in South-East Asia Region. SEA/HSD/289. 2007. WHO-SEARO
2. Strategic Directions for Strengthening Community-based Health Workers and Community Health Volunteers in the South-East Region. 2008 SEA/HSD/311. WHO/SEARO
3. Working Together for Health. The World Health Report 2006. ISBN 92 4 156317 6. WHO/HQ
4. Expert Group Meeting to Review the Guidelines and Tools for Continuing Medical Education. Manesar, Haryana, India, October 2009. SEA-HSD-332. WHO-SEARO
5. Report of the Regional Consultation on the Draft WHO Code of Practice for the International Recruitment of Health Personnel. Gurgron, Haryana, India, December 2009. SEA-HSD-331 WHO-SEARO
6. Strategic Plan. Global Health Workforce Alliance. 2006. http://www.who.int/workforcealliance
7. Guidelines for Preventive and Social Medicine/Community Health Curriculum in the Undergraduate Medical Education. SEA-HSD-325. WHO-SEARO
8. Regional Consultation on Strategic Plan for Health Workforce. Bali, Indonesia, December 2006 SEA-HSD-291 WHO-SEARO
9. Accreditation Guidelines for Educational/Training Institutions and Programs in Public Health. Chennai, India January 2002 SEA-HMD-213 WHO-SEARO
10. Dhaka Declaration on Strengthening Health Workforce in SEAR countries. Report of the Twenty-Fourth Meeting of Ministers of Health of Countries of the South-East Asia Region. Dhaka, Bangladesh,20-21 August 2006
11. Background documents of Asia-Pacific Action Alliance on Human Resources for Health Meetings. http://www.aaahrh.org.

PART A

CHAPTER. 16

BASIC CHARACTERISTICS OF A GOOD HEALTH PROGRAM DEVELOPMENT

“I loved clinical practice, but in public health, you can impact more than one person at a time. The whole society is your patient”

- Tom Frieden:
President and CEO of Resolve to Save Lives and former Director, CDC, USA

> **"Of all forms of inequality, injustice in health care is the most shocking and inhuman."**
>
> **- The Rev Martin Luther King Jr:**
> Leader in the American civil rights movement

There are several technical programs in the Ministry of Health (MoH). Many programs get funding and technical support from UN agencies, organizations, development partners, etc. It is important that the programs must function effectively and efficiently to achieve the desired objectives and targets. The following characteristics should be there to run a health program effectively and efficiently. Although there are several desirable characteristics, it is impossible to have all these in a program or program manager.

Thus, the following basic characteristics are put forward for consideration from a practical perspective. It is to be noted that some programs are specialized in nature and additional characteristics may be required. The characteristics are categorized into those related to program managers and some for the program itself.

1. The program manager should have good epidemiological thinking skill and know the principles of public health and public health ethics thoroughly.
2. The program manager should have certain basic leadership skills, especially for creating a team spirit among the staff. Additional characteristics are possessing attitude of fact-finding rather than fault-finding; and a compromising attitude but decisive in taking action on irresponsible acts and gross negligence of staff in performing their duties working under him.
3. The program manager must be able to network with various UN agencies, organizations, international NGOs, foundations, development partners for exploring funding and technical support through proper channel.
4. The essential job description of different categories of staff working under the program manager must be available and modified as per the requirement

of program delivery status and staff availability.

5. The program must be linked and well-integrated with allied programs in MoH and those in relevant ministries.
6. The program should have a simple and practical monitoring system for timely detection of important lapses and deficiencies in terms of technical, administrative, logistics, and management aspects.
7. Ready-made quick checklists to know the (i) staff performance; (ii) program delivery status in terms of meeting the objectives and targets; (iii) fund utilization aspects; (iv) knowledge, attitude and practice (KAP) of different categories of staff working in the program must be available.
8. Brief six-monthly evaluation meetings and yearly evaluation meetings must be in place. The format and modus operandi for discussion during evaluation meetings must be developed in advance involving all key staff of the program. This is essential to achieve the desired objective of evaluation meetings.
9. Annual report of the program, including analytic part, must be produced regularly and the format for the report must be developed, taking into consideration various reports of other programs in the country.
10. The format for recording staff duty travels, both in-country and outside the country, must be made available and mechanisms for reviewing them to take necessary supportive action must be there.
11. The program should have regular staff capacity building programs, both built-in, outside the program and outside the country.
12. The program should organize bi-weekly or, at least, monthly technical talks for concerned staff working in the program on generic topics such as monitoring, evaluation, indicators, outbreak investigations, analytical and data presentations methods. This can benefit the staff even if he or she has been transferred to another program. If all programs are doing this activity, it can exert tremendous positive effects for the country.
13. The program should have feedback presentation sessions by staff who have attended a workshop, meeting, seminar or conference, especially outside the country.
14. Mechanisms for anticipating and planning for action regarding expected funding availability, staff turn-over and human resource for health situation must be embedded in the program. The program must have a mechanism for monitoring budget utilization especially for funds received from outside the MoH. This can facilitate resource mobilization for the program.
15. The goals, objectives, strategies, interventions or activities, targets and indicators must be rational and practical. The program should not hesitate to change or modify the strategies and interventions as appropriate.

PART A

CHAPTER. 17

EIGHT BASIC PROBES BEFORE INITIATING A HEALTH PROGRAM: "DRINKING WATER AND HEALTH"

“Although we take it for granted, sanitation is a physical measure that has probably done more to increase human life span than any kind of drug or surgery”

- Deepak Chopra:
Indian-American author and alternate medicine advocate

(Based on the opening and closing remarks delivered at the technical session of the symposium on "Drinking Water and Health", organized by Myanmar Academy of Medical Science (MAMS) at the Department of Medical Research, Yangon. 7 March 2015).

Generally, the work area on "Drinking Water and Health" covers a wide spectrum of topics, ranging from water safety plan to microbiological, chemical and toxicological contamination to household water treatment and storage. These topics are interconnected and highly relevant to the current need of our country. We need to think with open and receptive minds if we would like to improve this work area by the Ministry of Health (MoH) and other relevant entities. Open views, forward-looking and future-oriented ideas by concerned professionals are desirable in pursuing, expanding and improving the overall scenario of "Drinking Water and Health" in our country.

Along this line of thinking and with long-term sustainability and perspectives in mind, it would be beneficial if we review at least the following eight basic probes, before embarking on the development of short-term and long-term strategies for improving "Drinking Water and Health" in the country.

In fact, these eight basic probes are relevant for consideration on any subject of public health importance either in initiating a program or strengthening a program. These eight probes are:

(i) To what extent are "Drinking Water and Health" issues reflected in our national health policy, national health research policy, national health plans, and strategies?

(ii) To what extent are "Drinking Water and Health" issues reflected in collaborative programs of UNICEF, WHO, UNDP and other relevant INGOs and entities?

(iii) To what extent are "Drinking Water and Health" issues included in the curricula of undergraduate medical and postgraduate MPH & MPTM courses?

(iv) To what extent are "Drinking Water and Health" actually given preferential importance by the health education and environmental health sections of the Department of Public Health?

(v) To what extent is research on "Drinking Water and Health" issues being conducted and the research findings utilized?

(vi) To what extent are data and information available on "Drinking Water and Health"?

(vii) To what extent budgetary allocation is made to carry out activities related to "Drinking Water and Health" in the budget sheets of MoH, other relevant ministries, and Municipal Development Corporation (MCD)? National Health Account will yield some information on budgetary aspects.

(viii) What is the quantum of health workforce that can deal with water and sanitation issues?

To effectively handle and overcome the challenges hinging around "Drinking Water and Health" issues, we need to work in close collaboration with UNICEF, WHO, UNDP, relevant local and international NGOs, community-based-organizations (CBOs) or civil society organizations (CSOs) at the ground level.

While we are involved in these issues related to "Drinking Water and Health", we should not lose sight of the importance of the availability of timely and reliable data and information to expose the ground reality. Some crucial information can be obtained from research carried out by the Department of Medical Research, universities and other relevant agencies and organizations. This is very important not only for monitoring but also for preparing a rational national plan with long-term vision in mind. At the same time, we need to know and assess the national level scenario from a broader perspective. Our views must be at the higher level, i.e., national and global. Our activities

THE ROLE OF CONDUCTING "IMPLEMENTATION RESEARCH" ON DIFFERENT WATER SANITATION PROGRAMS AND ACTIVITIES SHOULD NOT BE FORGOTTEN AND IT SHOULD BE EMPHASIZED.

must also be linked with what others are doing at the supra-national or global level, i.e., considering experience from other developing countries.

To include all aspects such as data and information in one perspective, we should strive for collecting and collating all necessary updated data and information, including research findings by the Department of Medical Research in this subject area, so that we can establish a data repository on water-related matters in the country. We should also not lose sight of the importance of validating currently available data. It is important to know the real scenario and we may even think of developing a new data-based system for ease of reference by all those concerned. It is also crucial that all players in this field share data and information among relevant stakeholders.

Networking of stakeholders would be an advantage. It also requires the proactive involvement of the National Health Laboratory and the Municipal Development Corporation in water sanitation issues. The role of conducting "implementation research" on different water sanitation programs and activities should not be forgotten and it should be emphasized.

There is also an urgent necessity of conducting regular refresher training courses for health care workers and other relevant professionals on water sanitation aspects and different contamination pathways that might occur, including water-related diseases, water-borne diseases and water-associated diseases. The impact would only be felt if all those concerned work as a team in an integrated and cohesive manner.

WE SHALL NOT DEFEAT ANY OF THE INFECTIOUS DISEASES THAT PLAGUED THE DEVELOPING WORLD UNTIL WE HAVE ALSO WON THE BATTLE FOR SAFEDRINKING WATER, SANITATION, AND BASIC HEALTH CARE.

- Kofi Annan:
Former Secretary General of the United Nations

Like WHO's World Health Days, each World Water Day has a theme and for this year it is "Water and Sustainable Development". We need to advocate policy makers in our country about possible propaganda activities that could be carried out around World Water Day. Some of us might also recall that 194 WHO Member States, including Myanmar, had endorsed World Health Assembly resolution on "Drinking-Water, Sanitation, and Health" (WHA 64.24) in 2011, which clearly stated the activities to be carried out at the country level, to improve drinking water, sanitation and health. Even the United Nations Human Rights Council adopted a resolution entitled "Human Rights and Access to Safe Drinking Water and Sanitation" (A/HRC/15/L.14) in 2010. It recognizes the right to safe water and sanitation as a human right on the same level as other social rights such as the right to food and right to health. It contains many facts, which could serve as policy support to move ahead for improving "Drinking Water and Health".

Several public health professionals are involved in framing, formulating or reformulating national plans or strategies in the domain of "Drinking Water and Health". The World Health Assembly resolution and United Nations Human Rights Council resolution gives a clear sense of direction for improving the scenario.

CONCLUSION

This subject matter has strong linkages with many diseases and conditions. Its importance should be clearly reflected in the objectives of MoH and other relevant ministries. Appropriate budgetary allocation should be made and we need to promote and intensify systematic collaboration and work closely with UNDP, UNICEF, WHO, other like-minded agencies, organizations and international NGOs. Inter-ministerial collaboration and coordination are crucial. This can be achieved through the good offices of the National Health Committee. In essence, our ultimate aim should be "potable drinking water for the population at large must be sufficient, acceptable, affordable and physically accessible". Let us work together to reduce the burden of diseases and conditions related to various perspectives of water availability as well as water quality.

(NB. This is the updated version of the article, which appeared in the Bulletin of Preventive and Social Medicine Society, Volume 1 Number 4, October 2015.)

PART A

CHAPTER. 18

EPIDEMIOLOGICAL METHODS FOR POLICY ANALYSIS

“It is important for the public to understand that the greatest strength of epidemiology is also its greatest weakness”

- Jan Vandenbroucke:
Leiden University Medical Center,
The Netherlands

(This article is based on the background paper prepared by the author, then Regional Adviser on Medical Research, WHO-SEARO, for the meeting of WHO Scientific Working Group (SWG) on Formulation of National Health Research Policies and Strategies, Jakarta, Indonesia, 6-8 December 1999 (SEA-RES-112).

Policy makers require information on the current and future scenario of the health status of the population and its determinants and trends. In addition, the likely implications of policy interactions, i.e., health policy versus health research policy versus development policies (housing policy, energy policy, agricultural policy, industrial policy) need to be exposed for detailed review. Generation of this information and its concomitant analysis can be facilitated by the use of methods and principles from several social science disciplines as well as biological and medical science especially epidemiology (e.g., social epidemiology, clinical epidemiology). The purpose of this article is a sincere attempt to explore various epidemiologic methods that can be applied as well as their indicators and caveats.

Policy analysis is usually based on analysis of information on existing research findings, expert judgement and even outcome of studies using modeling techniques. (Shortell and Solomon 1982).

Epidemiologic methods are very useful in looking into each step of the policy cycle or policy process. Basically, there are four stages in policy process (Walt 1994). These are:

(i) problem identification and issues recognition;
(ii) policy formulation;
(iii) policy implementation; and
(iv) policy evaluation.

Several cyclical models with varying number of steps are also available. It is important to mention that policy making is not always a linear process. It may have different feedback loops in the policy cycle or process.

How the epidemiologic methods can contribute in policy formulation was aptly explained by Ruwaard et al (1994). He

mentioned that the conceptual model for policy making has four interrelated nodal points, i.e., (i) autonomous developments (ii) health policy (iii) determinants and (iv) health status. Each nodal point can be further explored by using epidemiologic techniques.

It is to be noted that there is often a time lag before the results of epidemiologic analysis can exert some influence on health policy. It may take five to ten years before such policy (decisions) can be evaluated (Holland & Wainwright 1979). In the long-term perspective, epidemiologists need to recognize the existing policy system and adapt their work to the system.

EPIDEMIOLOGIC METHODS ARE APPLIED AS PART OF POLICY ANALYSIS

Epidemiologic methods can be applied on the following situations, which are inherent in the policy cycle (Spasoff 1999):

(i) Assessing the health status of the population, through conceptualization and measurement of health – an essential impact indicator to assess the effectiveness of the health policy.

(ii) Assessing health needs and risks and to cross-reference with the existing policies (health and research) and strategies – an indicator to show whether health policy is addressing the problems or issues facing the people.

(iii) Studying the population-level determinants in the context of the existing policy – an indicator necessary for readjustment of existing policy.

(iv) Evaluating and synthesizing evidence regarding potential interventions (successes and failures) in relation to the strategies proposed according to the policy – an indicator to elucidate whether the current policy together with its inherent strategies and interventions is acceptable in light of the prevailing scenario.

(v) Analyzing differential effects of various interventions in relation to the strategies proposed according to the policy – an indicator to be used in modifying the existing policy, i.e., retrograde analysis.

(vi) Evaluating the objectives in policy implementation especially in the context of rational allocation of resources – an indicator for overall review for policy change.

(vii) Evaluating geographic variations in health status and health system performances and pinpointing the necessity for policy review – an indicator for policy change in the context of geographic consideration.

The above are some of the issues related to policy process which can be dealt with by conducting research using various epidemiologic methods. Epidemiologic methods refer to a wide range of techniques drawn from various disciplines in science. Both descriptive and analytical epidemiology play important roles in the policy cycle or policy process review.

> The work of epidemiology is related to unanswered questions, but also to unanswered answers.
>
> **– Patricia Buffler:**
> University of California epidemiologist

CAVEATS IN USING EPIDEMIOLOGIC TECHNIQUES

One needs to be careful in adapting the results of analytical epidemiologic research. Applying the results in toto or without any modification may lead to policy failure because analytical epidemiology is usually conducted in carefully selected situations. (Spasoff 1999). Careful attention should be given when applying the results of mathematical models. It can be said that the most complicated mathematical models are really simplistic when compared to social and biological realities (Stallones 1980). The more complicated the mathematical models, the more assumptions have to be made. At times, the assumptions may not hold true in real situations.

Sometimes it is difficult to convince the policy makers regarding the findings of epidemiologic research pertaining to policy.

It may be due to several reasons. One simple reason is they are too subjective to the power of private or vested interest (Terris 1980). More often than not, it is difficult to address the questions for analysis or the epidemiologists do not address specific questions for which policy makers need answers. It may take too long to do the work and they do not promulgate the results in avenues or in a manner that policy makers can discern and understand (Spasoff 1999).

When population health data are interpreted in the context of existing policy, the following issues must be taken into account (Rosen 1985):

(i) Strength of association with the determinants;
(ii) Regional variation and pattern;
(iii) Data quality;
(iv) Consistency with other indicators;
(v) Consistency with risk factors;
(vi) Trend analysis; and
(vii) Consistency with results of other independent studies and with experiences of local health personnel.

It would be prudent not to make policy recommendations based on the results of one study. Because, the health status of the population or performance of the health system is the outcome of interactions of a multitude of attributes, such as various types of policy, social and cultural characteristics of the population. There is a basic difference in opinion seeking pattern between policy makers and epidemiologists. Health policy makers need clear-cut advice and answers based on the available information. Epidemiologists prefer interval estimates instead of simple answers or yes or no decisions (Spasoff 1999). A compromise should be reached in order to narrow the gap in this issue.

BASIC EPIDEMIOLOGIC TOOLS THAT CAN BE APPLIED IN SO-CALLED POLICY EPIDEMIOLOGY AND POLICY ANALYSIS (SPASOFF 1999)

These methods (not exhaustive) are:

(i) Demographic methods;
(ii) Natality, fertility, morbidity and mortality expressions or indicators;
(iii) Life table analysis (survivor analysis, potential years of life lost – PYLL, disability adjusted life years – DALYs, quality adjusted life years – QUALYs, quality adjusted life expectancy – QALE, or health adjusted life expectancy – HALE;
(iv) Epidemiologic indicators of effect;
(v) Indicators of association: relative risk (RR), attributable risk (AR), population attributable risk (PAR), odds ratio (OR);
(vi) Various types of epidemiologic study design (cohort, case control, cross-

sectional studies);

(vii) Methods used in economic burden of ill health (Direct cost: cost of health care, Indirect cost: cost due to morbidity and premature mortality);

(viii) Methods used in health need assessment in the context of health policy;

(ix) Risk and risk assessment methods, environmental risk assessment, behavioral risk assessment, etc.;

(x) Methods used in assessing causes of health problems;

(xi) Ecological studies where individual level analysis or completely ecologic analysis can be made. However, it is fraught with many methodological problems;

(xii) Methods used in assessment of potential intervention (randomized controlled trials, community intervention trials);

(xiii) Synthesizing evidence (systematic reviews and meta-analysis);

(xiv) Methods used in assessing suitability for policy (efficacy, effectiveness, applicability, efficiency, feasibility, potential coverage); and

(xv) Various research designs for evaluation of health interventions

THE ULTIMATE AIM OF POLICY ANALYSIS USING EPIDEMIOLOGIC METHODS IS TO ACHIEVE "EVIDENCE-BASED POLICY MAKING" (MUIR GRAY, 1997) THROUGH THE PROCESS OF ENLIGHTENING THE POLICY MAKERS.

CONCLUSION

The task of policy analysis using epidemiologic methods is exceedingly complex. Interpretation of results and overall inference should be given very carefully taking into consideration all assumptions made as well as emerging unexpected situations. This is because today's health problem is a measurable set of people's responses and views to contemporary environments which are inherently linked with the prevailing policies of the country. The ultimate aim of policy analysis using epidemiologic methods is to achieve "evidence-based policy making" (Muir Gray, 1997) through the process of enlightening the policy makers. The most important and difficult final lap in the whole process of policy analysis is how to present the findings to the policy makers. If it is too technical, the findings will be set aside by the policy makers and no progress can be made. Therefore, simple policy briefs supported by strong documentary evidence are preferable.

REFERENCES

1. Bjorkman, JW, Altenstetter C. Health Policy. MPG Books Ltd, Cornwall, UK. 1998
2. Holland WW, Wainwright AH. Epidemiology and Health Policy. Epidemiol Rev.1979; 1:211-32
3. Rosen M, Nystrom L, Wall S. Guidelines for Regional Mortality Analysis: An Epidemiologic Approach to Health Planning. Int. J. Epidemiol 1985; 14 (2): 293-9
4. Ruwaard D, Kramers PGN, van den Berg Jeths A, Achterberg PW. Public Health Status and Forecasts. The Health Status of the Dutch Population over the Period 1950-2010. Bilthoven, The Netherlands: National Institute of Public Health and Environmental Protection, 1994
5. Shortell SM, Solomon MA. Improving Health Care Policy Research. J Health Politics, Policy Law 1982; 6:684-702
6. Spasoff, RA. Epidemiologic Methods for Health Policy. Oxford University Press, 1999
7. Stallones RA. To Advance Epidemiology. Annu Rev Public Health 1980; 1:69-82
8. Terris M. Epidemiology as a Guide to Health Policy. Annu Rev Public Health 1980; 1:323-44
9. Walt G. Health Policy: An Introduction to Process and Power. London and New Jersey: Zed Books, 1994.

PART A

CHAPTER. 19

NETWORKING OF HEALTH INSTITUTIONS

“Networking is not about just connecting people. It is about connecting people with people, people with ideas, and people with opportunities”

- Michele Jennae:
Author of The COnNeCtworker

(This article is based on "Networking in the Context of Functions of WHO Collaborating Centers" by the author in WHO-SEARO Regional Health Forum, Volume 2 Number 2, 1997)

Networking is a dynamic process. It is about establishing a relationship, either formally or informally, among interested parties (institutions, organizations, foundations, agencies, societies, associations) in areas of mutual interest for the benefit of all parties involved in the network. In this process, there will be sharing of information and implementation of collaborative activities by members of institutions, organizations, foundations, agencies, societies, and associations in a network system. The efficiency and effectiveness of networking depend not only on a multitude of controlling factors acting on the parties but also on the configuration of the network system itself. The system of work may change or modify itself over time.

Alternatively, networking can be viewed as a formal linkage of organizations and people to undertake specific activities to solve common problems or overcome common challenges. In a country, there are several health institutions, organizations, like-minded associations and societies where networking can be made either formally or informally for the purpose of exchanging information, services and products. Furthermore, collaborative activities in research, training and other need-based functions can be carried out jointly.

OBJECTIVES AND BENEFITS OF NETWORKING

The overall objective of networking is to achieve mutually beneficial technical cooperation with a goal-oriented unity of action. This can be secured through a process of information exchange and coordination of work among the nodal points of the network. Simultaneously, it can also strengthen the nodal points in the network by way of sharing experience, fostering local, national and international collaboration in health development, assisting and participating in priority health programs and activities at national and international levels. It can also ensure efficient and effective use of available expertise and resources. The government needs to strongly promote and facilitate networking of institutions in the country.

NETWORK CONFIGURATION

[Structural aspects]

Nodal points, linkages, and coordinating mechanisms are the three basic elements in any network or network system. In the current context, the nodal points are health institutions, organizations, like-minded associations and societies. The linkages between the nodal points can be materialized through the application of various systems of information technology. The coordinating mechanisms are the rules and regulations, directives or modus operandi of nodal points involved in the network. The output of a network system depends on the interactions among the three basic elements. It is desirable that a network system is dynamic, responsive and flexible.

Network configuration can follow either hierarchical or non-hierarchical patterns. Each has its own advantages and disadvantages. An optimum configuration can be worked out based on the overall objectives of the network system, the characteristic features of the nodal points, the existing inter-relationship among nodal points and other factors.

Networking may be classified into several categories. First, as a non-directed network, where each nodal point connects with every other nodal point in the network, with none directing the network. Second, as a directed network, where focal points are inter-connected through one nodal point. Third, as a hierarchical network, where nodal points are grouped in various hierarchical patterns, for example, increasing or decreasing resources and expertise available. The most appropriate pattern should be selected taking the expected output of the network system into account.

[Functional aspects]

Generally, several functions are observed in networking. For instance, effective communication, dissemination of information, sharing of resources, creation of a critical mass of technical expertise, refinement of old and developing new methods, provision of a medium for facilitating or achieving agreed objectives, stimulation of dialogues, creating a platform for intellectual exchange of ideas or performing collaborative activities for mutual benefit. Some functions may evolve to gradually include a larger number of partners, for example, national centers of expertise.

ESTABLISHING A NETWORK SYSTEM

A number of issues need to be considered before initiating networking activities. The following information should be made available and reviewed thoroughly:

(i) The current system of work and mission statements or terms of reference of each nodal point in the light of the prospective role envisaged.
(ii) Specific technical inputs which each nodal point can provide for collaborative activities on various health programs, especially the expertise available.
(iii) Strength and weaknesses of each nodal point involved in the network system (for example, in the context of human resources, infrastructure and financial constraints).
(iv) Availability and feasibility of establishing

a good data base or information source.

(v) Resource-sharing or working together entails reciprocity. This implies a partnership approach in which each nodal point contributes something useful to others.

(vi) Available and realistic work plan, with necessary technical back up to achieve agreed objectives.

(vii) Authority to work collaboratively and flexibly in the spirit of give and take.

(viii) An effective and efficient system of communication.

Several functional activities are envisaged in the network system. These activities are linked to one another, either explicitly or implicitly. It is important to avoid duplication of work through good planning as well as harmonious adjustment of activities. Taking into consideration the above issues, an appropriate network configuration should be developed to meet a series of requirements:

(i) To obtain agreed objectives

(ii) To put in place operational procedures facilitating collaboration

(iii) To implement strategies for promoting and sustaining networking (including long-term support to strengthen networking)

(iv) To develop program areas and specific activities to be carried out jointly in the form of integrated work plan

(v) To harness resources effectively using different approaches

(vi) To monitor and evaluate the system in a simple and practical way, including identification of parameters and development of a database for future use

(vii) To propose a framework for phased expansion of collaborative activities.

NETWORKING IS A LOT LIKE NUTRITION AND FITNESS: WE KNOW WHAT TO DO, THE HARD PART IS MAKING IT A TOP PRIORITY

Herminia Ibarra:
Organizational Behavior Professor at London Business School

MONITORING AND EVALUATION OF NETWORKING ACTIVITIES

Monitoring and evaluation are essential for any network to be viable and sustainable. They are also important for improving the effectiveness and efficiency of the system itself. There are two levels of monitoring and evaluation. The first level closely monitors and evaluates individual activities implemented according to the terms of reference and specific work plan. Importantly, the second level monitors the performance of the network system itself.

CONCLUSION

In Myanmar's context, official networking can be made among all councils (medical, nursing and midwifery, etc.,), institutions (training, research, state/regional hospitals), and organizations (community-based, border area). Successful networking has a number of benefits such as speedy exchange of information among national authorities and councils, institutions and organizations on a range of issues; fostering institutional linkages on research, training and national health programs; transfer of technology among the centers; and well-established centers assisting newly developed centers.

REFERENCES

1. Htwe, M. Networking in the Context of Functions of WHO Collaborating Centers, WHO-SEARO Regional Health Forum, Volume 2 Number 2, 1997
2. Bang, Y.H. (1989) Mechanism for Coordinating, Monitoring, and Evaluating WHO Work at its Collaborating Centers in South-East Asia Region. New Delhi, WHO Regional Office for South-East Asia (SEA/Res/Meet.1/10).
3. World Health Organization (1980) Establishment of a Regional Network of Health Literature, Library and Information Services (HELLIS): Report of an inter-country consultative meeting, New Delhi, India, 27-31 August 1979. Regional Office for South-East Asia (SEA/HLT/8).
4. World Health Organization (1990) Inter-country Consultation on Resource development and networking for HFA leadership development. Jakarta, Indonesia, 30July–7 August 1990, Regional Office for South-East Asia (SEA/HSD/148).
5. World Health Organization (1991) Improving the HELLIS network in South-East Asia–Report of a Regional HELLIS Workshop, and the Joint HELLIS/Asia Pacific Popin Network Session, 29 September–1 October 1990, New Delhi, Regional Office for South-East Asia (SEA/HLT/32).
6. World Health Organization (1996) Regional Network for Surveillance of Gonococcal Antimicrobial Susceptibility in South-East Asia. New Delhi, Regional Office for South-East Asia (SEA/HLM/295).

PART A

CHAPTER. 20

TRANSFORMING DATA INTO INFORMATION

“As the world continues to generate unimaginable amounts of data, more data lead to more correlations, and more correlations can lead to more discoveries”

-Hans Rosling:
Professor of International Health
at the Karolinska Institute

"You seek too much information and not enough transformation"

Shirdi Sai Baba:
An Indian Spiritual Master

The health information system in developing countries has a huge amount of data. If these data are not transformed into information in time, it can be justifiably equated to an absence of data. The sizeable quantum of resources invested in the health information system will get lost. These data mines need to be cleared by applying basic statistical and reasoning methods so that they become very useful information. It can be used in (i) planning a program; (ii) changing the course of action; (iii) intensifying or modifying the interventions; (iv) reducing or sun-setting program activities; (v) taking technical, administrative, management and logistic actions on several perspectives.

The utility of data can be dramatically increased and the value of data becomes very high if we know how to appropriately transform it into information. Health professionals serving at different levels of the health care delivery system should be trained on the methods by which we can transform data into information. We do not need sophisticated statistical methods to do this. Simple descriptive, inferential and analytical statistical methods will serve the purpose. But these must be interpreted using epidemiological thinking skill together with consideration of specific and respective program issues.

A case in point is that if we analyze and interpret the raw data as such, we could find that "there is not a single case of benign prostatic hypertrophy or cancer prostate gland in female population". This statement is absolutely correct from the statistical perspective. In other words, some background knowledge on the issue at hand or program specific perspectives need to be considered when data are transformed into information.

The same piece of data should be transformed into different types of information depending on the nature of work that the staff is performing. In other words, the thinking

pattern or thought process on a piece of data or information could be different depending on the person who is transforming the data into information. The following scenario is depicted as an example.

Scenario: In a malaria-endemic area, 30 febrile persons with severe chills and rigors and some in a comatose state were admitted to a remote township hospital in the hilly area last night. This data/information was given to all categories of hospital staff early next morning. The following thought processes must immediately come into the minds of staff so that our health system performance can be at an acceptable level to serve the population. The thought process questions are not exhaustive.

THOUGHT PROCESS OF A NURSE: (NURSING CARE AND GENERAL THOUGHTS)

(i) I will be very busy tomorrow with these malaria patients. I hope no seriously ill persons are there. (GT)
(ii) I have to inform my nurse aid not to take leave during this week or so. I myself have to cancel my leave. (A)
(iii) I may have to prepare for special nursing care for severely ill and comatose patients. (NC)

THOUGHT PROCESS OF MATRON: (MANAGEMENT, ADMINISTRATIVE AND LOGISTIC THOUGHTS)

(i) Do I have enough beds, pillows and bed sheets in the hospital? (M)
(ii) Do I have enough antimalarials in the hospital wards? (M)
(vii) Do I have sufficient drip bottles and drip sets? In case, some of the patients are suffering from complicated malaria? (M)
(iv) I need to inform the kitchen regarding the number of patients for diet requirement. (L)
(v) How many nurses are taking leave tomorrow? (A)
(vi) We do not have sufficient beds for the 30 patients (M)

THOUGHT PROCESS OF TMO: (MANAGEMENT, TECHNICAL AND ADMINISTRATIVE)

(i) I have to check whether lab assistant is available tomorrow for blood testing. I hope reagents and rapid test kit are enough for the diagnosis. (M)
(ii) I hope required medicine and antimalarials are not out of stock. (M)
(iii) Can these patients be suffering from drug-resistant malaria? (T)

(iv) What should I do if blood is required for complicated malaria? (M).

(v) I may have to refer to district hospital if some patients are serious and dangerously ill. What about transport arrangement? (A)

(vi) I may have to refer the latest WHO guidelines on the management of severe malaria. Luckily, I have the latest edition. (T)

THE UTILITY OF DATA CAN BE DRAMATICALLY INCREASED AND THE VALUE OF DATA BECOMES VERY HIGH IF WE KNOW HOW TO APPROPRIATELY TRANSFORM IT INTO INFORMATION.

THOUGHT PROCESS OF EPIDEMIOLOGIST OR MALARIOLOGIST: (TECHNICAL)

(i) Is this an unusual occurrence of malaria cases in that area? (T)

(ii) What is the age group of the 30 patients? (T)

(iii) What is the gender proportion of these 30 patients? Men generally go to work in the forest fringes or forest? Women generally are at home. If women constitute the majority, it may be a local transmission. (T)

(iv) Are there relapses or recrudescence patients? (T)

(v) Is there anyone under one month denoting local transmission? (T)

(vi) What is the general trend of malaria in that area? (T)

(vii) Is it an unexpected event or pre-outbreak situation deserving special

attention to control malaria? (T)

(viii) Are they migrants or residents from this area or what about the addresses of these patients? (T)

(ix) Many probing questions on time, place, person; agent, host, environment and vector-related questions would come up. (T)

THOUGHT PROCESS OF STATE/REGIONAL PUBLIC HEALTH DIRECTOR (STRATEGIC-TECHNICAL, ADMINISTRATIVE)

(i) He/she will think of the overall malaria control situation in that area (S-T)

(ii) Trend of malaria patients admitted to that township hospital over the years for that area compared with other nearby townships (S-T)

(iii) Staff deployment situation, any vacancy posts, etc. in that area. (A)

(iv) Is the malaria control strategy effective or needs modification? (P)

CONCLUSION

The higher the hierarchical level of staff in the organization, the more strategic and policy level type of thought process will be there. The thought process of the Director-General will consider issues at the policy level in the context of state and regional variation and situation; policy and strategy of vector-borne diseases control, budgetary allocation; staff deployment and transfer, etc. The above scenario suggests that if all our staff, especially public health professionals, process and apply epidemiologic thought processes, we can serve the population more effectively on our path to Universal Health Coverage.

REFERENCES

1. Presentation made by Dr. Myint Htwe at the inter-country consultation on "Strengthening of Health Information System in Countries of South-East Asia Region", WHO-SEARO, New Delhi, 16-19 October 2001, (SEA-HS-219).
2. Presentation made by Dr. Myint Htwe at the inter-country workshop on "Data Management for Evidence-based Decision Making", Bangkok, Thailand, 3-7 December 2001, (SEA-HS-221).
3. Concluding remarks made by Dr. Myint Htwe at the inter-country workshop on "Strengthening Use of Health Information at the District level", Bangkok, Thailand, 10-12 August 2009 (SEA-HS-326).

PART A

CHAPTER. 21

INCREASING THE EFFECTIVENESS OF CAPACITY BUILDING ACTIVITIES

“Job training empowers people to realize their dreams and improve their lives”

- Sylvia Mathews Burwell:
22nd United States Secretary of Health and Human Services

> **"Nothing gets transformed in your life until your mind is transformed."**
>
> - **Ifeanyi Enoch Onuoha:**
> Author and a visionary leader)

Almost all health programs of the Ministry of Health have "Capacity Building Activities" (CBAs) mentioned as part of their work plan. We need to give serious attention to it so as to obtain the desired effect. It is one of the key activities for increasing the efficiency and effectiveness of program performance from all perspectives. It is also noted that a sizeable budget is allocated to conduct CBAs. We need to aim for "value for money". It is also a labor-intensive activity. CBAs can be done in various ways and one of them is conducting training or reorientation courses. The discussion that follows is focused on training or reorientation courses only.

ISSUES TO CONSIDER BEFORE DEVELOPING PLANS TO CONDUCT CBAS FOR NEXT BUDGET CYCLE

1. How many CBAs had been conducted program-wise during the last three years? These must be further explored in a general sense at least in terms of topics, duration, categories and number of participants/ trainees, list, and categories of faculty/ facilitator/resource person involved? This will give an overview of CBAs being conducted in the country. (Because of rapid staff turn-over, it may be necessary to hold CBAs regularly but systematically).

2. Get more detailed data for each CBA in terms of topics given, categories and number of staff who attended, categories of faculty involved, duration of each CBA, immediate post-evaluation/assessment findings of each CBA, number of participants who dropped-out, MoH sponsored or MoH, development partners or any outside agencies sponsored, budget spent in detail (per diem for participants, honorarium for faculty/facilitators/resource persons, costing for many other CBAs related administrative and management activities, handouts given, etc.) It is noted that sometimes per diem and honorarium were wrongly given to participants and faculty who did not attend.

3. Get the agenda and program of each CBA for critical review in terms of time allocation for each topic – balanced or not, feasibility, appropriateness, and relevance to objectives of CBA, etc.

4. Conduct focus group discussions and key informant interviews with facilitators/ resource persons, participants, and administrative personnel conducting CBA in separate groups (proper technical procedures must be followed in conducting focus group discussions and key informant interviews). It is better to get technical support from professionals of Department of Medical Research. Many relevant and useful information can be obtained and used effectively for improving future CBAs.

5. Analyze all the above data and information in detail for each CBA (analysis method will not be discussed here, as it will require writing another article. Any full-fledged epidemiologist can easily do it). However, the following perspectives, at least, must be analyzed:

(i) Is the objective of each CBA in line with overall goals and objectives of concerned program?
(i) Can the agenda of CBA be able to achieve the objectives of CBA? i.e., matching and cross-referencing of agenda versus objectives
(iii) Quick and dirty analysis on the experience and caliber of the lecturer or faculty of CBA
(iv) Quick review on teaching learning methods used and its appropriateness to the topics of CBA? (Teaching learning methods like table-top exercise, didactic lecture, scenario review, problem-solving exercise, debate, presentation, questions-based exercise, game, functional exercise, simulation exercise, operation-based exercise, etc.)
(v) Review of end-training evaluation/ assessment report

ISSUES TO CONSIDER JUST BEFORE CONDUCTING NEXT CBAS

Based on findings of the analysis made as mentioned above, plan for next CBAs. All the weaknesses identified can be improved before conducting next CBAs.

ISSUES TO CONSIDER WHILE CONDUCTING THE CBAS FOR IMPROVEMENT IN FUTURE

Take videos for a certain section of two or three CBAs. Review and delete it completely. No specific personal reference must be made. It is sensitive but there are many ways to circumvent the uneasiness of doing this or do participant observation instead. Ethical perspectives need to be taken into account.

ISSUES TO CONSIDER AFTER CONDUCTING CBAS

Immediate post-training evaluation/ assessment and analysis is a must for every CBA. A generic format for evaluation/ assessment can easily be developed and each CBA can adapt it to suit its specific requirement. If we are serious about it, we can have a very cost-effective and time-effective CBAs in future. Our objectives of conducting CBAs can be achieved satisfactorily.

CONCLUSION

To effectively plan CBAs, a meeting of all program managers should be called to discuss the CBAs to be carried out in the next 12 months and to share their experience. The reason being that many similar CBAs can be combined so that precious staff time can be saved. Some of the CBAs are generic in nature and cut across all programs and staff from different programs can attend. One side advantage is that staff from different programs can share their experience from different perspectives and angles. Currently, many staff are attending one CBA after another and time for actual program implementation is compromised. Let us work together to achieve the overall objective of the MoH. In essence, CBAs must be properly planned and conducted in a very systematic manner.

PART B

RESEARCH IN SUPPORT OF PUBLIC HEALTH

PART B

CHAPTER. 1

CHARACTERISTICS OF A GOOD HEALTH RESEARCH INSTITUTION

“Every institution can be credible and great if its officials qualify the moral values, discipline, and honesty, within constitutional limits”

- Ehsan Sehgal:
Journalist, scholar, and founding chairman of the Muslim United Nations

"GREAT RESEARCH UNIVERSITIES MUST INSIST ON INDEPENDENCE FROM GOVERNMENT AND ON THE EXERCISE OF ACADEMIC FREEDOM"

Alan Dershowitz: Author and an American Lawyer known for his work in constitutional law and American criminal law

Research institutions perform with varying degrees of efficiency, based on their capacity, capability of researchers and funding availability. In order to make the research institution strong and as efficient as possible to contribute to the health development of a country, the following preliminary checklist may be used to quickly assess the requirements in terms of its infrastructure, functions and performance. The findings can be used to further improve the performance of the research institution from all perspectives. The checklist is by no means exhaustive, but could serve as a basic minimum to assess the research institution in a generic manner.

Any research institution can possess many of the characteristics mentioned below, but there is always be room for improvement. The characteristics mentioned below can be expanded (additional subset questions) if one really wants to conduct a detailed review and assessment on the overall performance of the research institution. These characteristics are interconnected. The strength of a research institution is as strong as its weakest characteristics. In other words, the characteristics of the research institution need to be strengthened in a well-balanced manner.

The following generic checklist may be applied to assess the general scenario or performance of the research institution.

1. Is there a "National Health Research Policy and Strategies" in the country? If there is, "are goals, vision, mission statements, and objectives of the research institution clearly stated and also reflected the spectrum of "National Health Research Policy and Strategies?"
2. Are there institutional guidelines on "Responsible Conduct of Research"? If so, what is the level of adherence by researchers to these guidelines?
3. Are there institutional guidelines on "Research Ethics"? If there are, what is the level of adherence by researchers to these guidelines?
4. What is the level of performance of "Ethics Review Committee (ERC)" or "In-

stitutional Review Boards (IRB)"? "Are there specific guidelines for members of ERC and IRB?" and "is the membership of ERC and IRB well balanced?"

5. Are there institutional guidelines on "Good Research Management Practice"? If so, what is the level of adherence by researchers to these guidelines?
6. Is there a dynamic and comprehensive "Research Information System" in the research institution? Is research prioritization a common phenomenon for the institution?
7. Are there regular and systematically run "Research capacity building programs for various domains of research and Research mentoring programs?" If there are, any review and assessment being made from time to time?
8. Are there clearly defined "pathways for career development of researchers?"
9. Are there regular forums for presentation of research findings by researchers? Some examples are research symposiums, research congresses, research seminars, etc.
10. Are there opportunities for young researchers to publish their papers, such as Research Bulletin and Research Journals?
11. Is there an annual report of the research institution being issued regularly? If so, is any analysis being made on the annual report from time to time, or is there an "analytical section in the annual report"?
12. Is there any "Resource Flow Analysis for Research" being done?
13. Are there "Sister Research Institutions" or networking among research institutions inside the country as well as with research institutions outside the country?
14. Is there a "Researchers Exchange Program" with other research institutions (both in-country and abroad)?
15. Does the research institution have a "Research Enabling Environment"?

This set of 15 questions was framed in the context of research institutions in developing countries. A separate review may be made to assess the "Research Infrastructure" of various sub-domains of research, applying the checklist also. Each of the above 15 checklist questions can be further expanded to explore more in detail regarding the performance of various sub-domains of research. Generally, if a research institution can fulfill the majority of the items in the checklist in an affirmative or satisfactory manner, the research institution can be regarded as a good research institution. We should all strive collectively to make our research institution "A Good Health Research Institution" to serve the country most effectively and efficiently.

PART B

CHAPTER. 2

STRENGTHENING HEALTH RESEARCH INSTITUTIONS IN SUPPORT OF PUBLIC HEALTH

“It is important to get results from the experiment but the most important is the process in getting the results”

- Nik Ahmad Nizam:
Director, Center for sustainable nanomaterials,
Universiti Teknologi Malaysia

(Based on the article written in the magazine in commemoration of 15th anniversary of Department of Medical Research - Upper Myanmar & presentation titled "Promoting the Role of Research Institutions in National Health Development" made by the author at the symposium of 41st Myanmar Health Research Congress, Department of Medical Research (Lower Myanmar), 10 January 2013).

The public health domain includes a wide array of entities ranging from public health workers (community-based health workforce, program managers to epidemiologists) with different technical backgrounds to health systems and institutions down to sub-rural health centers. Public health and research domains are inherently linked and support each other positively. The smooth functioning of the health research domain is essential to fast-track the efficient performance of the health care delivery system in the country which is necessary for improving the overall health status of the population.

The health care delivery system has two major functions, i.e., curative and public health. The performance of the health care delivery system depends on several factors some of which are beyond the control of the Ministry of Health. It is the duty of researchers or research institutions to find out these factors, (by way of conducting "implementation research", as well as various qualitative and quantitative research) which may vary from one geographical location to another and from time to time and also from different characteristics of professionals running the health system. In other words, epidemiologic triad (time, place and person) determines whether the health system performs well or not in the context of overall public health functions.

Similarly, curative functions of the health care delivery system can also be supported and improved by means of conducting clinical research and operational research on several aspects of hospital performance, both general and specialist hospitals, located in the country. The country's overall health domain can only be improved if one takes into account both the curative and public health functions.

Out of the spectrum of different types of research available, "implementation research" is one of the avenues by which one can determine the status of public health functions of the health system in terms of

exposing the interaction of the epidemiologic triad. The public health functions, especially, can be improved to a greater extent by way of applying the findings of "implementation research".

Implementation research is used as a general term for research that focuses on the question, "What is happening" in the design, implementation, management and administration, logistical operations, services delivered and outcomes of projects and programmes2. In other words, implementation research can assist in streamlining logistics, management, and administrative aspects as well as enhancing technical perspectives of various projects and programs of the health care delivery system.

In order to do so, it is important to brush up the research domain. The strength of the research domain depends on availability of several key determinants or factors, such as:

(i) Sound and rational national health research policy and strategies;
(ii) Technical capability and capacity of researchers;
(iii) Presence of a system of good research management practice;
(iv) Dynamic research information system;
(v) Well established research culture not only in research institutions but also in schools and universities;
(vi) Effective networking among research and health institutions;
(vii) Practicing responsible conduct of research;
(viii) Well established and strong "Ethics Review Committee" or "Institutional Review Board";
(ix) Adhering to research ethics in conducting research;
(x) Dynamic research monitoring system for technical, management, administrative, logistics, human resource, infrastructure and financial aspects; and
(xi) Broad minded and forward- looking senior research managers who execute good research management practice[1].

In developing as well as in developed countries, all these factors may not be available in desirable perspectives and proportion or functioning smoothly. This is natural. These factors could be promoted through the combined and concerted efforts of all stakeholders involved in this endeavor. However, a robust and dynamic national health research policy together with supporting key strategies will ultimately determine whether the research domain is on the right track or not.

It is essential to strengthen the above factors in a phase-wise and step-wise approach, with reasonable budgetary support from the

government and other sources. Resource flow analysis in research3 is required to elicit the situation and trend of the funding scenario so that appropriate remedial measures and due attention could be made for its growth and sustainability.

Each research institution is generally guided by a variety of institutional guidelines and system of work such as:

(i) Availability of updated vision and mission statement;
(ii) Availability of updated institutional research ethical guidelines for its researchers;
(iii) Availability of updated institutional guidelines for responsible conduct of research;
(iv) Dynamic institutional framework for research information system;
(v) Availability of updated institutional guidelines for establishing good research management practice;
(vi) General guidelines for establishing regular capacity building activities (both intramural and extramural) for incoming young researchers together with effective mentoring system for them;
(vii) Guidelines for networking with other research institutions both within and outside the country;
(viii) A system of career ladder for researchers;
(ix) A system of researcher exchange program between research institutions as well as with health institutions, both nationally and internationally;
(x) Presence of regular forum or platform for researchers, clinicians and public health professionals especially for identifying research agenda and research utilization;

> **"THE RESEARCH IS TO SEE WHAT EVERYBODY ELSE HAS SEEN, AND TO THINK WHAT NOBODY ELSE HAS THOUGHT".**
>
> **Albert Szent-Gyorgyi:**
> (Hungarian Biochemist,
> Nobel Laureate in Physiology or Medicine in 1937)

(xi) Presence of practical and down-to-earth research monitoring system;
(xii) Framework for resource mobilization, rational resource allocation together with resource flow analysis annually; and
(xiii) Compulsory issuance of the annual or biennial report of the research institution, including a chapter on critical analysis on strengths and weaknesses and suggestions for research planning and improvement.1.

These guidelines, framework and system of work would definitely facilitate inculcation of good research culture among researchers and make research institutions strong and independent. For all these activities, the prime mover is the head of the research institution with unwavering support from policy makers. The head is, in fact, the chief research architect who is responsible for the institution's sustainability, growth, and progress.

In other words, the chief research architect must possess excellent research management skills to move the research institution to greater heights. Researchers, by nature of their work, generally acquire good epidemiological thinking skill, analytical and critical thinking capability1.

In conclusion, it can be confidently said that efficient performance of health care delivery system cannot be achieved without the support of a strong research domain in the country. Therefore, the abovementioned factors must be put in place with assurance and understanding from the policy makers. Let us work together to achieve our objective of improving the overall health status of the population with full involvement of researchers.

REFERENCES

1. Strengthening Research Domain to Improve the Performance of Health Care Delivery System in the country, by Dr. Myint Htwe. Magazine issued in commemoration of 15th Anniversary of Department of Medical Research (Upper Myanmar), 2014.
2. A Guide to Implementation Research, by Alan Werner, Urban Institute Press (ISBN 0-87766-724-1)
3. Monitoring Financial Flows for Health Research. Global Forum for Health Research 2001. ISBN 2-940286-05-1. www.globalforumhealth.org

(NB. This article appeared in the Bulletin of Preventive and Social Medicine Society, Volume 1 Number 3, June 2015).

PART B

CHAPTER. 3

RESEARCH INSTITUTIONS AND NATIONAL HEALTH DEVELOPMENT

“To meet the global health needs of tomorrow, it is critical to invest in research and development today so the most effective solutions are available when we need them”

- Global health technologies solutions - GHTC

(This article is based on the presentation made at the symposium of 41st Myanmar Health Research Congress, Department of Medical Research, Lower Myanmar, Yangon, 10 January 2013).

It is a fact that health research is essential for the development of any country, including improvement of health status of the population at large. Research and development go hand in hand. Development in any area cannot proceed smoothly without basing it on relevant research findings. This idea needs to be ingrained and inculcated among health professionals working at various levels of the health care delivery system.

To complement this idea, it is important to realign the thinking of young researchers and young medical graduates from the very beginning of their career. The whole spectrum of research process can definitely improve the skills of health professionals in critical thinking, as well as in analytical and epidemiological thinking skills.

We, therefore, need to find ways and means to further promoting the role of health research institutions (HRIs) in national health development. In Myanmar's context, universities cannot be considered research institutions (which are essentially research institutions in developed countries and in some developing countries) due to various reasons.

REVIEWING THE CURRENT SCENARIO

In order to specifically strategize and effectively promote the role of HRIs in national health development, we first need to know the current situation of factors influencing this aspect. The following probes can yield many options for us to pursue further. It is, however, not exhaustive. The context of the probes is mixed, i.e., Myanmar as well as the international scenario.

(i) Are there effective and sustainable linkages among HRIs and health institutions in the country? What types of linkages or platforms are available and are they functioning well? Is there any room for improvement?

(ii) Are health research information systems (electronic and computerized) well established among HRIs and health institutions? If so, are they linked (electronically or otherwise) with service departments (Department of

Public Health, Department of Medical Services, Department of Health Professional Resources Development and Management and Department of Traditional Medicine) of the Ministry of Health (MoH) and various universities under MoH?

(iii) Are joint research projects carried out on a regular basis with service departments and universities under MoH? This is important from the utility perspective.

(iv) Is sharing of important research findings practiced on a regular basis between HRIs, service departments and universities under MoH? How effective is the current mechanism, forum or platform? Is there any room for improvement?

(v) Are there "researcher exchange program" among HRIs and health institutions and also to some extent with service departments and universities?

(vi) Are service departments closely involved in setting the research agenda? Is there any room for improvement? This is the key issue to promote the role of HRIs in national health development.

(vii) To what extent are HRIs effectively and practically involved in national health planning exercises, national health policy, and strategy formulation, health interventions selection for various health projects and programs?

(viii) What is the general working relationship between HRIs and service departments? There are several aspects to be considered in reviewing this.

(ix) Is the role of HRIs and health research spelled out, either explicitly or implicitly, in national health policy?

(x) What is the current funding situation of HRIs (national funding support and international funding support)?

(xi) What is the degree of flexibility on external collaboration and networking with various extramural research institutions, organizations, agencies, universities, foundations or international nongovernmental organizations? Is there room for improvement? What are these?

(xii) What is the current situation of regular capacity building programs for young researchers in HRIs (intramural and extramural)? Has any recent evaluation have made on this and action taken?

The above probes will yield important preliminary information for us to move ahead in order to further promote, strengthen and increase the momentum of the role of HRIs in national health development. Any HRI in any country will not give a perfect response or fully satisfactory response to the above probes. After obtaining preliminary responses from the above probing questions, we may quickly embark on intensive in-house brainstorming sessions.

Here we need to practice free and frank discussions and exchange of ideas and experiences using various management techniques (Delphi, Delbecq, focus group

> **"RESEARCH AND DEVELOPMENT HAVE LED TO CRITICAL BREAKTHROUGHS IN PREVENTION, DIAGNOSIS AND TREATMENT OF DEADLY GLOBAL DISEASES."**
>
> **(USAID)**

discussions, key informant interviews, proper brainstorming or brain writing methods).

Practical and sustainable ideas or strategies should be selected without considering the source, i.e., irrespective of the position or rank of the staff member. It is also essential that we need to think out of the box and change our mindsets as much as possible.

Before identifying the possible course of action, it would be useful that key projects, programs, strategies and interventions of service departments are known to professionals of HRIs. The mission statement and key strategies of the HRIs should be thoroughly reviewed in the context of the contemporary scenario. Human resource situation of HRIs should be quickly reviewed and analyzed.

WHAT ARE THE POSSIBLE OPTIONS OR ACTIVITIES THAT WE CAN CONTEMPLATE TO PROMOTE THE ROLE OF HRIS IN NATIONAL HEALTH DEVELOPMENT?

The activities mentioned below could be jointly worked out between the professionals of HRIs and service departments of MoH. It is to be emphasized and also important to note that HRIs are not meddling in the affairs of service departments but supporting them in achieving their objectives in the context of overall national health development. This fact must be clearly understood by all the parties involved.

(i) Be involved in prioritization and resource allocation of health projects and programs in national health plan of MoH based on research findings.
(ii) Jointly identify research areas/agenda including administrative, operational, logistics and management aspects of certain priority projects and programs.
(iii) Jointly develop and implement research proposals (PI or Co-PI must be from service department).
(iv) Provide orientation training on operational research, implementation research, and translational research to professionals of service departments on a regular basis as there is rapid turn-over of staff in service departments.
(v) Conduct research utilization workshops with follow-ups.
(vi) Conduct joint review/evaluation of

priority health projects and programs of national importance

(vii) Assist in monitoring, evaluation and surveys conducted by service departments.

(viii) Collaborate in analyzing data generated by health information units of service departments.

(ix) There should be compulsory participation of professionals from service departments (MoH should facilitate this) in research congress and important research meetings.

(x). Identify ways and means to inculcate research culture in service departments. It could be done phases and stepwise.

Apart from the above, HRIs should simultaneously consider implementing or augmenting the following aspects:

(i) Technical soundness of young researchers must be ensured

(ii) Sense of collaboration should be inculcated in each and every young researcher

(iii) Sense of team spirit and team approach should be enhanced in each and every young researcher

(iv) Responsible conduct of research (RCR) should be promoted

(v) Research ethics should be strictly practiced.

CONCLUSION

Some of the determining factors in successfully promoting the role of HRIs in national health development are as follows: good working relationships, good understanding, team spirit and approach, equal partnership, sharing of knowledge and experience, responsible conduct of research, etc. This could also increase the importance and prestige of HRIs in the country in the context of national health development.

It is also proposed to conduct a national seminar on this subject for in-depth discussions. The output of this seminar could set the tone for furthering the importance and essential role of HRIs in national health development. Following the national seminar, it could prove useful, on a long-term perspective, if an executive summary of the important role that HRIs can play in national health development is prepared for informing policy makers and key parliamentary members.

At the time when service departments are challenged by complex issues and problems, they must draw upon the strengths and assets of HRIs. HRIs can also stand ready if an extensive review of its modus operandi is made and corrective measures taken. It is hoped that this article will help to inspire and encourage researchers to adopt a strategic approach with regard to their roles in national health development.

PART B

CHAPTER. 4

STRENGTHENING HEALTH RESEARCH INFORMATION SYSTEM

**“To be sure,
it is not the fruits of
scientific research that
elevate a man and enrich
his nature, but the urge to
understand, the intellectual
work, creative or receptive”**

- Albert Einstein:
Nobel Laureate in Physics

> "RESEARCH REPORTS ARE GENERALLY NOT REFERENCED SERIOUSLY, ALTHOUGH THEY ARE PRESENTED AT A RESEARCH SYMPOSIUM OR CONGRESS."

Health Research Information System (HRIS) is the backbone of any health research system and help to make it function efficiently. The stages of development of HRIS vary from one institution to another. The importance accorded to HRIS is not commensurate with its usefulness. HRIS is essential for making the correct decision pertaining to planning, administrative, logistics, management and technical matters of the research institution. If HRIS is not performing well, the following situation, among others, can arise.

(i) Research planning and monitoring may not be up to the mark;
(ii) Rational resource allocation to different disciplines of research may not be possible;
(iii) Long-term as well as short-term human resource planning in research will be difficult;
(iv) Intramural and extramural networking and collaboration will not be that strong; and
(v) Resource mobilization for research will be inefficient.

We, therefore, need to find practical ways and means to further strengthen and establish a dynamic and robust HRIS in the country.

INITIAL EXPLORATORY QUESTIONS TO BE ASKED

The following exploratory questions may need to be asked before we embark on strengthening HRIS.

(i) Do we have an electronic or computerized overall research information system in the country? If so, what is the level of performance in terms of efficiency and networking status?
(ii) Do we have electronic or computerized HRIS in health research and affiliated institutions in the country?
(iii) Are they effectively serving the real

needs of research professionals working in these institutions?

(iv) The generic questions, which can be asked are: Are they functioning well? Is the system comprehensive, dynamic, robust and responsive?

(v) Does it give sufficient information for research planning and also for health planning?

If the response to these questions is not a straight "YES", we need to do something to improve it as soon as possible.

HRIS SCENARIO IN A DEVELOPING COUNTRY

HRIS of developing countries is generally not up to the mark. Most institutions have a system of recording and reporting on paper but they are not in proper order. Sometimes databases are not properly maintained and updated. Staff responsible for maintaining research database have not been specifically assigned and trained and necessary support to them is not always available. Research reports are generally not referenced seriously, although they are presented at a research symposium or congress. The overall sense of ownership of HRIS needs to be inculcated among researchers. HRISs are generally not recognized as a priority activity.

CHARACTERISTICS OF A GOOD HRIS

An efficient HRIS (electronic and computerized) should have at least the following basic characteristics. It must be simple, dynamic, responsive, user-friendly, ease of updating, smooth and sustainable extramural and intramural linkages, and managed by an efficient and forward-looking coordinator. The key components of HRIS are:

(i) Trend of resource flow to different disciplines of research;

(ii) Resource mobilization pattern and status;

(iii) Availability of human resource for research and its trend;

(iv) Research training or capacity building activities (intramural as well as extramural) being conducted including researcher exchange programs being initiated;

(v) Details of research projects being conducted;

(vi) List of research publications, discipline-wise;

(vii) Research infrastructure in terms of several perspectives;

viii) Records of challenges being faced by the research institution;

(ix) Various perspectives of research management, etc.

KEY SUCCESS FACTORS FOR EFFICIENT FUNCTIONING OF HRIS

Establishment of HRIS must be at least mentioned in the national health research policy and preferably elaborated in the institution's mission statement and strategies. This will allow getting good input, support, and resources for strengthening HRIS in an institution. For any HRIS to be successful, efficient and sustainable, regular and critical review of the system is essential in addition to having a sense of ownership by researchers. Practical ways and means should be continuously sought to promote a sense of ownership by all those involved in the research system in the country. After all, proper management of HRIS by fully committed staff members is essential.

KEY ACTION AREAS IN HRIS

The key action areas to be considered when developing, establishing or strengthening an HRIS are as follows: generating database framework, synthesizing, verifying, storing, retrieving, analyzing, disseminating, and utilizing information, assessment and evaluation of HRIS. Thorough brainstorming, involving relevant professionals, is required when finalizing the overall framework.

KEY ACTIVITIES FOR CONSIDERATION BEFORE ESTABLISHING OR STRENGTHENING HRIS

Before establishing or strengthening an HRIS, it is worthwhile to do a quick review of national and institutional health research policy, statement or strategy on HRIS, and existing HRIS in terms of input, infrastructure, management, linkages, etc. A thorough brainstorming is required for finalizing HRIS framework and its contents. Based on it, clear guidelines on the management of HRIS should be developed.

These guidelines must be dynamic and should be subject to change depending on the changing scenario or requirement. The research information emanating from HRIS must also be readily available and easily accessible to policy strategists, research planners, and research managers. At the same time, it is essential to institutionalize capacity building activities for management of HRIS.

At the national level, it is also worth considering the establishment of a national oversight center for overall research information for all disciplines related to health and beyond the health domain. HRIS can provide strategic information for

formulating or reformulating a rational national health research policy and strategy. For HRIS to be comprehensive and useful, it is essential to promote inter-institutional and intra-institutional information networking.

Mandatory registration of research studies, clinical trials and also for fugitive research carried out in the country must be made. A regular forum for the dissemination of research findings and utilization can stimulate dynamicity and responsiveness of HRIS. Budgeting for the dissemination of research findings should be included when submitting the research project proposal.

BENEFITS OF A GOOD HRIS IN THE COUNTRY

Having a good HRIS can lead to several benefits to the domain of research, such as:

(i) Reducing the administrative burden;
(ii) Providing up-to-date information on research and research management-related issues;
(iii) Obtaining a streamlined, single point access to research information;
(iv) More chance of getting financial support from funding agencies and technical collaboration from big research organizations or institutions;
(v) Facilitating responsible conduct of research (RCR);
(vi) Reducing fraud and unwanted manipulation; and
(vii) Facilitating good research planning and research strategy formulation.

The ultimate benefit is the availability of decision-making information for professionals working in service departments of the Ministry of Health, who should, in fact, be the real users of research information.

CONCLUSION

To reap the full benefit of research projects being carried out in the country, we need to have a strong, dynamic, robust, user-friendly and sustainable overall "Country Research Information System" (CRIS). It must be linked with "Health Research Information System(s)" (HRIS) of the research institution(s) in the country. It is worthwhile to consider conducting a national seminar on "Strengthening, Streamlining and Optimizing Research Information Systems in Myanmar".

PART B

CHAPTER. 5

RESEARCH AND HEALTH POLICY FORMULATION

**“Nowadays,
a minister of health
cannot consider his or her job
done simply by looking at the
healthcare system. It is not
enough to have health a poli-
cy, you need healthy policies
everywhere”.**

- Julio Frenk:
Assistant Director-General of WHO
and Minister of Health, Mexico

"THERE IS NO MORE IMPORTANT TIME THAN NOW TO EMPHASIZE THE CRITICAL IMPORTANCE OF PUBLIC HEALTH POLICY"

Public Health Under Siege:
Improving Policy in Turbulent Times, de Beaumont Foundation, 2021

This article is written in order to stimulate the minds of young researchers so that more interest is generated in the area of policy research, policy analysis, role of research in policy making/formulation, policy reformulation and policy evaluation. In this article, policy refers to health policy unless otherwise specified.

This article will focus on:

(i) role of research in policy making/ formulation;
(ii) conditions that need to be fulfilled in order that health research can make policy of the country practical, relevant, rational, forward looking, dynamic and especially reflecting the current needs of the country;
(iii) some epidemiologic tools/methods that can be used in policy research/ analysis and its caveat;
(iv) steps in health policy research (analysis) and policy making; and
(v) constraints generally encountered in developing countries in policy making.

Health policy is generally defined as a broad statement of goals, objectives, and means that create the framework of health care activities in the country (Grindle 1980). Health policy research/analysis is a process of scientific investigation where methodologies and principles from health and social sciences are applied in order to either formulate or reformulate or evaluate the health policy. The principles, methods and approaches used in health systems research are also applicable in health policy research.

The importance of sound and rational health policy making is recognized by an increasing number of bodies. Consideration of research findings in policy making will result in policies which may eventually lead to desired outcomes, including health gains (Hanney et al 2003). Therefore, there is a growing need of encouraging partnerships between researchers and policy makers. It is not achieved easily because those doing research and those who might be able to use it are from different cultures. The policy makers are at a higher hierarchical position, who generally do not want to be influenced by researchers.

The interface between researchers and policy makers must be made more permeable while balancing the interests of these two

groups (Hanney et al 2006). It is important to establish a long-term linkage system between researchers and policy makers. Researchers and epidemiologists should also work hand in hand in areas such as desktop review of policy-related documents, documentary analysis, key informant interviews, focus group discussions and other appropriate methods of information gathering. It can yield strong evidence in a short span of time whereby the policy can be modified.

One should note that there is reciprocity between research and health policy. A good example of this type of reciprocity is seen in the written statement of National Health Research Policy of Nepal, i.e., "To augment health researches in the priority areas set by National Health Policy and to provide advice based on evidence to His Majesty's Government of Nepal for formulating appropriate health policies". One of the operational strategies is "A joint team of Nepal Health Research Council and the Ministry of Health will be formed to promote health research in policy development, priority setting, research process, dissemination and utilization of research findings". This type of interconnectedness between research policy, health policy and research strategy statements are very conducive to augment the role of health research in health policy development.

ROLE OF RESEARCH IN POLICY MAKING AND HOW TO PROMOTE IT

Policy makers require reliable information on current and future scenarios of health status of the population and its determinants and trends. In addition, the likely implications of policy interactions, i.e., health policy versus health research policy versus sectorial development policies (housing policy, energy policy, agricultural policy, industrial policy) versus economic policies need to be exposed to policy makers very clearly and in simple terms. Generation of this information and its concomitant review and analysis can be facilitated through the use of methods and principles from several social sciences disciplines as well as biological and medical sciences especially epidemiology.

Health policy research/analysis is usually based on review of existing research findings, expert judgement and even outcome of studies using modelling techniques (Shortell and Solomon 1982). Epidemiologic methods are very useful in looking into each step of the policy cycle or policy process (Walt 1994). In fact, when policy is about to be formulated, one needs to follow the simple policy process (Walt 1994) such as (a) problem identification and issues recognition (b) policy formulation (c) policy implementation (d) policy evaluation.

A policy or strategy should be evidence based as scarce resources available in developing countries are being utilized in implementing the policy using appropriate strategy. One needs to be very careful in formulating a policy as it may take several years before such policy (decision) can be evaluated (Holland & Wainwright 1979). One should not forget that several research studies had already been carried out by the Department of Medical Research, where the findings had significant policy implications. The findings

of these important research studies could be reviewed in toto and due consideration could be given when a national health policy is formulated or to be reformulated.

The World Health Assembly, in 1990, urged Member States, particularly developing countries, to create or strengthen mechanisms which would enable consideration of research findings in policy making and health systems operations. It also invited the research community to promote communication of findings to support decision making and the resource allocation process (WHA 43.19). In line with the World Health Assembly resolution, one needs to promote the role of health research in policy making.

When researchers present their findings in a research congress or seminars, its relevance and linkages to the services of existing national health care delivery systems and national health policy should be emphasized to the extent possible. Researchers should also consult decision makers and implementers (service departments of Ministry of Health) when a research study topic is identified. Generally, the researchers tend to work by themselves. Therefore, research relevance to national priorities might be overlooked.

MINIMAL QUESTIONS TO BE ASKED BY POLICY MAKERS BEFORE POLICY MAKING

There are many good examples of how research can play an important role in public health policy making. In such a situation, policy makers generally ask researchers to synthesize the following information. The information could be obtained from findings of several research studies already carried out under different scenarios or conditions. If research findings are not available or if the findings are inconclusive, one may carry out quick research studies or if the issue is urgent, one may get information through key informant interviews or by conducting focus group discussions or Technical Advisory Group meetings or through many other means.

(i) How large (in terms of time, place and persons) and important (severity or intensity or mortality or socioeconomic implications or political ramifications or increasing trend) is the said public health problem in the country?

(ii) If it is a real problem, what is the feasibility of implementing a program and what is the short-term and long-term cost of implementing the policy/ strategies/programs for that problem in the country?

(iii) What type of policy decision is to be made to select appropriate and cost-effective interventions? What untoward implications will affect the general public if the selected intervention is implemented? This is concerned with public health ethics.

(iv) What is the current situation of human resource for health, health infrastructure and many other components that are required to implement the policy?

The above information could be generated from research studies already carried out in the country or elsewhere. In other words, research-informed policy or evidence-based policy is the one which will have long-term beneficial effects for the population at large.

NEED FOR INTERACTION BETWEEN POLICY MAKERS AND SENIOR RESEARCHERS

Research can provide several aspects of successful or failed policies and the reasons for success or failure. Policy options can also be proposed by the researchers. These are important inputs to policy making so that the policy finally put in place for the country is the most appropriate and rational one. Throughout the implementation of the policy, researchers can also play a very important role in doing process evaluation, outcome evaluation and cost effectiveness evaluation. It should be emphasized that systematic reviews of research findings on a policy or strategy or program would provide the strongest basis or inputs into making the right policy decisions. Hence, the role of research in policy formulation is a sine qua non.

It is, therefore, desirable that policy makers or decision makers become more involved or interested in research and interact closely with senior researchers and research managers. Policy makers should also be proactive in advising a specific research domain to be given due attention so that there is a sense of ownership on the findings of research, which could be used in policy making.

A platform or forum needs to be created to facilitate the proposed interaction between senior researchers, research managers and policy makers. However, research evidence is just one aspect in the domain of policy making, although an important one. Political, financial, social and population voices play an equally important role.

IS THE HEALTH POLICY IN PLACE RELEVANT AND RATIONAL?

Health policy research promotes a way of looking into the policy process and appropriateness of the policy in place. The basic question is, "Has the policy achieved its desired effects? If not, what aspects of it should be modified or amended? If the impact is not noticeable, health policy researchers must ask the following basic questions in order to arrive at the correct diagnosis;

(i) Are managerial / administrative aspects of the health system at fault?
(ii) Are health-related policies not supportive of the health policy?
(iii) Are program strategies not relevant to the health policy itself?
(iv) Is the policy itself not explicit or irrelevant or not in consonance with the existing health infrastructure and human resources?
(v) Do policy makers and senior administrators ignore the findings of policy-related research projects which challenge current health policy?

CONDITIONS THAT NEED TO BE FULFILLED TO AUGMENT THE ROLE OF HEALTH RESEARCH IN POLICY MAKING

In order that health research facilitates policy making, the following prerequisites must be available or fulfilled:

(i) National health research policy itself must be conducive to development of a good research culture in the research institution or country. Good research culture can lead to availability of

motivated and capable researchers in the country, who can undertake policy research.

(ii) Appropriate utilization of research findings should be the norm of the research institutions in the country. Research outcomes should be seriously considered especially if these are related to health policy.

(iii) The overall research oversight team of the research institution must be proactive and fully functional.

(iv) National health research policy must also be forward looking, responsive, dynamic and broad enough to cater to contemporary and future needs of the country especially in areas of health promotion, prevention, treatment and rehabilitation.

(v) National health research framework, based on national health research policy, which is again based on national health policy must include activities related to policy research and analysis.

(vi) Preferably, there must be a "health policy research team" or "policy analysis" team led by a senior research manager (Director-General of Medical Research in Myanmar's context). Team members may include a senior researcher, an epidemiologist, an economist, a health economist, a sociologist, a researcher with experience in doing policy analysis, a statistician, a health planner, and an administrator.

(vii) This team should be preferably located in the Ministry of Health and not at the departmental or institutional level. The team can function under the direct strategic supervision of Health Minister or Deputy Health Minister.

SOME EPIDEMIOLOGIC TOOLS/METHODS THAT CAN BE APPLIED IN POLICY RESEARCH

(i) Demographic methods (life table analysis, potential years of life lost (PYLL), disability adjusted life years (DALYs), quality adjusted life years (QUALYs), quality adjusted life expectancy (QALE), health adjusted life expectancy (HALE), etc.)

(ii) Epidemiologic indicators of effect (relative risk (RR), attributable risk (AR), population attributable risk (PAR), odds ratio (OR), etc.)

(iii) Various types of epidemiologic study design (cohort, case control, cross sectional studies, etc.)

(iv) Methods used in economic burden of ill health (direct cost: cost of health care, Indirect cost: cost due to morbidity and premature mortality, etc.)

(v) Methods used in health need assessment (precede-proceed model, triangulation, etc.)

(vi) Risk and risk assessment methods (environmental risk assessment, behavioral risk assessment, etc.)

(vii) Methods used in assessment of potential interventions (randomized controlled trials, community intervention trials)

(viii) Synthesizing evidence (systematic reviews, meta-analysis, etc.)

(ix) Methods used in assessing suitability for policy (efficacy, effectiveness, applicability, efficiency, feasibility, potential coverage)

(x) Various combinations of research designs for evaluating health interventions.

The task of conducting policy analysis using epidemiologic tools is exceedingly complex. Interpretation of results and overall inference should be given very carefully. The ultimate aim is to achieve, as much as possible, "evidence-based policy making" or "research-informed policy making", so that policy at hand is really relevant, rational and beneficial to the people of the country. The above facts are some of the issues related to the policy process which can be dealt with by conducting research using various epidemiological methods, both descriptive and analytic.

INDICATORS TO DEPICT THE SITUATION *VIS-A-VIS* HEALTH POLICY

Concurrently, it will be useful to review the following situations as part of the policy review using epidemiologic techniques:

(i) Assessing the health status of the population, through conceptualization and measurement – an essential impact indicator to assess the effectiveness of the health policy;
(ii) Assessing health needs and risks and to cross reference with the existing policies (health and research) and strategies – an indicator to show whether health policy is addressing problems or issues facing the people;
(iii) Evaluating and synthesizing evidence regarding potential interventions (successes and failures) in relation to strategies proposed according to the policy – an indicator to elucidate whether the current policy together with its inherent strategies and interventions is acceptable in light of the prevailing situation;
(c) Analyzing differential effects of various interventions in relation to the strategies proposed according to the policy – an indicator to be used in modifying the existing policy, i.e., retrograde analysis;
(iv) Evaluating geographic variations in health status and health system performance and pinpointing the necessity for policy review – an indicator for policy change in the context of geographic consideration; and
(v) Evaluating the resource allocation for different health strategies and interventions – an indicator of overall review of policy change.

CAVEATS IN USING EPIDEMIOLOGIC TOOLS/METHODS

(i) One needs to be careful in adapting or adopting the results of epidemiologic research studies. Applying the results in toto or without considering the linkages to the determining factors, which are sometimes beyond our control, may lead to policy failure. Because analytical epidemiology is usually conducted in carefully selected situations (Spasoff 1999).
(ii) Sometimes it is difficult to convince the policy makers regarding the findings of epidemiological research studies pertaining to policy. They may be too subjective to the power of private or vested interest (Terris 1980). Researchers should be aware of this scenario.
(iii) Careful attention should be given when applying the results of mathematical models for policy change. In fact, most

complicated mathematical models are really simplistic when considered in real life scenario in light of social and biological realities. The assumptions made in the models may also be unrealistic.

(iv) When population health data are interpreted in the context of existing policy, the strength of association with the determinants, regional variation and pattern, data quality, consistency with other findings, trend pattern, etc. (Rosen 1985) need to be considered.

(v) In essence, it would be prudent not to make policy recommendations based on the results of one research study. Because, the health status of the population or performance of the health system is the outcome of interactions of a multitude of attributes.

(vi) It is also important to note that there is a basic difference in the opinion seeking pattern between policy makers and epidemiologists/researchers. Policy makers need clear cut advice and answers based on available information. Epidemiologists /researchers prefer interval estimates instead of simple answer or yes or no decisions (Spasoff 1999). A compromise should be reached to narrow the gap in this aspect, when policy is formulated.

STEPS IN HEALTH POLICY RESEARCH (ANALYSIS) AND POLICY MAKING

The following are basic steps in health policy research (analysis) generally carried out in a country. Justification of the need for health policy research arises from economic pressure, political pressure or demand from the public. Justification needs to be scrutinized in terms of rationality or appropriateness. Once justified, review of availability of technical and administrative know-how, including infrastructure to conduct the policy review process should be made. Involvement of professionals from disciplines outside the health domain such as health economists, social scientists, statisticians, experienced and balanced politicians, etc. is essential.

PREPARATORY ACTIVITIES ARE

(i) identify and pinpoint issues to be tackled and probable hindering and facilitating factors;

(ii) identify new channels or strategies to alleviate health problems as well as collaborating and supporting mechanisms;

(iii) develop flow diagrams for implementation of different policy at different levels of the health care delivery system using the strategies envisaged under each policy statement;

(iv) identify a broad range of goals and objectives in line with existing or modified policies; identify policy options and submit them to the steering committee, together with expected implications of each option.

(v) The draft version of the policy statement, as approved by the steering committee, should then be submitted to the Minister for Health for guidance and for further submission to the highest authority (National Health Committee) for consideration and final approval.

CONSTRAINTS GENERALLY OBSERVED IN DEVELOPING COUNTRIES IN POLICY MAKING

Generally, there are several research projects being carried out in any developing country. The proportion of research on policy or policy-related issues is small due to its sensitivity. Another reason is, even if the research shows that a policy needs to be modified or reformulated, research managers generally ignore to put it up to the highest level due to several reasons. Sometimes, the findings of policy research are not properly propagated or presented and therefore the higher authorities are not aware of it.

Interdisciplinary and inter-sectorial linkages are generally not reflected in policy and strategy of the country and thereby its importance is lost. Higher level policy makers are generally not properly primed regarding the crucial role that health research can play in improving the health policy and thereby the overall health status of the people. The important linkage between health research and implementation of health services and programs is generally not well recognized and thereby due attention is not given. The constraints alluded to earlier can be adjusted or ironed out if higher authorities support and accept the fact that health research is essential to make health policy suitable to the country.

CONCLUSION

Health research can facilitate formulation or reformulation of a sound, practical, relevant, and implementable health policy. Health research can detect the flaws and weaknesses in the existing health policy in light of the system environment in which the policy is being implemented. Generally, in developing countries, policy is formulated without any systematic follow-up or evaluation. Health research can help develop policy assessment indicators which may be required to change the course of action whenever and wherever necessary. Having a sound health policy will lead to a health care system which is effective, efficient, adaptable and responsive to the needs of the country.

Role of research in policy making is all the more important as countries are in a state of epidemiological and socioeconomic transition. Thus, the existing policy needs to be reviewed as to its appropriateness and applicability in the context of changing situations. In the era of reforms in health care concepts, orientation towards market economy, dwindling resources and the competitive nature of resource allocation for different ministries, health policy must be responsive to the need of the contemporary situation.

One needs to promote healthy public policies through a strong national health research policy. When the role of research in policy making is considered, researchers need to keep in mind the importance of applying a systems approach and systems thinking through the use of epidemiologic thought process. It is suggested to conduct a national-level seminar for in-depth discussion on “Role of Research in National Health Development” based on strong national health policy and national health research policy.

> **"IT IS SUGGESTED TO CONDUCT A NATIONAL-LEVEL SEMINAR FOR IN-DEPTH DISCUSSION ON "ROLE OF RESEARCH IN NATIONAL HEALTH DEVELOPMENT" BASED ON STRONG NATIONAL HEALTH POLICY AND NATIONAL HEALTH RESEARCH POLICY."**

Last but not the least, one may think of how the research activities of departments of Medical Research can be linked more strongly with national health development plans and programs of service departments under the Ministry of Health.

REFERENCES

1. Bjorkman, JW., Altenstetter, C. Health Policy. MPG Books Ltd, Cornwell, UK. 1998.
2. Coleman, JS. Policy Research in Social Sciences. Johns Hopkins University.
3. Ganapathy, RS. et al. Public Policy and Policy Analysis in India. SAGE publications. New Delhi/Beverly Hills, London.
4. Grindle, M. Policy Content and Context in Implementation. In: Grindle, M., ed. Politics and policy Implementation in the Third World. Princeton, Princeton University Press.
5. Holland, WW., Wainwright, AH. Epidemiology and Health Policy. Epidemiologic Review. 1979; 1:211-32.
6. Htwe, M. Issues in Health Policy Research. Regional Health Forum. WHO South-East Asia Region. Volume 4, Numbers 1 & 2, 2000.
7. Htwe, M. Formulation, Implementation and Evaluation of Health Research Policy. Regional Health Forum. WHO South-East Asia Region. Volume 5, Number 2, 2001.
8. Htwe, M., Jost, S. Promoting the Application of Research Findings in Health Development. Regional Health Forum. WHO South-East Asia Region. Volume 2, Number 2, 1997.
9. Htwe, M. Epidemiologic Methods used in Policy Analysis. Meeting of the Scientific Working Group on Formulation of National Health Research Policies, and Strategies, Jakarta, Indonesia, December 1999 (SEA/SWG-FPS/J).
10. Htwe, M. Overview on Health Policy

Research and Issues for Discussion in the Inter-country Meeting on Health Policy Research. WHO-SEARO. November 1995. (SEA/HPR/Meet/19).

11. Htwe, M. Technical discourse number two "Formulation/Reformulation of National Health Research Policy and Strategies in a Country". Talk delivered at the Department of Medical Research (lower Myanmar) on 15 December 2010.
12. ICMR Bulletin, Volume 34, Number 9-10, September-October 2004.
13. National Health Research Policy of Nepal, published by Nepal Health Research Council, Ramshah Path, Kathmandu. 2003.
14. Rosen, M., Nystrom, L., Wall, S. Guidelines for Regional Mortality Analysis: An Epidemiologic Approach to Health Planning. Int. J. Epidemiology 1985; 14 (2): 239.
15. Ruwaard, D., Kramers, PGN., van den Berg Jeths A, Achterberg PW. Public Health Status and Forecasts. The Health Status of the Dutch Population over the Period 1950-2010. Bilthoven, The Netherlands: National Institute of Public Health and Environmental protection, 1994.
16. Shortell SM,. Solomon, MA. Improving Health Care Policy Research. J Health Politics, Policy Law 1982: 6:684-702.
17. Spasoff, RA. Epidemiologic Methods for Health Policy. Oxford University Press, 1999.
18. Stallones, RA. To Advance Epidemiology. Annual Review of Public Health 1980. 1:69-82
19. State Policy Guide: Using Research in Public Health Policy Making, A publication of The Council of State Governments.
20. Stephen R. Hanney, et al. 2003 The Utilization of Health Research in Policy-making: Concepts, Examples and Methods of Assessments. Health Research Policy and Systems.
21. Terris, M. Epidemiology as a Guide to Health Policy. Annual Review of Public Health 1980; 1:323-44.
22. Walt, G. Health Policy. An Introduction to Process and Power. London and New Jersey: Zed Books, 1994.
23. World Health Organization (1990) The Role of Health Research in the Strategy for Health for All by the Year 2000: Research for Health: A Global Overview, Geneva. (A 43/Technical Discussions/2, Background Documents: May 1990).
24. World Health Organization (1993) Handbook of Resolutions and Decisions of the World Health Assembly and the Executive Board, Vol. III, Third Edition (1985-1992), WHO, Geneva.

PART B

CHAPTER. 6

FORMULATION/ REFORMULATION OF MYANMAR NATIONAL HEALTH RESEARCH POLICY AND STRATEGIES

“Strategies for research and policy development must simultaneously address people’s needs, the capacity of programs to provide good quality of care, and the range of technological options available”

- Ruth Simmons:
President of Prairie View A&M University

(This article is based on the technical discourse at the Department of Medical Research (Lower Myanmar)).

The ultimate purpose of formulation/ reformulation of National Health Research Policy (NHRP) is to get a policy which reflects the following characteristics:

1. NHRP will be complementary to and also supportive of National Health Policy and strategies.
2. Many aspects of NHRP will have strong linkages with National Health Plan and its implementation.
3. NHRP will have either direct or indirect links with policy and strategies of health-related ministries in the country.
4. NHRP will be evidence-based so that scarce resources are utilized to the fullest extent in translating policy into action.
5. Research strategies and activities emerging out of NHRP will be able to support the activities of the Ministry of Health (MoH) in tackling health challenges of the country.
6. NHRP will be forward-looking, responsive, dynamic and broad enough to cater to the contemporary and future needs of the country in areas of health promotion, prevention, treatment, and rehabilitation.

ADVANTAGES OF HAVING A SOUND NHRP

The following advantages are likely to be achieved if we have a sound and rational NHRP:

1. The activities of research organizations and institutions (Department of Medical Research) are consistent, less duplicated, less fragmented, fully justified, cost effective, cost efficient and really beneficial to the country.
2. It is easier for research organizations and institutions (Department of Medical Research) to deal with relevant UN organizations, funding agencies

and other international research organizations for collaborative research activities.

3. A strong National Health Research Framework can be developed which can move the research agenda with clear-cut direction.
4. This framework could be used and referred to in teaching students at the Universities of Medicine, Public Health, Community Health, Nursing and Paramedical Institutes, etc. A research culture could be ingrained in the minds of future health workers. This could have long-term beneficial effects for the country.

WHAT IS HEALTH RESEARCH POLICY?

1. Simply put, "A health research policy is a set of principles guiding decision making". It provides a framework against which research strategies, interventions, and activities are developed.
2. The basic principles of formulating / reformulating NHRP are similar to formulating / reformulating the health policy.

GENERIC CYCLE OF POLICY MAKING AND POLICY PROCESS

Policy making is a continuous interactive process with a cyclical structure or nature. Several cyclical models are available. The basic cycle is (i) problem identification and issue recognition; (ii) policy formulation; (iii) policy implementation; and (iv) policy evaluation. Duration of the cyclical process may vary from country to country. A policy becomes strong, relevant and useful if this cyclical process is observed by an institution.

> **"IN MODERN TIMES SOUND POLICY-MAKING MUST OFTEN COME TO GRIPS WITH NUMBERS"**
>
> **- Randal Marlin:**
> A Canadian philosophy professor
> at Carleton University in Ottawa

MECHANISM TO FORMULATE/ REFORMULATE NHRP

- A legitimate body to initiate the process is required.
- An appropriate advisory group and functional technical core group or task force to do the actual work should be formed. Sub-groups could be formed as required.
- Conduct forums with broad participation to review the findings of "research scenario analysis". Each forum must have specific objectives and expected output. Members of the forum must be proactive, professional in discussion and technically strong. Full administrative and secretarial support is essential.
- A dynamic and pragmatic prioritization process is important in order to identify key problem areas, disciplines, and domains. The selection of domains or areas of research should be jointly identified by the research managers, researchers and the service department professionals (departments of Public Health, Medical Services, Traditional Medicine, and Health Professional Resource Development and Management) and faculty members of concerned teaching institutions.
- Identification of policy options and its implications (social, economic, political, cultural, etc.) must be thoroughly discussed.
- A national health research convention involving all players must be conducted to discuss various policy options identified by the functional technical core group and agreed upon by the advisory group.
- Separate debate or brainstorming sessions may be required for controversial issues emanating throughout the formulation / reformulation process.

The final draft should be submitted to higher authorities as per the country's established procedure. The following issues should be discussed as appropriate in the process or after the process of formulation / reformulation. The information emanating from it may also facilitate formulation / reformulation of NHRP. This could also be used in the translation of NHRP into action:

1. Development of tools and indicators, such as effectiveness, efficiency, responsiveness, applicability, relevancy, adequacy, equity, feasibility, etc., for assessing the progress of implementation of NHRP should be considered;

2. An efficient administrative and management system should be outlined to steer the policy in the right direction;
3. A system for "Responsible Conduct of Research" (RCR) should be developed;
4. A phase-wise action plan to translate NHRP into action should be drawn up involving all collaborating partners up to utilization of research findings;
5. An action plan for capacity building of young researchers together with analysis of current human resource for research should be drawn;
6. Doable action plan for improving "Research Management" and coordination of research institutions should be drawn;
7. Development of a "Resource Mobilization Strategy" for the research institution (resource allocation in health research is an investment and not an expenditure) should be considered;
8. Action plan for streamlining research information system in the country should be considered;
9. Development of quick checklists to assess the performance of a unit or division or department of a research institution;
10. Quick analysis of current utilization pattern of budget/funding for research; and
11. Ethical standards in research.

CONTENTS OF NHRP STATEMENT

The inherent purpose of NHRP is to consider future (long-term) health scenarios and related research needs as well as to solve the existing main health problems (short-term). The format of NHRP statements may vary from country to country. (Samples of National Health Research Policy of Nepal and India are distributed as references).

Specific policy guidelines related to the following issues may be incorporated in the policy as policy statements:

1. Overall research themes related to broad program areas aimed at achieving a health target within a specified time frame;
2. Specific priority research areas together with specific priority research topics or a national health research plan;
3. Knowledge generation and knowledge management;
4. Resource allocation vis-à-vis basic research, clinical research, health systems research, implementation research, etc.;
5. Human resource for research development and deployment, including career structures;

6. Reward and recognition for research;
7. Strengthening the capacity of research institutions and establishment of new institutions;
8. Legislative and ethical requirements for research;
9. Procedures for ensuring the evaluation of research findings and their appropriate use in health development;
10. Informing the public of relevant research outcomes and initiating public debates on pertinent issues;
11. Modalities for exploring internal and external funding for priority research areas;
12. Collaboration or networking with internal and external partners (international research centers, research foundations, and relevant UN organizations) for research development, etc.;
13. Multidisciplinary (social, behavioral and health economics sciences), multi-sectoral, community-based organizations and private sector linkages (pharmaceutical industries) (so that these will be properly reflected in the research framework and strategies); and
14. How research culture will be nurtured.

CONCLUSION

(i) We need concerted and coordinated efforts to consider carrying out some of the points mentioned above in a phased or step-by-step manner.

(ii) While considering the discussion points mentioned above, systems approach, systems thinking and epidemiologic thinking should be applied.

(iii) The research professionals of Department of Medical Research are, no doubt, key players. However, other relevant players need to be primed and properly informed so that they are involved in improving the health research domain in the country.

(iv) We need to promote healthy public policies through a strong National Health Research Policy.

(v) The role of the University of Public Health, Preventive and Social Medicine Society of Myanmar Medical Association, University of Medicine, University of Community Health, University of Nursing, University of Medical Technology and training schools or institutions in the country are also very crucial as partners. Their inputs are essential.

(vi) It is preferable if the main operational strategies are identified together with

the newly formulated or reformulated NHRP.

(vii) It is suggested to conduct a national-level seminar for an in-depth discussion on "Role of Research in National Health Development". With approval from MoH, WHO funding support could be secured easily.

NB. 1. Research and Health Research are used interchangeably. 2. NHRP and National Health Research Policy and Strategies are used interchangeably.

FURTHER READING

1. Pal L.A. Public Policy Analysis: 2nd ed. Scarborough; Nelson Canada, 1992
2. Spasoff, R.A. Epidemiologic Methods for Health Policy, Oxford University Press, 1999
3. Walt G. Health Policy: An introduction to Process and Power. London and New Jersey: Zed Books, 1994
4. Teaching and Learning Materials on Research Management, Strategies for their Development and use at Different Levels of Management, 1997, Document SEA/RES/MGMT/5 (WHO-SEARO Document)
5. National Health Research Strategy. Directorate General of Health Services, Ministry of Health and Family Welfare, Dhaka, Bangladesh. January 2009
6. *Health Research Policy Formulation, Implementation, and Evaluation. SEA/SWG-FPS/K (WHO-SEARO document)
7. *Issues in Health Policy Research. SEA/SWG-FPS/L (WHO SEARO document)
8. *Epidemiologic Methods used in Policy Analysis. SEA/SWG-FPS/J (WHO-SEARO document)
9. *Formulation of National Health Research Policies and Strategies. Meeting of the Scientific Working Group (SWG) SEA-RES-112 (WHO-SEARO document)
10. National Health Research Policy of Nepal by The Nepal Health Research Council (NHRC), Kathmandu, Nepal. First edition 2003
11. ICMR Bulletin Vol. 34, No. 9-10 September-October 2004. ISSN 0377-4910

(N.B. Items number 6, 7, 8, & 9 were prepared by Dr. Myint Htwe, then Regional Adviser on Medical Research, (1994 to 2000), WHO-SEARO)

PART B

CHAPTER. 7

PROMOTING UTILIZATION OF RESEARCH FINDINGS

“Research utilization is the connective tissue between evidence and action” “…there can be no lasting success - no positive, systemic answers to our world’s most complex challenges - without research utilization”

- Aubrey Weber:
Technical Officer, FHI 360 Research

(This article is based on the background paper titled "Strategies for Effective Promotion of the Application of Research Results in Health Development", prepared for the Regional Workshop on Research Management, Surabaya, Indonesia, 11-15 August 1997, (SEA/RES/MGMT/6).

This paper is aimed at stimulating ideas which can be translated into action to develop strategies for effective application of research findings in health development. It covers issues for consideration in the context of researchers, research institutions, inter-departmental and inter-ministerial procedures, decision makers and program managers. The barriers in the utilization of research findings and challenges in research dissemination are also highlighted. Strategies to increase the probability of getting research results into practice are also outlined.

INTRODUCTION

The forty-third World Health Assembly adopted a resolution (WHA43.19) in 1990 on the role of health research. It urged Member States, particularly developing countries, to create or strengthen mechanisms that would enable the consideration of research findings at the policy-making level, as well as their translation into health systems operations. It also invited the research community to intensify efforts in communicating research findings and in developing technology to support decision making and resource allocation processes. Since then, the issue has been regularly discussed in various fora.

Getting research findings into practice connotes making an effort to improve research utilization. It should be undertaken at all levels in the research domain ranging from individual researchers to broad-based institutional programs. It needs to be emphasized that research utilization is as important as the conduct of research. Each represents different points on the spectrum of the research process and demands different skills of those engaged in their respective endeavors. In the research-to-application path, the application phase is usually fraught with hindering and frustrating conditions.

One must aim to transform the research findings into a context appropriate to the practical environment. In other words, research-based knowledge generated by researchers needs to be translated into both language and operational activities that are easily understood by the end users. When research utilization is considered, its importance to the profession, the change process, specifically as it applies to organizational change and the steps involved in research utilization must be thoroughly understood.

Research utilization actually encompasses and is related to the whole spectrum of exploration and identification of priority problems, identification and gathering of

research studies, critiquing the studies, determining the research base and its relevance to different settings, transformation of new knowledge into a practice mode, educating the practitioners, evaluating the outcomes and, finally, modifying and changing the practice as indicated.

The actual steps of research utilization remain the same for all the disciplines but the mode in which they are executed may vary according to differing requirements. Research is essentially unfinished unless the findings are synthesized and applied in practice to improve the existing situation.

The ministries of health must, therefore, not only promote and support health research but must also have an idea why it is being done and what is required from science and scientists. To supplement this, organization and management systems for research should have built-in mechanisms for evaluation of the products of research and for alerting potential users to their value (Davies- 1992). At this juncture, the role of medical research councils, professional bodies, departments of medical research and WHO collaborating centers should be explored with a view to enhancing their role in this activity.

UTILIZATION OF RESEARCH FINDINGS IN THE WHO SOUTH-EAST ASIA REGION

In the application of research findings in health development in the Region, WHO is only one of the partners. There are several others like bilateral donors, multilateral agencies, ministry of health and related ministries, medical research councils, national policy makers, nongovernmental organizations, and health care professionals at different levels of the health care delivery system. While each provides inputs at varying degrees, some provide a major thrust and others little or none at all to the implementation of specific research findings. In the decision-making process concerning the implementation of diverse research findings, it may not be predictable as health research is not the only concern, it may have to compete with other interests at the local, regional and national levels of the ministry of health and related ministries.

However, in this Region, there is evidence that research findings have been successfully applied in areas such as control of malaria, diarrhea, dengue fever, hepatitis, poliomyelitis, etc. One hiatus in research has been the inadequacy, both in absolute and relative terms, of the quality and quantity of research into the behavioral, social and economic aspects of health and disease. This has been realized but not adequately addressed. A general improvement of research quality is warranted, both in terms of scientific validity and practical usability. Efforts should be made to concentrate on continued support coupled with technical backstopping of research projects, until they are satisfactorily completed.

The low utilization is mainly due to insufficient follow-up and lack of necessary assistance and cooperation in the country. It has also been shown that often the research results were not published even in national journals let alone in international journals. (Aung Than Batu, 1994)

ISSUES FOR CONSIDERATION

In order to smoothly transform the findings of research into practice, one may need to review the underlying reasons as to why it has not happened in most cases. By critically reviewing the status quo in light of the overall research process, one may be able to formulate down-to-earth strategies to permeate the process of research utilization into practice. Closs and Cheater (1994) suggest that utilizing research findings is a highly complex task, requiring a positive attitude towards a research culture and the interest of staff. MacGuire (1990) goes further and states that the issue of utilizing research findings in practice goes beyond simply viewing difficulties as the failure of individuals to respond to new knowledge or other innovations.

There are many models on research utilization (Stetler model; Iowa model; CURN project model, etc.). Some are based on organizational aspects (organizational process research utilization model: Goode - 1992), and others on the research management and communication process. Issues of utilization actually cut across all levels of the organization, from mission statement and policy documents to procedural manuals. The major issues commonly encountered are as follows:

ISSUES RELATED TO THE RESEARCHERS AND RESEARCH INSTITUTION

The recommendations made by the researchers are, at times, abstract and impractical or too complicated to be understood by policymakers and the implementers. This itself is detrimental to the research community and unknowingly leads to alienation of the research community from the policy makers. Researchers prefer to work by themselves without consulting the decision makers or implementers throughout the research process. They are so engrossed in their work that they tend to overlook the relevance of their research to national priorities. Therefore, there is usually little likelihood of using the results of research by decision makers.

In addition, researchers tend to use sophisticated research designs and statistical procedures in the hope that their research projects will be viewed by others as high standard research. This has virtually resulted in the further isolation of research projects from the end users. In most of the research congresses or seminars pertaining to public health research or health systems research, researchers tend to present their findings without linking its importance to the functioning of the existing health care system. Mention is also usually not made as to how the findings can help improve the overall performance of the health care system or of the implications of the results of research under different scenarios.

ISSUES RELATED TO INTER-DEPARTMENTAL OR INTER-MINISTERIAL PROCEDURES

In some cases, there is a thin line of communication between the ministry and research institutions and no attempt seems to have been made to strengthen it by using various mechanisms appropriate to the local situation. Decision makers are too busy to be involved in the research planning process especially in formulating and prioritizing the

research agenda. They also have the notion that "research is for the sake of research" and that the findings have very little to do with the decision-making process. The linkage or path between the decision makers and the researchers is not clearly defined or delineated. This has created a parallel approach in pursuing their respective tasks.

Few countries have advisory or similar committees for putting research into practice and also to specifically review the recommendations of research projects with a view to incorporating them into the ongoing health care system. There are weaknesses in the system for effectively disseminating the results of research projects to various categories of end users. Research findings often reach top managers and policy makers not as a report or even an executive summary or briefing but in the form of a speech delivered to researchers at various committees and commissions. (COHRED).

ISSUES RELATED TO RESEARCH POLICY AND PLANNING *VIS-A-VIS* NATIONAL HEALTH POLICY

Research is generally not built into the planning process of the national health care system. It is usually considered separately or on an ad hoc basis as per the availability of the funds or by donor pressure. This has resulted in research activities being carried out independently of the planned activities of the ministries of health. These types of disjointed activities are not conducive to achieving the stated objectives.

Research policies are not always in consonance with national health policies. Research policies tend to be formulated in a compartmentalized manner where there is very little interconnection within the research policy itself. Reciprocity between the research policies and the national health policies are not noted and also the dynamicity of this relationship is not well established. When the application of new knowledge is likely to have political or policy implications, special attention must be given to avoid a backlash.

ISSUES RELATED TO DECISION-MAKERS AND PROGRAM MANAGERS

Many decision makers do not seem to perceive the findings from research could substantially contribute to improvements in the effectiveness and efficiency of the health care delivery system. In other words, they are not aware of the fact that research is one of the important and practical tools to solve administrative and managerial problems. There is also an unwillingness on the part of the decision-makers to initiate a change in the system or sometimes they themselves are unable to change the system because of the bureaucratic nature of the overall system which hampers any form of change.

CHALLENGES TO RESEARCH DISSEMINATION

The overall intention of research dissemination is to initiate the process of getting new knowledge used for the good of the society by increasing the effectiveness and efficiency of the health care delivery system. Publication of research findings is part of the career ladder of research scientists. While there may be higher status attached in publishing in international journals, arrangements must be made to facilitate early dissemination of

results in local journals. Such dissemination is important for communication with local health authorities and other potential users of the findings (A43/ Technical Discussions/2 WHO HQ). It is also noted that the high cost and proliferation of professional journals have become important barriers to "keeping up with the literature".

The dissemination of research information is generally aimed at three categories of workers in the ministries of health viz. (i) clinicians; (ii) public health professionals/program managers; and (iii) decision/policy makers. All three categories are knowledgeable in the respective fields of research. These people are busy with their own sphere of activities and find very little time to keep abreast of the latest findings in research.

The dissemination of implications of research findings, especially health systems research, down to the community level is not being promoted in a simplified form that can be understood by the community, especially in developing countries. Careful attention, therefore, should be given as to (i) what, when and how to disseminate the research results; (ii) intended target population and their level of interest and knowledge; (iii) a mechanism for follow-up to study the impact or implications of incorporating the research findings.

BARRIERS TO UTILIZATION OF RESEARCH RESULTS

The diffusion of scientific knowledge in society is a complex process influenced by education, culture, political organization and stage of development of the country among others (Davies - 1992). The attitude of program managers towards research and the knowledge and perception of research utilization has been found to adversely affect active involvement of program managers in research utilization. Educational preparation and personality factors are important determinants for utilization of research results. Hunt (1981) suggests that research findings are not used in clinical and public health practice due to the following reasons.

- They do not know them
- They do not understand them
- They do not believe them
- They do not know how to apply them
- They are not allowed to use them

All these factors are equally important in formulating the strategies for improved utilization of research findings. Many studies have been carried out to identify barriers in utilizing research findings. It was found that the following four main characteristics were responsible for its use (Funk- 1995):

Characteristics of the adopters such as research values, skills, and awareness
Under this rubric, lack of awareness of research, being isolated from knowledgeable colleagues with whom to discuss the research results, being incapable of evaluating the quality of the research and the benefits that would arise out of the change based on the findings of the research was minimal. The feeling of gaining very little self-benefit on many aspects, unwilling to change or try new ideas and approaches, not seeing the value of research for practice, are found to be major factors hindering the use of research findings.

CHARACTERISTICS OF THE ORGANIZATION SUCH AS SETTING BARRIERS AND LIMITATIONS

Under this rubric, insufficient authority to change as per the findings of research, insufficient time allocated to think new ideas and methods related to research findings, and non-cooperation or lack of support from professional staff working in the same organization are identified as major hindering factors. Insurmountable administrative issues arising out of the change, inadequate support facilities to implement the change, insufficient time to read the research papers and non-existence of in-house fora to discuss the research related to its discipline, etc., are other major factors hindering the use of research findings.

CHARACTERISTICS OF THE INNOVATION SUCH AS QUALITIES OF THE RESEARCH

Under this rubric, non-replicability of the findings, methodologic inadequacies of the research, late publication of research reports, and non-justifiable conclusions drawn from the research are major factors hampering the use of research findings. Conflicting results in the literature review, and uncertainty about the credibility of findings of the research are other factors hindering the use of research findings.

CHARACTERISTICS OF THE COMMUNICATION SUCH AS PRESENTATION AND ACCESSIBILITY OF RESEARCH

Under this rubric, inability to understand the sophisticated statistical analyzes used, lack of clarity regarding implications for practice, and research reports not being clear and readable, are found to be major factors hindering the use of research finding.

STRATEGIES TO INCREASE THE PROBABILITY OF GETTING THE FINDINGS OF RESEARCH INTO PRACTICE

A number of attempts have been made to increase the utilization of research findings by formulating an array of strategies. One caveat is that strategies must be practical and be able to be generalized widely taking into account the organizational constraints (Cavanagh - 1996). Care should be taken while developing the strategies that research utilization is not seen as a separate entity which the staff performs independently of other duties (Rogers - 1994).

It is worthwhile to consider those factors and issues which are directly as well as indirectly related to putting the findings of research into practice. The issues span the planning phase of the research process to actual utilization and also follow-up on the implications of its use. The implementation process of each strategy may require a set of activities which could be developed according to the requirement of the local situation. The strategies outlined below may, to some extent, overlap with one another.

STRATEGIES RELATED TO RESEARCH POLICY AND PLANNING

(i) Undertaking research planning within the framework of existing health development program
(ii) Involving health program implementation unit or planning cell in the ministry in formulating research

agenda and activities

(iii) Consulting decision makers on the proposed research subjects at the very outset and soliciting their guidance

(iv) Participation of policy makers/ community throughout the research planning process

(v) Developing procedures for minimizing bureaucratic delays

(vi) Advocating and motivating policy makers and administrators in recognizing the importance of research to solve health problems through informed decision-making

STRATEGIES RELATED TO PRIORITIZATION OF RESEARCH AREAS

(i) Focusing on priority programs or priority problem areas of respective geographic or administrative boundaries

(ii) Involving officials from health and related ministries in research agenda prioritization process

(iii) Developing specific funding criteria emphasizing the utilization aspect

(iv) Using set criteria for selection of research proposals such as national significance, scientific merit, and technical feasibility

STRATEGIES RELATED TO QUALITY OF RESEARCH

(i) Ensuring high quality of research proposals funded by WHO

(ii) Ensuring close connection between objectives, methodology and technical support

(ii) Maintaining support and backstopping throughout the research process from initiation till utilization of research findings

(iv) Focusing capacity building in high priority areas of research

STRATEGIES RELATED TO CONDUCT OF RESEARCH

(i) Conducting research on the most pressing current problems and future needs for health planning and development in a timely manner

(ii) Conducting research-cum-action type of workshop

(iii) Using simple and understandable research methodology and also not applying complicated statistical techniques if ordinary statistics can instead be applied

(iv) Proper monitoring and supervision of research using various management tools and informing the interim results to decision makers

STRATEGIES RELATED TO RESEARCH BASE

(i) Cultivating the research environment that nurtures staff and empowers them in their day-to-day activity.

(ii) Incorporating research utilization themes into the mission statements of the institutions

(iii) Providing administrative support by:

- stating specific mission or philosophic direction that addresses the importance of research utilization
- identifying job descriptions and behaviors that support research utilization activities
- allocating time and resources for

research professionals

(iv) Developing quality research proposals on issues of contemporary importance and systematic follow-up
(v) Development of research utilization mechanisms
(vi) Strengthening links between the policy makers and the research institutions by including senior research managers within the mainstream of decision making in health

STRATEGIES RELATED TO DISSEMINATION OF RESEARCH FINDINGS

(i) Compiling and computerizing research findings by research councils or institutions with built-in mechanism for dissemination
(i) Setting up special bulletin boards for ishowing research findings of current interest to staff of the institutions or departments
(iii) Encouraging staff to attend research conferences and present papers/ posters related to research utilization projects
(iv). Promotion of simplified and high-profile advocacy newsletter for senior officials
(v) Conducting research forums or research utilization workshops involving WHO collaborating centers

STRATEGIES RELATED TO TRANSLATION OF NEW KNOWLEDGE INTO PRACTICE

(i) Establishing a permanent, built-in mechanism to relay relevant findings of research to decision / policymakers / program managers / public health professionals
(ii) Restructuring or forming proactive research utilization committees as change agents in the research institutions and ministries of health
(iii) Making research-based recommendations as simple and practical as possible taking into account the existing system of the health care system
(iv) Developing a validation system for research findings of national significance
(v) Making research journals that contain functional research projects easily accessible to health professionals in order to create a research-friendly atmosphere

The strategies envisaged above can be put into practice provided there is organizational commitment and availability of resources. A model developed by Rogers (1971) suggests that a number of stages may need to be negotiated prior to the actual use of research findings. The stages are knowledge, persuasion, decision, implementation and conferment.

CONCLUSION

As a matter of fact, public health programs can be conceptualized as a pyramid. Research knowledge forms the base of the pyramid. Out of it, standards/ norms/methods/ procedures are developed. The public health information and documentation systems serve as a supporting pillar. Quality improvement or cost effectiveness or cost efficiency forms the top layer of the pyramid. The top layers are again bound by evaluation research.

Therefore, one should not regard research as just an activity of a few individuals in academic

environments but rather as an attitude of mind that should be widely practiced and applied. Research-based practice is a necessity, especially in today's health care climate with its increasing demand for high quality, cost-effective health care.

If the ultimate benefit of research is ever to reach the clients, research findings must be understood and implemented by health managers at all levels of the system. The research utilization attitude is also influenced by the end users' understanding of research utilization concepts, skills in reading and critiquing research articles, applying them into practice and evaluating the impact of the innovation. This development does not occur rapidly and requires commitment and willingness to learn because the process is cyclical and ongoing and not a one-off event.

The success of research utilization depends upon the interest and commitment of both researchers and end users. It cannot be achieved by any individual working in isolation (Bircumshaw - 1990). Because research findings need to be tailored to a specific organization, it is clearly the responsibility of managers at each specific setting to apply the available scientific body of knowledge. Translating research into practice is neither easy nor quick. Research utilization is an organizational responsibility. It is best accomplished if there is a commitment to do so at the organizational level.

When a committee of change agents takes on the challenge of engineering the process, and when a well thought-out, deliberate planned change process is undertaken, research-based practice can be effectively established (Goode- 1992). In conclusion, it can be stated that applying research findings in clinical and public health practice is perhaps the biggest challenge facing all of us (Sheehan- 1986).

REFERENCES

1. Batu, A.T. (1994) - Review of research promotion and development program of WHO-SEARO (1986-1995)
2. Bircumshaw, D. (1990) - The utilization of research findings in clinical nursing practice. Journal of Advanced Nursing, 15, 1272-1280.
3. Cavanagh, S.J. & Tross, G. (1996) - Utilizing research findings in nursing: policy and practice considerations. Journal of Advanced Nursing 24, 1083 - 1088.
4. Closs S.J. & Cheater F.M. (1994) - Utilization of nursing research: culture, interest, and support. The Journal of Advanced Nursing 19 (4), 762-773
5. COHRED, Research into action. Issue 7, Oct-Dec 1996.
6. Davies, A.M., & Mansourian, B. (1992) - Management of health research. Research Strategies for Health. 38-45.
7. Funk, S.G., et al (1995) - Barriers and facilitators of research utilization: an integrated review. The Nursing Clinics of North America. 30 (3), September 1995 .395-407.
8. Goode, C. & Bulechek, G.M. (1992) - Research utilization: an organizational process that enhances the quality of care.

"Failure in research is far better than having ideas that are never followed up"

- Steven Mogee
(Author and a world leading expert on radiation and human health)

Journal of Nursing Care Quality; special report: 27-35.

9. Htwe, M. - "Strategies for effective promotion of the application of research results in health development". Background paper prepared for the Regional Workshop on Research Management, Surabaya, Indonesia, 11-15 August 1997 (SEA/RES/MGMT/6).
10. Htwe, M., and Jost, S. P., Promoting the Application of Research Findings in Health Development, WHO South-East Asia Regional Health Forum – Volume 2 Number 2, 1997.
11. Hunt, J. (1981) - Indicators for nursing practice: the use of research findings. Journal of Advanced Nursing. (6) 189-194.
12. Research for Health: A Global Overview. WHO A43/Technical Discussion/2 (1990).
13. MacGuire, J.M. (1990): Putting nursing research findings into practice: research utilization as an aspect of management of change. Journal of Advanced Nursing 15(5), 614-620.
14. Rodgers, S. (1994) - An exploratory study of research utilization by nurses in general medical and surgical wards. Journal of Advanced Nursing 20 (5), 904-911.
15. Rogers, E. (1971) - Communication of innovations, a cross-cultural approach. Free Press, New York.
16. Sheehan, J. (1986) -Nursing research in Britain: the state of the art. Nurse Education Today- 6, 3-6.

PART B

CHAPTER. 8

RESEARCH PRIORITIZATION

**“Do not try
to do everything.
Do one thing well.
If you define the problem
correctly, you almost have
the solution”**

- Steve Jobs:
American business magnate

(This article is based on the background document titled "Research Prioritization" prepared as, then Regional Adviser on Medical Research, WHO-SEARO, for the meeting of Scientific Working Group on Criteria for Setting Research priorities (SEA/SWG-PRIOR/P), 1-3 November 1999, WHO-SEARO, New Delhi, India)

Research prioritization is a dynamic process and is usually done at different hierarchical levels of the health research system such as national, institutional, departmental, or programme level. It should be part of the research planning exercise. The prioritized list needs to be reviewed and updated periodically. The determinants and pattern of diseases or conditions and their effect on the population at large are constantly changing. These changes potentially result in inequality in the health status of the people. This entails a reconsideration of the balance and relevance of health research areas in the context of allocation and management of finite resources for research.

Research prioritization must be undertaken within the framework of the overall national policies and goals, national health policies and national health research policies. Actually, research prioritization is one of the key nodal points in the research cycle i.e., research planning, research priority setting, research strategies and implementation of research priorities, research utilization, research monitoring, and evaluation, (part of the research information system) and overall research management. The final aim of research prioritization is "how best well-balanced research can support and complement the health system to achieve the national goals for health". It calls for a forward-looking research system.

PREREQUISITES

Certain prerequisites are to be fulfilled before one can initiate the research prioritization process. This is to pave a correct path in achieving the objectives of a research system i.e., well-balanced and relevant priority research domains/areas/topics. Basic prerequisites can be attained by responding to or exploring the following questions:

1. To the extent possible, how should one acquire "valid, reliable and sufficient data and information" necessary for the prioritization process?
2. What are the existing national health research strategies?
3. What are the practical and technically sound methodologies generally applied for research prioritization?
4. How should one get a consensus on the selection of the best methodology and correct line of approach for research

prioritization? (This depends on the level of research prioritization to be made).

5. What is the budget and time frame available for the prioritization process?
6. Who should be the members in the Technical Advisory Group (TAG) to give overall technical guidance throughout the process of research prioritization and how should this group function (Terms of Reference)?
7. Who should be the members in the Core Working Group to actually do the prioritization and how should this group function (Terms of Reference)?

CORE WORKING GROUP AND TECHNICAL ADVISORY GROUP

The core working group is the one actually doing the prioritization process. Sub-groups can be formed for undertaking specific tasks, e.g., measurement and tool group, criteria selection group, research domain/area/theme identification group, logistic and coordination group. These groups should meet throughout the process as and when necessary. The team leader of the core working group must be a senior person who is not only technically sound and administratively competent but also possesses leadership quality. It is extremely important to have a cohesive and team-spirited core working group. The group members should comprise of professionals from different disciplines and with technical expertise in specific areas.

The leader of the core working group should ensure that there will be no domination during the discussion by any group member. Participation, discussion modalities, logistics and group dynamics must be carefully worked out and properly managed. A senior facilitator may be required for each sub-group. The role of the facilitator is just to facilitate but not to direct. The facilitator must have broad experience in fostering group interactions, and also be well versed in techniques employed in the priority setting process. The main task of the technical advisory group is to give overall guidance on the prioritization process in the context of health and research policy issues.

PROCESS

The whole process of prioritization should be well documented for future reference or ironing out any controversial issues that may emerge later. The rationale, different schools of thought put forward, the justification for selecting a particular measurement tool or approach should also be noted. The process differs depending on whether it is done at the national, institutional, departmental, or program level.

While considering the overall process for developing a conceptual framework for prioritization, the following issues may be taken into account:

1. To ensure that all leading agencies responsible for funding, major research players, research institutions, and senior programme managers of the

Ministry of Health (MoH) are involved to the extent possible. If it is not feasible, they should, at least, be consulted or communicated with for information exchange throughout the process. This participatory approach is essential in order to have informed decisions and high probability of implementation of priority research areas thus identified.

2. To emphasize the process for technical soundness rather than the outcome.
3. To ensure that the process should be information-driven with supporting facts and justifiable opinions.
4. To ensure that consultation is as much as possible objective and transparent.
5. To ensure that the process itself has a built-in monitoring or assessment mechanism.
6. To solicit the experience of those who have already undertaken the process using similar approaches and methods.

METHODOLOGY
METHOD/MEASUREMENT TOOL

The selection of an appropriate method or measurement tool is the most crucial part of the whole process of research prioritization. One should be aware that each method has its strengths and weaknesses. Placing too much emphasis on theoretical issues is usually counter-productive. The following points must be given due attention:

(i) No one method is superior to the other. It is all relative and depends on the requirement of the prevailing situation.

(ii) The methods vary in complexity, flexibility, rigor and other characteristics. No one method is best suited for all situations.

(iii) In selecting the methodology on measurement tool, a compromise is usually to be made between the theoretical or technical requirement and the practicability or feasibility of applying the method.

(iv) Whatever method is selected, it is beneficial to obtain concurrence from the gatekeepers or research policy makers through the advisory group on the prioritization process.

(v) The pitfalls of prioritization must be made known and discussed amongst the core working group members who do the research priority setting.

(vi) Qualitative methods can provide useful information when quantitative methods cannot be effectively done. One should not hesitate to use qualitative methods. As quantitative information is usually incomplete or insufficient in developing countries, it may sometimes require expert judgement or opinion.

(vii) The method selected must be flexible enough to adapt to the prevailing scenario, yet maintain its robustness. This also implies that the method must be able to entertain new opportunities and challenges that may emerge.

(viii) The selected method or measurement tool should be subjected to sensitivity analysis. This involves changing or shifting weights on parameters or criteria to know the robustness of the results of priority setting method, i.e.,

the degree of its insensitivity to changes in assumptions. It can be accomplished through group analysis and discussion or by means of mathematical procedures. The sensitivity analysis is possible for single criterion methods as well as for multiple criteria methods.

(ix) Priority setting method or measurement tool or methods may themselves be compared by applying certain criteria in order to get the best method or measurement tool.

CRITERIA

Criteria for priority setting should be logically related to the stated policy, objective or mission statement of the research organization or institute. Selection of criteria usually underpins the process of prioritization. Each stage of prioritization may require different sets of criteria. Sufficient attention must be given to identifying criteria reflecting the impact on economic and societal aspects, e.g., the monetary cost of treating the disease, the years of productive life lost due to a particular disease or condition. Criteria should be clearly spelled out and must be independent of each other. The weight given to criteria must be thoroughly discussed and consensus obtained among the core group members.

The aim is that criteria must be used in a balanced way. It is also beneficial to consider knowledge-based criteria or non-numerical criteria which call for human expert judgement. The criteria for selection of priority areas of regional research used by the South-East Asia Advisory Committee on Medical Research (1976) are mentioned in the Annex.

The following issues usually serve as an important input in developing criteria:

(i) Will the issue to be addressed have a significant impact on the current and future health status of the people with respect to mortality, morbidity, quality of life, the cost of health service?
(ii) Will the outcome of the proposed research have a significant impact on the issue to be addressed?
(iii) Is there sufficient research capability and capacity so that the issue can be addressed with confidence?

CLASSIFICATION

Expected prioritized research areas should be classified in order to facilitate implementation by certain organizations or groups. It can also be classified according to five major domains of global health e.g., disease conditions and health impairments, health care system, environmental determinants, food and nutrition, socio-cultural characteristics. The following generic areas may be used for classification (the list is not exhaustive):

(i) Thematic areas
(ii) Technologies-and methodologies-related areas

(iii) Management and organization of a system
(iv) Disease-specific
(v) New interventions/ methods development
(vi) Effectiveness and efficiency of current and past interventions
(vii) Social and community needs-related

CONCLUSION

In the research prioritization process, the different interest of researchers and end-users should be well balanced. It can be achieved through intensive consultation throughout the process with those who have experience and knowledge in research prioritization. The basic requirements for research prioritization are sound reasoning and unbiased judgement coupled with analytical capacity. In order to create a sense of ownership, delineation of the boundaries of research domains must be made. A broad-based priority setting exercise can guide and promote long-term growth of research and scientific enterprise.

Research prioritization is a dynamic process which needs to be reviewed and updated as and when necessary. The timing of the review process is closely related to any change in the overall national policy or national health research policy or national health policy or framework and modus operandi of the national health research system. The priority setting process is usually complex and multi-tiered, possessing both quantitative and qualitative component.

The issue facing us is the political weight versus scientific weight in making the final decision on prioritized research areas and also for allocation of funding among the research areas identified. This poses a challenge to most of the researchers in a research system. The caveat is that the research prioritization process should not be put solely into the hands of research scientists. Last but not the least, the outcome of the priority setting process should be widely disseminated to the concerned foci in the Ministry of Health and related ministries.

REFERENCES

1. Council on Health Research for Development. Essential National Health Research and Priority Setting Lessons Learned. Geneva: COHRED; 1997: p.66. (COHRED document 97.3).
2. Energy Efficiency and Conservation Authority. New and emerging renewable energy sources: priorities for future research. 1997 Jun 25 [cited 1999 May 5]; [8 screens]. Available from URL: http://www.eeca.govt.nz/ publications/ renewable/ future/3.html.
3. Frist SB. Setting Biomedical Research Priorities at the National Institutes of Health. 1997 Dec [cited 1999 May 16]; [2 screens]. Available from URL: http://www.senate.gov/frist/faseb.html.
4. Graham R. AAFP Statement to the IOM

Committee on the NIH Research Priority-setting Process. 1998 Apr 3[cited 1999 May 5]; [3 screens]. Available from URL: http://home.aafp.org/gov/fed/980403.html.

5. Hoffert, Stephen P. Reach out to Public, IOM tells NIH. Scientist [serial online]1998 Jul 20 [cited 1999 May 5]; 12(15):[2 screens]. Available from URL: http://www.the-scientist.lib.upenn.edu/yr1998/july/ hoffert p4 980720.html.
6. Information and Discussion Forum on Priority Setting in Agricultural Research. Measurement Methods: Sensitivity Analysis. 1999 Mar 9 [Cited 1999 May 16]; [2 screens]. Available from URL: http://www.cgiar.org/isnar/fora/Priority/MeSensit.htm.
7. Insulin-Free World Foundation. NIH should Seek Greater Public Input When Setting Research Priorities. [Cited 1999 May 16]; [5 screens]. Available from URL:http://www.insulin-free.org/articles/28e6.html.
8. Iverson, MJ. Research Priorities Perceived for the NYFEA by its Leaders: A National Delphi Study. [cited 1999 May 16]: [6 screens]. Available from URL: http://www.ssu. missouri.edu/ssu/AgEd/NAERM/s-b-2.html.
9. Johnson, JA. Disease Funding and NIH Priority Study.1998 Feb 23 [Cited 1999 May 16]; [6 screens]. Available from URL: http://www.voiceforjoanie. org/homepages/thompson/ Funding.html.
10. Kennedy, Edward M. Statement of Senator Edward M. Kennedy - Public Health and Safety Subcommittee Hearing: Biomedical Research Priorities: WHO should decide? The Desk of Senator Edward Kennedy. 1997 May 1 [Cited 1999 May 16]; [2 screens]. Available from URL: http://www.senate.gov/member/ma/kennedy/general/statements/ 970501bioresearch.html.
11. National Institute of Nursing Research: National Institutes of Health, National Nursing Research Agenda: Setting Nursing Research Priorities. 1993 Sep 23 [Cited 1999 May 16]; [2 screens]. Available from URL: http://www.nih.gov/ninr/NINRnnra.htm.
12. Pan American Health Organization. Manual of Policies, Standards and Procedure. Washington: PAHO Health Research Programme; 1994. (HDP/HDR/.94.6).
13. Pan American Health Organization. Research Priority Areas, Lines, and Themes, Washington: WHO/PAHO Research Grants Programme; 1995. (HDP/HDR.95.03).
14. Rosen MR. Statement on National Institutes of Health, Research Priority-Setting Process Presented Before the Committee on the NIH Research Priority-Setting Process, Institute of Medicine. 1998 Apr 3 [Cited 1999 May 16]; [3 screens]. Available from URL: http://www.amhrt.org/ Support/Advocacy/Research/rosen.html.
15. Science and Technology in Congress. Congress Takes a Hard Look at Health

> **"APPLIED RESEARCH GENERATES IMPROVEMENTS, NOT BREAKTHROUGHS. GREAT SCIENTIFIC ADVANCES SPRING FROM PURE RESEARCH"**
>
> **Jacques Cousteau: Naval officer,**
> explorer, innovator, scientist, author and researcher

Research Priority Setting. 1998 May [Cited 1999 May 16]; [2 screens]. Available from URL: http://www.aaas.org/spp/dspp/ cstc/bulletin/articles/5-98/prior.htm.

16. Scoggins B. Priority Setting for Health Research, Health Research Council for New Zealand. Manila: WHO Western Pacific Region; 1994. (WPR/RPD/RPD(1)/94.6).
17. Shrestha MP, Gyawali K, Shrestha I, editors. Proceedings of the Conference on Prioritization of ENHR Agenda, Nagarkot, Nepal, 12-14 August 1998. Kathmandu: Essential National Health Research; 1998: p.55.
18. United Nations Research Institute for Social Development. Setting Research Priorities. 1997 [Cited 1999 May 16]; [4 screens]. Available from URL: http://www.um.dk/undenrigspolitik/undviklingspolitik/evaluering/1997-1/1997-1.3.html.
19. World Health Organization. A Research Policy Agenda for Science and Technology to Support Global Health Development. Geneva: WHO; 1998: p.165. (WHO/RPS/ACHR/98.1). World Health Organization. The 10/90 report on health research 1999: Overview of the Global Forum, Priorities in Health Research, Analytical Work for Priority Setting, Poverty, and Health, Partnership Initiatives in Health Research, Capacity Development, Communication to Help Bridge the 10/90 Gap, Practical Framework for Setting Priorities. Geneva: WHO Global Forum for Health Research; 1999: p.174.
20. Htwe, M. Research Prioritization, then Regional Adviser on Medical Research, WHO-SEARO, background document for the meeting of the Scientific Working Group on Criteria for Setting Research priorities (SEA/SWG-PRIOR/P), 1-3 November 1999, WHO-SEARO, New Delhi, India.
21. Htwe, M. Research Prioritization, Regional Health Forum – Volume 3, Number 1, 1999.

ANNEX

CRITERIA FOR SELECTION OF PRIORITY AREAS OF REGIONAL RESEARCH (SEA/ ACMR: 1976)

1. The research area should relate to a priority health problem in the countries of the Region.
2. The problem should be of major importance in terms of its relationship to the socioeconomic development of the countries of the Region.
3. The problem should have a demonstrable potential for solution or clarification and there should be a strong probability of the solution being applied within a reasonable time and at a reasonable cost.
4. The solution or clarification of the problem should lead to the development or improvement of a broad national health programme destined ultimately to strengthen national and/or international health development involving large numbers of people.
5. The research should lead to the development of new scientific knowledge and/or adaptation of knowledge in various national contexts.
6. The problem should require regional collaborative efforts taking into account, for example, one or more of the following:

   (i) Variations in the frequency and distribution of a disease in different geographic areas;

   (ii) Differences in ecological settings that influence manifestations of a disease as well as its response to health intervention; and

   (iii) The opportunity it would provide for pooling together the resources of the countries of the Region for studying common problems

PART B

CHAPTER. 9

PROMOTING HEALTH POLICY RESEARCH

“In order to be involved in health policy, you really had to understand more than the individual patient that we as physicians, are taught to think about”.

- Risa J. Lavizzo-Mourey
(President emerita and former CEO of the Robert Wood Johnson Foundation – RWJF)

(This article is based on the background document prepared as, then WHO Regional Adviser on Research Policy and Cooperation, for the meeting of the WHO Scientific Working Group (SWG) on Formulation of National Health Research Policies and Strategies, held in Jakarta, Indonesia, 6-8 December 1999 (SEA/SWG-FPS/L) and the article in WHO-SEARO Regional Health Forum, Volume 4, Numbers 1 & 2, 2000).

Health policy research can be defined in many ways but all definitions support the same objective: i.e., to improve the policy of the institution or country. The formulation of National Health Research Policy is closely linked to National Health Policy. There is reciprocity between the two policies. Analysis of National Health Research Policy is incomplete without referring to the National Health Policy. The term health policy research is sometimes interchangeably used as health policy analysis.

Health policy research is a process of scientific investigation where different methodologies and principles from health and social sciences are applied in order to either formulate or evaluate the policies. Such research finally leads to setting objectives and formulating strategies, including activities and plans for health development. Health policy research can also be viewed as a subset of health systems research. The principles, methods and approaches used in health systems research are also applicable to health policy research. Health policy research promotes a way of looking into the policy process. For example: has the policy achieved its desired effect? If not, what aspects of it should be modified or amended. If its impact is not appreciable, health policy researchers must ask the following questions in order to arrive at the correct diagnosis:

(i) Are managerial/administrative aspects of the health system at fault?
(ii) Are health-related policies and strategies not supportive of the health policy? Are they antagonistic?
(iii) Is the health care system (including technical aspects) not dynamic or not responsive to changing epidemiological conditions?
(iv) Are programme strategies not relevant or supportive to health policy itself?
(v) Are activities identified under the strategies less cohesive and not integrated?
(vi) Is the policy itself not explicit?
(vii) Is the policy irrelevant or not in consonance with the existing health infrastructure and epidemiological conditions?
viii) Do policy makers and senior administrators ignore the research findings that challenge current policies?

These are just a few exploratory questions which may help in the analysis of health policy. Each of the above question is a researchable issue in itself, and health policy research is the key to unlocking it.
In its simplest form, health policy research is research done on health policy. Health

policy research can be viewed from different perspectives. It can be viewed either as a policy process or reviewing the policy contents. It can be analysed or researched by applying theories and methods from different disciplines of science. From a broader perspective, health policy research can be done on the whole gamut of policy formulation, policy advocacy, policy implementation, and policy evaluation. Health policy research can be carried out on exogenous factors that affect health policy. They are situational factors (which are more or less transient, impermanent or idiosyncratic conditions that have an impact on policy); structural factors (which are relatively unchanging elements of the society); and cultural factors (which are value commitments of groups within communities or the society as a whole)14.

Frenk (1992) has regarded health policy research as the study of the determinants, design, implementation and consequences of health policy. In this context, it can be seen as a component of health systems research17. Health policy research can also be regarded as (i) purely a research process; (ii) research into the managerial process of health planning; (iii) a complementary process into the development of health policy; or (iv) a tool to monitor and evaluate the intended and unintended effects of the health policy. It is usually more practical to initiate health policy research within the framework of health systems research. The approach should be pragmatic and focused rather than tackling issues on a broad front7. In other words, initial emphasis should be given to conducting research relevant to specific issues in the health policy rather than on the comprehensive National Health Policy.

WHO POSITION ON HEALTH POLICY RESEARCH

The Global Advisory Committee on Health Research, in its 32nd session in 1994, noted that health policy research deserved a very high priority. More case studies should be done to generate new hypotheses. It was agreed that research is needed to convince decision-makers of the usefulness of health policy research. The recommendations made by WHO South-East Asia Advisory Committee on Health Research in 1994 are still valid today. These are:

(i) Health policy research should be considered a priority area for promotion and support by WHO;
(ii) WHO Regional Office should support national efforts in using health policy research to monitor and evaluate existing health policies with respect to their relevance and impact on health and health infrastructure in order to achieve more effective and efficient public health actions;
(iii) WHO Regional Office should assist ministries of health in developing dynamic relationships with researchers, politicians and planners in non-health sectors where health policy research may contribute to formulation of healthy public policies conducive to health promotion and protection;
(iv) WHO Regional Office should assist Member States in developing expertise in health policy research for use at national and sub-national levels and create a critical mass of policy analysts, and foster linkages among countries for regional collaboration.

The forty-eight session of the WHO Regional Committee for South-East Asia in 1995 adopted a resolution urging Member States "to undertake a comprehensive review of their health policies, covering all aspects of social and economic development, and placing appropriate emphasis upon health promotion and primary prevention". In the era of reforms in health care concepts, orientation towards the market economy, dwindling resources and the competitive nature of resource allocation for different ministries, health policy must be flexible and adaptable to the contemporary situation.

WHY IS HEALTH POLICY RESEARCH NECESSARY?

Health policy research is necessary because:

(i) Health policy is a basic determinant in ensuring that health systems perform more efficiently and effectively;
(ii) Health strategies, based on National Health Policy, are formulated based on prevailing and changing epidemiological conditions. The health policy, therefore, must be equally dynamic and responsive to the situation;
(iii) Health policy cuts across all programmes at all levels of the health care delivery system;
(iv) Health policy research is an area where there is great potential for further development;
(v) Countries are in epidemiological and socioeconomic transition. Thus, existing health policy needs to be reviewed as to its appropriateness and applicability in the context of new or unexpected situations, e.g., changing lifestyles and resultant diseases/conditions, environmental and industrial pollution.

WHAT DOES HEALTH POLICY CONSIST OF?

The degree of emphasis given to each component depends on the type and the level of policy to be applied. The policy is not simply about prescription or description of the topic in question. It is the outcome of complex social, political and economic interactions.

The components of health policy depend on the level of health policy to be promulgated. Generally, it consists of: (i) conditions pertaining to financing and mode of health services delivery and health promotion; (ii) technical standards for health care provided by both the public and private sector; (iii) emphasis on certain fields or disciplines e.g., traditional medicine, health systems research, etc.; and (iv) regulatory aspects within the health system.

WHAT DOES HEALTH POLICY RESEARCH PROCESS BASICALLY INVOLVE?

During the process of conducting health policy research, different options may evolve to operationalize the health policy. The process involves inputs from disciplines such as social science and management science.

(i) A review of existing health policy, including the content, feasibility, as well as intended or unintended effects on the beneficiaries.
(ii) A review of the controllable and seemingly uncontrollable factors influencing the policy itself. Depending on the nature and intent, either prospective or retrospective analytical studies can be done.
(iii) A process of looking into the health policy for its flexibility and sensitivity to the changing environment.

GENERAL ISSUES TO BE NOTED IN HEALTH POLICY RESEARCH OR ANALYSIS

At the initial stage of undertaking health policy research, complex questions that are likely to lead to ambiguous and unsatisfactory answers should be avoided. It is, therefore, important to decide which are the important questions, keeping the list as short as possible. If the research is to be performed successfully, key issues must be clarified and prioritized as far as possible. It is to be noted that complex interdisciplinary work is required to carry out health policy research. Areas for health policy research are unlimited. However, it is time dependent.

Before health policy research is conducted, members of the research team must be apprised of the current situation in the context of health effects of sectoral policies. From the point of view of the policy process, it is essential to do situational analysis on the overall status of health policy. Policy environment or contextual analysis is a pre-requisite in initiating a sequence of activities. It should be done within the context of socioeconomic, political, and technological settings. The ways in which policy, decisions and plans are arrived at, implemented, monitored and evaluated should be reviewed, i.e., process analysis. The medium where the policy is translated into action must be analysed, i.e., Infrastructure analysis. The impact of the policy is relatively difficult to measure given the fact that it is the result of the interaction of multiple factors, some of which are totally unrelated to health policy.

POLICY ASSESSMENT INDICATORS

(i) These should be developed in order to provide information for the purpose of monitoring and evaluating the direction, pace and degree of success of the policy being implemented.

(ii) Indicators are necessary for different phases of the policy process, i.e., pre-formulation phase, formulation phase and various implementation phases until termination.

(iii) The more sensitive the indicator the better is the responsiveness of the evaluation process. Indicators are actually the guiding lights for the decision makers, health professionals, planners and legislators.

Steps in health policy research (analysis) and policy formulation9

The following are basic steps in health policy research (analysis). It does not necessarily follow the sequence mentioned below:

JUSTIFICATION OF THE NEED FOR HEALTH POLICY RESEARCH (ANALYSIS)

(i) Justification based on past experience.
(ii) Economic pressure on the system.
(iii) Political pressure on the system.
(iv) Cost implications of a strategy, programme or project.

Availability of technical and administrative know-how, including infrastructure, to conduct health policy research must be reviewed. Involvement of professionals from other institutions who have experience is essential.

PREPARATORY ACTIVITIES

Areas to be covered should not be confined to the existing health policy but should extend beyond the domain of the current health policy.

(i) Formation of health policy research (analysis) steering committee and core

group.

(ii) Review and analysis of available literature - (past case studies, epidemics of conditions/diseases, case reports, evaluation reports, etc.).

(iii) Review and analysis of the modus operandi of the health care system, health infrastructure, including human resources for health, at different levels.

REVIEW OF POLICY ENVIRONMENT

Inter-relationship with policies of health-related ministries, including identification of hindering and facilitating factors must be explored. It is important to have a dialogue with focal points or key informants from health and health-related ministries. Based on the aforementioned activities, we need to: (i) identify and pinpoint issues to be tackled and hindering and facilitating factors; (ii) identify new channels or strategies to alleviate problems as well as collaborating and supporting mechanisms; and (iii) develop flow diagrams for implementation of different policies at different levels using the strategies envisaged under each policy statement.

HEALTH POLICY FORMULATION (BASED ON THE ABOVE)

(i) Identify a broad range of goals and objectives in line with the existing or modified health policies.

(ii) Identify policy options and submitting them to the Steering Committee, together with expected implications of each option.

(iii) Get approval from the Steering Committee of the draft version of the policy statement.

IMPLEMENTATION MECHANISMS OF HEALTH POLICY

(1) It could be framed for different hierarchical levels of the health system together with identification of supporting and collaborating mechanisms.

(ii) Depending on the nature and objectives of the mission, the extent of built-in review, research and analysis should be incorporated in the implementation plan.

STRATEGIES FOR PROMOTING HEALTH POLICY RESEARCH

The following strategies are envisaged. It is not exhaustive but includes the essential ones. Health policy related definitions are also mentioned as an annex.

(A) Awareness and demand for health policy research (Initial strategy)

(i) Create awareness among decision makers by explicitly explaining the importance and usefulness of health policy research for planning and other purposes, e.g., citing results of case studies.

(ii) Creation of awareness must also be directed towards strategic officials who have the authority and power to initiate the process.

(iii) Explanatory mechanism or method of communication should be simple and straightforward.

(iv) Controversial issues must not be highlighted at this juncture.

(v) Epidemiologic triad (person, time and place) play a critical role in the success of this activity. To whom we should address and at what opportune time

and where. The third variable "where" will vary from country to country and also on the level i.e., country, provincial, regional, township, etc.

(B) Research capability strengthening (basic strategy for embarking on health policy research).

(i) It needs some advance planning to streamline it. It should be well orchestrated with other health-related strategies.

(ii) Availability of appropriate human and financial resources is an essential prerequisite.

(iii) Collaboration among institutes of different disciplines is the sine qua non because health policy research requirements are many and varied. Unlike other types of research, it goes beyond the boundaries of health research.

(iv) The most effective and least costly activity is conducting research with built-in training programmes.

(C) Regional and inter-country networking (for sharing of experience and information)

(i) Establish focal points in the Ministry of Health for networking.

(ii) Supporting and collaborating activities must be clearly identified and visualized.

(iii) To obtain more information in support of this strategy, linkages can be made with international organizations.

(D) Giving research grants to research scientists (a direct strategy for promoting health policy research)

(i) Commissioned research studies are preferable.

(ii) Areas/topics to be studied must be identified by means of a consultative process through involvement of professionals from various disciplines.

(E) Dissemination of information

(i) This activity may be taken by WHO-SEARO in collaboration with various focal points in respective countries, WHO Collaborating Centres, and Centres of Excellence involved in doing health policy research studies.

(ii) Bibliography on health policy research should be prepared, frequently updated and disseminated to focal points.

CONCLUSION

The aim of doing health policy research can be summarized as (i) to facilitate in formulation of sound, practical and applicable health policies; (ii) to facilitate in formulation of appropriate strategies and operational activities; (iii) to detect flaws and weaknesses in the existing policy in light of the system environment in which the policy is being implemented; (iv) to develop policy implementation/assessment indicators, which may be required to change the course of action whenever and wherever necessary; and (v) to finally make a policy change or reform the health care system. The ultimate outcome, therefore, of health policy research is to achieve the most practical, implementable, and dynamic health policy and synergy between health policy and affiliated/related policies. It will finally lead to a health care system becoming more effective, efficient, adaptable and responsive to the needs of the country.

ANNEX:
HEALTH POLICY RELATED DEFINITIONS[1&2]

Policies may be interpreted as general statements of understanding which guide decision-making.

Policies are based on human aspirations, a set of values, commitments, assessment of current situation and an image of the desired future situation.

Policy formation refers to the process where the demand of the society is being recognized by different social and power groups. Such groups include political as well as interest groups, trade unions, mass media, etc. They put up the demand which will finally lead to policy formulation.

Policy formulation refers to shaping up of a political demand into a set of values for social action. The process for policy formulation implies the adoption of a social demand by political and power groups, its analysis in terms of social interaction, and its enunciation, which provide the guidance for their technical implementation. The final outcome of such a process is a policy statement.

Policy formalization is that part of the policy process which presents a policy statement with necessary social arguments and justification for a decision. It entails tasks of dissemination, negotiation and approval.

Policy implementation: Various stages of the managerial process such as broad programming and programme budgeting which translate policies into strategies to achieve stated objectives, have an important feedback effect on policy formulation. Policy implementation through various stages of planning and management has an influence on policy reformulation or formulation of new policies to reflect realities in the implementation of national health plans and programmes.

Health policy formulation is a part of a broader managerial process for national health development. This process consists of an interlinked sequence of events including policy formulation, programme formulation and budgeting, programme delivery through various services and institutions, evaluation and reprogramming as necessary and information support throughout.

REFERENCES

1. Public Policy and Policy Analysis in India by R.S. Ganapathy, et. al - SAGE Publications, New Delhi/Beverly Hills, London.
2. Health Promotion Research Towards a New Social Epidemiology, edited by Bernhard Badura and Ilona Kickbusch, WHO Regional Publications, European Series No. 37.
3. The Impact of Development Policies on Health - A review of the literature, World Health Organization, Geneva, 1990.
4. Policy Content and Context in Implementation. In: Grindle, M., ed. Politics and policy implementation in the Third World. Princeton, Princeton University Press.
5. Health Policy and Planning 9 (4); 353-370; Reforming the Health Sector in Developing Countries: The Central Role of Policy Analysis, by Gill Walt, Health Policy Unit, London School of Hygiene and Tropical Medicine, U.K., and Lucy Gilson, Department of Social Policy and Administration, London School of Economics and Political Science, U.K.
6. Health Policy Analysis/Research - Proposals for a Promotional Framework

(A Report by R. Srinivasan), WHO Consultant, 13 December 1994 to 13 February 1995.
7. Follow-up recommendations of 20th ACHR on the Promotion and Support of HPR by WHO, by Dr Aung Than Batu, formerly, Director, RHR, WHO-SEARO, New Delhi.
8. Advisory Committee on Health Research - Report to the Director-General (ACHR32/94.22 Report).
9. Guide to Policy Analysis and Formulation for Human Resources for Health, July 1994 (SEA/HMD/201).
10. Improving Health Policy and Management - Nine Critical Research Issues for the 1990s, edited by Stephen M. Shortell, Uwe E. Reinhardt.
11. The Crisis of Public Health: Reflections for the Debate - Scientific Publication No. 540, Pan American Health Organization.
12. Health Implications of Public Policy - Case Studies, Modules, Methodologies, edited by Basu Ghosh, Indian Institute of Management, Bangalore.
13. Health Policy - An Introduction to Process and Power, by Gill Walt, ed Books London and New Jersey.
14. Leichter, H.M., (1979) A Comparative Approach to Policy Analysis: Health Care Policies in Four Nations, Cambridge University Press: Cambridge.
15. Hall, P., Land H., Parker, R. and Webb, A. (1975); Change Choice and Conflict in Social Policy, Heinemann London.
16. Kingdon J. (1984): Agendas, Alternatives and Public Policies, Little Brown & Co. Boston.
17. Grindle, M. and Thomas, J. (1991): Public Choices and Policy Change, Johns Hopkins Press, Baltimore.
18. Foltz,A. (1992): Assuring Health Sector Policy Reforms in Africa: the Role of No-Project Assistance, paper presented at the American Public Health Association Annual meeting in November.
19. Public Health Policy Forum - Disease Control Priorities in Developing Countries: Health Policy Responses to Epidemiological Change, Dr T. Jamison, PhD., and W. Henry Mosley.
20. Policy Research in the Social Sciences by James S. Coleman, Johns Hopkins University.
21. Evaluating Health Systems and Health Policies, Crumper, G. (Kingston, Jamaica, Scand J. Soc. Med 1990, Suppl. 46: 133-135).
22. Htwe, M. "Overview on Health Policy Research and Issues for Discussion" (SEA/HPR/ Meet/19), Inter-country Meeting on Health Policy Research, 1995. (SEA/HPR/Meet/19).
23. Htwe, M. Background paper titled "Issues in Health Policy Research", (SEA/SWG-FPS/L), Meeting of the WHO Scientific Working Group (SWG) on Formulation of National Health Research Policies and Strategies, held in Jakarta, Indonesia, 6-8 December 1999.
24. Htwe, M."Issues in Health Policy Research", WHO-SEARO Regional Health Forum, Volume 4, Numbers 1 & 2, 2000)
25. Htwe, M. "Epidemiological Methods Used in Policy Analysis", (SEA/SWG-FPS/J), Meeting of the WHO Scientific Working Group (SWG) on Formulation of National Health Research Policies and Strategies, held in Jakarta, Indonesia, 6-8 December 1999.
26. Htwe, M. "Formulation, Implementation and Evaluation of Health Research Policy" WHO-SEARO Regional Health Forum – Volume 5, Number 2, 2001.

PART C

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, forum 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 coördination", "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. Another 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.

Along 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. Here, 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. These 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. Rational 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. This 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. If 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.

As 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.

Before 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. We 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 its 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) network 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 coördination. 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 coördination. 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. Thinking 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.

Majority of the staff here in this room are public health professionals, epidemiologists, health administrators, and senior management officials. There 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. The 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. To 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. Another 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 coördination. 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. The 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. Food 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. Similarly, 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. We 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 it. Without research, the growth of the traditional medicine field will be retarded or even stunted. This 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. Another 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". We 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.

As 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. Rational 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. Some 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. We 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 level. 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. After 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. In 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.

My 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 faul-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.

CONCLUSION

Let 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 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 overall health status of the population on our path to attaining Universal Health Coverage.

We have many things to do but we will carefully consider and prioritize and carry out it 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.

My 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.

H.E Dr. Myint Htwe
Union Minister
Ministry of Health and Sports
1st April 2016