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Contents

Editorial

- ▶ Rising Trend of Superficial Fungal Infection in Bangladesh and Physicians' Responsibility 05
Professor Dr Md Uzire Azam Khan

Special Article

- ▶ Public Health Education in South East Asia – current status and future direction in achieving goals of Universal Health Coverage 06-10
Dr. Hafiza Arzuman, Dr. Md. Abdul Hannan Sarker, Dr. Md. Shamsul Alam, Dr. Mst. Wahida Jahan, Dr. Ishita Hasan Disha, Dr. Farzana Yeasmin, Dr. Md. Azfarul Habib

Original Article

- ▶ Frequency and antibiotic susceptibility pattern of uropathogens isolated from patients with urinary tract infection 11-19
Dr. Mst. Jeneya Afrin, Dr. D.M. Arifur Rahman, Dr. Rezowana Sharmin, Dr. Fahim Uddin Ahmad, Dr. Sabera Gulnagar, Dr. Md. Azfarul Habib
- ▶ Effect of Conventional Anti Tubercular Drugs and Azathioprine on Nontuberculous Mycobacteria in Patients of Crohn's Disease 20-25
Dr. Md. Kaisar Niaz, Major, Dr. Md. Delwar Hossain, Dr. SM Mizanur Rahman, Dr. Md. Anisur Rahman
- ▶ Sodium content of breads available in the markets of Dhaka city, Bangladesh 26-31
Dr. Mohammad Rashidul Alam, Dr. Md Khalequzzaman, Dr. Sohel Reza Choudhury, Dr. Mst Shanjida Sharmim, Suman Mohajan, Prof. Syed Shariful Islam
- ▶ Efficacy and Tolerability of Miltefosin for Childhood in Visceral leishmaniasis 32-36
Dr. Md. Monjur-e-Murshed, Dr. Md. Rustam, Dr. Md. Khalilur Rahman, Dr. A.S.M. Selim, Dr. Md. Shameem, Dr. Naznin Pervin
- ▶ The effect of adenoid hypertrophy on development of Otitis Media with Effusion (OME) 37-41
Dr. Md. Ziaul Ahsan, Dr. Md. Saiduzzaman, Dr. Syed Md. Tipu Sultan, Dr. Dipon Kumar Sarkar

Review Article

- ▶ Laboratory Diagnosis of cancer in 21st century: A brief review 42-47
Dr. D. M. Arifur Rahman, Dr. AKM Ahsan Habib



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Address of Correspondence

Executive Editor, TMSS Medical College Journal, TMSS Medical College
Rangpur Road, Thengamara, Bogura, Bangladesh.
Phone: 051-61830, Fax : 051-61830
e-mail: editortmcjournal@gmail.com, Web: www.tmssmedicalcollege.com

Special Article**Public Health Education in South East Asia – current status and future direction in achieving goals of Universal Health Coverage**Arzuman H¹, Sarker MAH², Alam MS³, Jahan MW⁴, Disha IH⁵, Yeasmin F⁶, Habib MA^{7*}

1. Dr. Hafiza Arzuman, Professor, Department of Community Medicine, TMSS Medical College Bogura.
2. Dr. Md. Abdul Hannan Sarker, Associate professor, Department of Community Medicine, TMSS Medical College Bogura.
3. Dr. Md. Shamsul Alam, Lecturer, Department of Community Medicine, TMSS Medical College Bogura.
4. Dr. Mst. Wahida Jahan, Lecturer, Department of Community Medicine, TMSS Medical College Bogura.
5. Dr. Ishita Hasan Disha, Lecturer, Department of Community Medicine, TMSS Medical College Bogura.
6. Dr. Farzana Yeasmin, Lecturer, Department of Community Medicine, TMSS Medical College Bogura.
7. Dr. Md. Azfarul Habib, Professor, Department of Community Medicine, TMSS Medical College Bogura.

* Corresponding author

Dr. Md. Azfarul Habib, Professor, Department of Community Medicine, TMSS Medical College, Bogura.

Mobile: 01711-425983, E-mail: azfarulhabib83@gmail.com

Abstract

In a global world where there is an explosion of technology, information and IT system, the countries in South Asian Association for Regional Cooperation (SAARC) are still struggling to reach a certain standard of health. One of the reasons for that is lack of sufficient and efficient public health specialist to address the public health. The emerging of new diseases posed new challenges to public health to address the new challenge. Only just there have been efforts to develop capacity building in public health in these countries by producing competent public health workforce through public health institutes and schools and undergraduate medical programme. This review focused on current status of public health education in South East Asia region and its challenges. It also focuses on different aspects of public health education and how we can modify or update public health education for reaching the goal of Universal health coverage by 2020. In this review, we try to summarize post graduate and undergraduate education reform and strategies that has been proposed by World Health Organization and from published articles in different journals in South East Asian region.

Key words: Public Health Education, South East Asia, Universal Health Coverage, Goal, Challenge,

Introduction

South East Asia Region (SEAR) consists of eleven countries squeezed with 620 million people makes it one of the most populated regions in the world. Molded by its history, geography and position the region is a major crossroad of trade, and consists of vast social, economic and political diversity¹. Despite their diversity, SEAR countries are attempting to shape a common regional identity to seek jointly acceptable and effective solutions for the key regional health challenges². While globally there has been an blast of scientific and technological discoveries that help diagnose, prevent, and treat diseases, the countries of the South East Asia region have failed to fully gather the benefits of these breakthroughs for many reasons.³ A remarkable progress has been made for most of the areas of public health in this region but recent evaluation indicates uneven achievements within and across the countries⁴.

The central threats to public health are a mixture of regional as well as global factors. Factors include demographic and epidemiological transition, changes in the environment, increased people's mobility, information and communication revolution, war, terrorism, denationalization, deregulation of health care and increasing levels of health inequality both within and between countries⁵. Most of the countries of SEAR are facing a burden of new and emerging diseases, challenge of health issues due to environment change, ageing populations, mental health and the challenge of rising epidemics of non-communicable diseases.⁶ Health is an important determinant of financial success and growth of a nation⁷, and central to the achievement of all millennium development goals⁸. Universal Health Coverage (UHC) has become a major goal for health reform in many countries and a priority objective of World Health Organization for

facing the new public health challenges. The enjoyment of the highest possible standard of health is one of the basic rights of every human being without difference of race, religion, and political belief, economic or social condition UHC means every person; everywhere has access to quality health care without suffering financial hardship.^{5,6,7,8} Countries in SEAR have defined UHC differently and are at different levels of success, with the common goal of improving justice in health^{7,8}. The SEAR Regional Strategy for Universal Health Coverage was endorsed by the Sixty-Fifth Session of the Regional Committee for SEAR and recommends four Strategic Directions for advancing UHC in the South-East Asia Region. One of the endorsed Strategic Directions is strengthening national institutions and capacities for universal health coverage⁹. One way to achieve UHC is to build up public health capacity by strengthening the public health education and by producing public health personnel^{3,10}. In SEAR countries the health system is generally focused on curative care which is also not very well managed and further challenged by a lack of efficient and skilled public health professionals.

Regional Public Health Education: Current Situation

Public health education that is irrelevant to national health priorities and divorced from public health practice is ineffective and represents a lost opportunity. Most of the countries of this region are challenged with problems of shortage of health professionals, misdistribution and limited capacity for production, proper management and distribution of human resources for health.¹¹ *It is extremely important to strengthen Public Health Education planning of this region for producing skilled public health professionals for facing the emerging challenges.*^{11 and 12} A review of Public Health Education by WHO South-East Asia Region¹³ showed mixed results. Despite the presence of undergraduate training in medical schools and several postgraduate courses in Bangladesh, India, Indonesia, Malaysia, Thailand and few other countries, there is a great variation in institutes and courses offered among the countries. Traditionally Public Health education was exclusively

for undergraduate medical student's and the post graduate courses for medical graduates with training in core public health without specialisation in specific areas. A conscious shift is taking place and both medical and non-medical institutions in most of the countries have initiated public health programs for both medical and nonmedical graduates. Many institutes started core public health programs (General Masters in Public Health – MPH and also specialized courses MPH with tracks/specialization).¹⁴

In Bangladesh, the National Institute of Preventive and Social Medicine (NIPSOM) admit more than hundred students in different areas of public health every year, and few other institutions have basic courses of Public Health at public sector. Many private institutions are also offering post graduate programmes. In addition, a few Universities/institutions are offering distance education and are planning to respond rapidly if circumstances favour those^{14 and 15} Thailand seems to be relatively more advanced in Public Health Education in this Region. While Mahidol and Chulalongkorn Universities have longstanding public health faculties, other institutions that train professionals related to public health are also becoming very active. India, Indonesia, Malaysia are also offering mainly post graduate programme in Public health extensively^{16,17}

Challenges faced by Public Health Education

Inadequate attention to management and institutional reforms is an important barrier in achieving universal health coverage through public health professions. The major challenges facing Public Health Education in SEAR are -

- Quality assurance of Public Health Education,
- Teaching standards and faculty members' competency in practical field experience, especially in public health management and outbreak control.
- Lack of policy-relevant research or publication of public health faculties' indicates weakness of Public Health Education and its detachment with real-life public health policies and practices.
- Biomedical and public health research have not received the same level of attention in this region as they do in the developed world.

- Only a small number of medical and non-medical students are keen to specialize in public health and even a smaller number of them are interested to work in rural areas.
- Lack of regular review and update of the Public Health Education curricula in both under and post graduate levels is a major setback for producing efficient public health professionals to face the emerging challenges.
- The lack of leadership and managerial efficiency are another shortcoming in the countries and the steady building up of a group of leaders and managers will work towards achieving desired goals.
- At a political level, it is uncertain that those in senior policy-making positions are knowledgeable of public health issues. However they are leaders who have the vital role in taking care of health systems and in interpreting evidence into policy and programme implementation. ^{5,8,14,16,17,18}
- Properly train the educators, practitioners and researchers and prepare public health leaders and managers;
- Serve as a focal point for multischool trans disciplinary research for evidence and contribute in public health policies;
- Work collaboratively with other professional schools to assure quality public health content in their programme.
- Inculcate lifelong learning spree to the students of public health; and engage them in various community health programme for understanding the real community problems.
- Estimate requirements and supply of public health professionals.
- Accreditation and benchmarking of the programme for improving the quality of education;
- Outline strategic considerations to improve the curricula and strengthen faculties; incorporate modern technology in instructional methods, and move with global trends of public health education. ^{15, 16, 17,18}

Future direction to strengthen Public Health Education for achieving Universal Health Coverage

The extent of improving the health of the public depends on the quality and preparedness of the public health workforce, which is in turn dependent upon the relevance and quality of its education and training. To generate skilled public health professionals, it is extremely important to strengthen the Public Health Education planning of a country.

The eruption of scientific and technological discoveries that help diagnose, prevent, and treat diseases, the countries of the SEAR have failed to fully protect the welfares of these break throughs for many reasons. Public health policy not always been firmly rooted in evidence. Some assumptions that have guided policy decisions have proved incorrect.

The strengthening of Public Health Education needs a multipronged approach to achieve all major strategic directions outlined in Calcutta Declaration (2000), Dhaka Declaration (2006) and Regional Committee meeting of WHO (2012). In response to that the responsibilities of the Schools of Public Health in this region should be

For improvement of Undergraduate training of Public health a General recommendations for medical schools and departments of community medicine/ preventive and social medicine/public health by WHO

- Curriculum review and revision
- Teaching learning methods
- Competency-based training for undergraduates in public health- It is recommended that all public health courses must have provision for utilizing about 40% of time for skill building as basic public health skills are lacking at the undergraduate level.
- Practice-based teaching/learning environment
- Field practice area
- Integration/interaction with clinical disciplines
- Integration between health services and public health
- Quality assurance and accreditation in public health education and training
- Promotion of greater community involvement in public health development activities, social responsibility and accountability

- Continuing professional development (CPD) - It is suggested that the CME for medical teachers and other public health professionals should be compulsory at regular intervals.^{17, 18, 19}

Concluding remarks

Before a century or more the foundations were laid in the region for a future of better health and longer lives. The communicable diseases that had taken millions of lives in 19th century were beaten in 20th century by clean water and safe sewage, discovery of new vaccinations and start of mass immunization programmes. The multidisciplinary and multisectorial character of public health might pose a challenge to organizing public health education. Today new foundations need to be laid if we are to beat the challenges posed to public health. Just like the health care pioneers a 100 years ago who came to realize that prevention is better than cure, faced with new challenges we need to come to the same insight today with new technology and proper motivation.

The challenge of Universal Health Coverage is real. Progress is going on and further progress is possible. Resources and reforms are both needed.

Declaration of competing interest

The authors declare that the review was conducted without any commercial or financial relationships that could be posing as a potential conflict of interest. The authors confirm that there is no conflict of interest.

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