



ISSN NO. 2320-5407

Journal homepage: <http://www.journalijar.com>

INTERNATIONAL JOURNAL
OF ADVANCED RESEARCH

RESEARCH ARTICLE

Public health priorities of South Asia: An overview

Dr. Arun K Simon^(1,2), Dr. T V Bhumika⁽²⁾, Dr. Richa Jaswal⁽²⁾, Prof. N Sreekumaran Nair⁽³⁾

1. Department of Public Health Dentistry, Manipal College of Dental Sciences, Mangalore, Manipal University, Karnataka, India

2. Department of Statistics, Public Health Evidence South Asia, Manipal, Manipal University, Karnataka, India

3. Professor of Biostatistics and Head, Department of Statistics and Dr. TMA Pai Endowment Chair in Systematic Reviews and Evidence Based Public Health, Manipal, Manipal University, Karnataka, India

Manuscript Info

Manuscript History:

Received: 15 February 2015
Final Accepted: 25 March 2015
Published Online: April 2015

Key words:

Southern Asia; Health Priorities;
Environmental health; Public health

*Corresponding Author

Prof. N Sreekumaran Nair

Abstract

The challenges faced by the South Asian region are many in the domain of healthcare. Even though the health outcomes have improved in South Asia in the past decade, the distribution of these gains has been unequal. The aim of this review paper was to identify the public health priorities for South Asia using secondary databases. Literature search on electronic databases such as PubMed, MEDLINE, ScienceDirect, GoogleScholar was carried to obtain data addressing public health issues of South Asia. The literature search indicated, the dual burden of communicable and non-communicable diseases, environmental health, social determinants of health and strengthening of existing health systems as a public health priority for South Asia. The South Asian region is confronted with a formidable challenge to address its public health problems that are far greater than rest of the world. Provision of universal health care should be the priority for the countries in this region. This paper throws light on the myriad of the challenges faced by the South Asian region at present. It provides an insight in to the major public health priorities to improve healthcare services in the region. Public health professionals can utilize this information to further their research activities in the priority areas of the region.

Copy Right, IJAR, 2015.. All rights reserved

INTRODUCTION

The South Asian region includes India, Pakistan, Bangladesh, Nepal, and Sri Lanka that accounts for nearly one-fifth of the world's population. Low life expectancy and high rates of malnutrition coupled with infant mortality, and incidence of Tuberculosis and HIV/AIDS pose a significant health challenge in South Asia. Health related problems include poor sanitation, poor maternal health, poor access to healthcare services and widespread malaria.¹ In spite of these problems, the countries in the World Health Organization South East Asian region spend only about 3.4 percent of the gross domestic product, compared to a global average of 8.7 percent.²

Among the countries in South Asia, the vast population of 1210.2 million in India, presents a formidable challenge to provide a high standard of healthcare with the efficient administration of available resources.³ The region's health outcomes have improved, but remain unacceptably poor in many areas. Even-though from 2000 to 2007, all five countries saw progress in life expectancy, infant survival, and childhood immunization, they remain poor in many areas. The shortfall of basic health systems along with poverty and malnutrition has resulted in increased mortality rates.⁴ Expansion of basic health services in rural areas is required for improving immunization coverage and antenatal check-up which is around 68 percent in South Asia.⁵ The maternal mortality rate was also higher in South Asia, where approximately 185,000 women die every year.⁶

Health services and outcomes are influenced by education, class, geography, and urban or rural residence. Disparities that exist between South Asia's urban and rural populations show that the problem of health inequality is also influenced by geography. Tailor made public health interventions considering area specific challenges are required to address the inequalities.¹ Sri Lanka has been a special case in South Asia due to its better health infrastructure, relative wealth, smaller scale and strong political leadership that gives prime concern for health and education. Sri Lanka enjoys several advantages of a manageable population and favourable maritime location. Another reason for its special status within South Asia is that the public health decision making has been devolved to the local level. A mix of public and private partnerships has led to near universal health coverage for all in Sri Lanka.¹ The aim of this study was to identify the public health priorities for South Asia using secondary databases.

Literature Search:

Literature search on electronic databases such as PubMed, MEDLINE, ScienceDirect, GoogleScholar was carried to obtain data addressing public health issues of South Asia.

Dual burden of Disease

The major theme that was reported as a public health priority was the dual burden of disease that non communicable diseases are putting on developing countries already struggling to tackle the impact of infectious diseases. Non-communicable diseases like cardiovascular disease, respiratory disease, digestive diseases, cancer, and diabetes account for over 50 percent of deaths in the WHO South East Asian region while death from infectious diseases, maternal and perinatal conditions and nutritional deficiencies combined are expected to reduce by 16%.⁷ Regional economies and poverty alleviation efforts are greatly burdened by non-communicable diseases. Unhealthy dietary patterns, inactive lifestyles, socioeconomic obstacles, insufficient health facilities and widespread tobacco use have increased the burden of South Asia's chronic disease.¹ Malnutrition is also one of the important issues threatening South Asia's well-being. Over 20 percent of children less than five years of age in every country in the region are underweight. The impact of climate change on agriculture may also aggravate the problem of malnutrition in the future. The rapid population growth in India and Pakistan threatens the recent gains against malnutrition, where women and children are the most vulnerable. A sustainable approach involving, medical, economic and agricultural solutions are needed to address the crisis of malnutrition.⁸ Mental health has not been given its due importance and is a public health priority in South East Asia. The dearth of policy implementation and lack of investments are the main obstacles for improving the mental health of the region.⁹ Amongst the communicable diseases, HIV/AIDS poses a formidable health problem to the Asian subcontinent. The epidemic follows different patterns according to the demography and geography. The HIV/ AIDS epidemic has contributed to the resurgence of tuberculosis (TB) in South Asia and India is burdened with the majority of cases.¹⁰ In spite the availability of effective directly observed treatment strategy (DOTS) there has been rise in cases of multidrug-resistant TB (MDR-TB) and extensively drug-resistant TB (XDR-TB).¹ The need of the hour is to integrate HIV and TB prevention and research to halt the spread of drug-resistant TB among the most vulnerable population. The risk factors for respiratory infections are widespread in the South East Asia region. Lower respiratory infections are one of the primary reasons of disability adjusted life years (DALYs) globally, across all age groups.¹¹ The investigations of infectious disease outbreaks need to be brought into focus. The pressing reasons for outbreak investigations are to identify and eliminate the source(s) of infection.

Environmental health

Under environmental health, the urgent need is for improving water and sanitation conditions to bring down infectious diseases among children and adults. Diarrhoea is an important problem in South Asia which accounts for 29 percent of the world's under-five deaths.¹² Accordingly seventy-four percent of the population of South Asia are deprived of access to improved sanitation facilities compared to 29 percent of the global population.¹³ Road traffic accidents is a public health priority in the South Asian region. Road traffic accidents as a public health priority have only been recognized in the recent past.¹⁴ Road traffic accidents also have taken a toll on South Asia which along with Western Pacific countries share more than half of the global burden.¹⁵ There is a pressing need to address the ever-growing problem of electronic waste and biomedical waste disposal. South Asia faces a peculiar problem in the form of Electronic waste not only due to generation from its own sources but also due to dumping from other developed nations.¹⁶ Even-though low and middle income countries contribute less to healthcare waste generation, unregistered health centres and unscientific disposal have resulted in the spread of communicable diseases.¹⁷ There is a need for proper implementation of disposal guidelines for electronic and biomedical waste. The biological

hazards due to radiation from cell phone towers are often neglected, particularly in Asian countries where cell phones are pervasive.

Social determinants of health

Social determinants of health is also considered among the public health priorities for South Asia. There is a widening of the rich-poor gap among the countries of the region.¹⁸ Increase in inequality has put a serious burden on poverty alleviation efforts. Social inequality not only encompasses inequality in income but also in education, health, and economic assets such as land.¹⁹ Suicide rates have increased globally as evidenced by the fact that it represented 1.3% of the total global burden of disease in 2004 and the South East Asian region is no exception.²⁰ Suicide was the tenth leading cause of death for all ages.²¹ The South East Asian region records the second highest prevalence rate of moderate disability (16%) and the third highest prevalence rate of severe disability (12.9%) that makes it a public health priority.²² Disability not only affects the person but also has a huge economic impact on the family members. Another area of concern for the South Asian region was substance abuse. Strict policies can reduce the public health problems due to substance use, so that the health care system can work towards the restoration of health of the individual.²³

Health system strengthening

Under this, the main focus should be on strengthening public health facilities, careful allocation of health expenditure and increased supervision and efficient management of existing facilities. In South East Asia, the growing demands of the population have put increasing pressure on the existing health care systems. The diversity of the populations has been a hurdle in strengthening the health system in these countries. Health care in South Asia has evolved into an industry mainly buoyed by the growth in their private sector health care that is out of reach for a common man. The new medical technologies needs to grow hand in hand with the traditional health practices.²⁴ The areas to be concentrated in strengthening of existing health care systems are to identify the need for policy changes and practices and initiatives to improve functioning.²⁵

Public health education and research priorities for South Asia

The role of public health education is of paramount importance in the formulation of national health policies and public health practice. There is a vast difference among the public health institutes and the courses offered in the region. In the context of inadequate public health capacity and the emergence of new infectious diseases a pragmatic approach towards public health education is required. The role of public health education is of paramount importance in the formulation of national health policies and public health practice. There is a vast difference among the public health institutes and the courses offered in the region. In the context of inadequate public health capacity and the emergence of new infectious diseases a pragmatic approach towards public health education is required. Field Epidemiology Training Programmes (FETPs) are a success stories in Thailand, that has applied the concept of “linking education and practice” in its programme.²⁶ Sanders et al in 2004 emphasised that research should identify health risks not only in local and national context but also in a global setting. They felt that the focus of health research should be on the barriers to primary health care approach. They also encouraged the participation and partnership with civil society.²⁷ McCoy et al in 2004 felt that resources devoted to research do not benefit poor people in developing countries. They expressed that research is needed on utilizing available and affordable technology while promoting the transfer of knowledge from research into policy and practice. They also called for bridging the imbalance in power between researchers in rich and poor countries.²⁸ The World Health Organization Task Force on Health Systems Research, 2004 urged researchers to focus on financial and human resources and organization and delivery of health services.²⁹ In 2005, WHO-SEARO region published a document to strengthen public health as a discipline, and strengthen schools of public health. The suggested actions include developing of evidence based public health policies and advancing institutional capabilities. The document also called for strengthening of public health regulation and health financing. It also mentioned community based public health research and multi-disciplinary interventions as an area of focus. The document also called for the Schools of Public Health to develop expertise in epidemiology and bio-statistics, identifying gaps in knowledge and to design and implement studies. Expertise in carrying out health systems research and sensitivity analysis, cost effectiveness studies and preparing research papers were also expected from them.³⁰

Conclusions

South Asia still faces an uphill task to provide its population with universal health care. This region faces a formidable challenge to face its intricate public health challenges that are far greater than rest of the world. This

paper prioritizes the public health challenges faced by South Asia and the environmental health was still considered as an important and immediate challenge facing South Asia.

Box 1: Health research priorities for South Asia

- Use of available and affordable technology
- Transfer of research knowledge into policies and practice
- Percolation of benefits of health research to benefit poor in developing countries
- Healthcare delivery
- Identify barriers to primary health care approach
- Public health capacity building
- Community oriented health research
- Adequate resource allocation

References

1. Haté V, Gannon S. Public Health in South Asia [Internet]. Cent. Strateg. Int. Stud.2010 [cited 2014 Aug 16];Available from: http://csis.org/files/publication/100715_Hate_PublicHealthSouthAsia_Web.pdf
2. World Health Organization. Health Expenditure [Internet]. [cited 2014 Aug 21];Available from: http://www.who.int/whosis/whostat/EN_WHS09_Table7.pdf
3. Government of India. Census 2011 provisional population totals [Internet]. [cited 2014 Aug 21];Available from: http://censusindia.gov.in/2011-prov-results/data_files/india/pov_popu_total_presentation_2011.pdf
4. World Health Organization. Global Health Observatory [Internet]. 2009 [cited 2014 Aug 18];Available from: <http://apps.who.int/ghodata/>.
5. The United Nations Children's Fund (UNICEF). Childinfo: Statistics by Area/Maternal Health [Internet]. 2009 [cited 2014 Aug 18];Available from: <http://www.childinfo.org/>
6. World Health Organization Regional Office for South-East Asia (SEARO). Improving maternal, newborn and child health in the South-East Asia Region. [cited 2014 Aug 18];Available from: http://www.searo.who.int/entity/maternal_reproductive_health/documents/SEA-MCH-228/en/
7. World Health Organization. The Impact of Chronic Disease in South-East Asia [Internet]. [cited 2014 Aug 16];Available from: http://www.who.int/chp/chronic_disease_report/media/searo.pdf?ua=1
8. Food and Agriculture Organization of the United Nations. Food Security Statistics [Internet]. [cited 2014 Aug 18];Available from: <http://www.fao.org/economic/ess/food-security-statistics/monitoring-progress-by-country-2004-2006/en/>
9. Maramis A, Van Tuan N, Minas H. Mental health in southeast Asia. *Lancet* 2011;377:700–2.
10. Donald PR, van Helden PD. The global burden of tuberculosis--combating drug resistance in difficult times. *N Engl J Med* 2009;360:2393–5.
11. World Health Organization Regional Office for South-East Asia (SEARO). | Strategy for coordinated approach to prevention and control of acute diarrhoea and respiratory infection in the South-East Asia Region. [cited 2014 Aug 16];Available from: http://www.searo.who.int/entity/child_adolescent/documents/sea_cd_212/en/
12. World Health Organization. Diarrhoea: why children are still dying and what can be done. [cited 2014 Aug 14];Available from: http://www.who.int/maternal_child_adolescent/documents/9789241598415/en/
13. World Health Organization. Progress on sanitation and drinking-water 2010 update. [cited 2014 Aug 14];Available from: http://www.who.int/water_sanitation_health/publications/9789241563956/en/
14. World Health Organization. Child injuries. [cited 2014 Aug 14];Available from: http://www.who.int/violence_injury_prevention/child/injury/en/
15. Peden M. Global collaboration on road traffic injury prevention. *Int J Inj Contr Saf Promot* 2005;12:85–91.
16. Pinto VN. E-waste hazard: The impending challenge. *Indian J Occup Environ Med* 2008;12:65–70.
17. Vishwanathan C, Adhikari R. Health Care Waste Management in South Asia [Internet]. 2006 [cited 2014 Aug 14];Available from: <http://www.faculty.ait.ac.th/visu/pdfs/Conference/HWMS.pdf>
18. Economic and Social Inequality in Asia and Pacific: 12 Things to Know | Asian Development Bank [Internet]. [cited 2014 Aug 16];Available from: <http://www.adb.org/features/inequality-asia-and-pacific-region-12-things-know>
19. Inequality in Asia: key indicators 2007 special chapter highlights [Internet]. [cited 2014 Aug 16];Available from:

[http://graduateinstitute.ch/files/live/sites/iheid/files/sites/developpement/shared/developpement/mdev/soutienauxcou
rs0809/Gironde Pauvrete/Inequality-in-Asia-Highlights.pdf](http://graduateinstitute.ch/files/live/sites/iheid/files/sites/developpement/shared/developpement/mdev/soutienauxcou
rs0809/Gironde Pauvrete/Inequality-in-Asia-Highlights.pdf)

20. World Health Organization. Suicide prevention (SUPRE). [cited 2014 Aug 16]; Available from: http://www.who.int/mental_health/prevention/suicide/suicideprevent/en/
21. Centers for Disease Control and Prevention (CDC). Suicide [Internet]. 2012 [cited 2014 Aug 16]; Available from: http://www.cdc.gov/violenceprevention/pdf/suicide_datasheet-a.pdf
22. World Health Organization. World Report on Disability [Internet]. [cited 2014 Aug 16]; Available from: http://www.who.int/disabilities/world_report/2011/report.pdf
23. World Health Organization. Substance abuse. [cited 2014 Aug 16]; Available from: http://www.who.int/topics/substance_abuse/en/
24. Beaglehole R, Dal Poz MR. Public health workforce: challenges and policy issues. *Hum Resour Health* 2003;1:4.
25. Health Systems Strengthening [Internet]. [cited 2014 Aug 16]; Available from: http://www.urc-chs.com/health_systems_strengthening
26. Tangcharoensathien V, Prakongsai P. Regional public health education: current situation and challenges. *Bull. World Health Organ.* 2007;85:903–4.
27. Sanders D, Labonte R, Baum F, Chopra M. Making research matter: a civil society perspective on health research. *Bull World Health Organ* 2004;82:757–63.
28. McCoy D, Sanders D, Baum F, Narayan T, Legge D. Pushing the international health research agenda towards equity and effectiveness. *Lancet* 364:1630–1.
29. Task Force on Health Systems Research. Informed choices for attaining the Millennium Development Goals: towards an international cooperative agenda for health-systems research. *Lancet* 364:997–1003.
30. World Health Organization. South-East Asia Public Health Initiative 2004-2008 [Internet]. 2005 [cited 2014 Aug 18]; Available from: http://apps.searo.who.int/PDS_DOCS/B3458.pdf