

A Study of Malnutrition in Asia

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Abstract

Introduction: There is a serious problem that needs to be addressed in Asia, a double problem about malnutrition and nutrition in school going children. This study is going to investigate malnutrition and nutrition in school children. The diseases caused by malnutrition and those caused by nutrition like obesity. This study is going to be a comparative study among four countries: China, India, Thailand and Nepal. Diseases associated with malnutrition or nutrition and mostly linked to the economic status of a country of its citizens. Children from a poor country of family are more like to suffer from malnutrition while those from rich countries or families are more like to suffer from nutrition diseases like overweight or obesity. This study will compare the economic status of the four countries and how it has affected the malnutrition as well as the nutrition diseases of school children in the countries.

Objective: To examine carefully malnutrition in Asian countries.

Methods: Different papers were analyzed.

Conclusion: Asian diets pay less attention to meat and milk, while they pay more attention to grains, fish, fruits, and vegetables.

Keywords: *Malnutrition in Asia; Malnutrition in China; Malnutrition in India*

Introduction

Asia is the largest and most populous continent in the world. There are two very large countries, India and China, with a population of more than 2 billion. The Asian continent occupies 29.4% of the earth's surface and has a population of approximately 4.5 billion (in 2015), which represents approximately 60% of the world's population. As of 2015, the total population of China and India is estimated to exceed 2.7 billion. There are 49 countries in Asia, generally divided into 6 main regions: Central Asia (Turkish, Iranian, Mongolian, and Russian); East Asia (Chinese (historical), Han-Tibetan, Japanese, and Korean); North Asia (indigenous peoples of Siberia); Ugrian people in Finland; Tungusian people); South Asia (India, Pakistan, Dravidians, Aryans Indians, Worlds); Southeast Asia (Austronesian, Thai peoples; Cambodia, Indonesia, Laos, Philippines, Vietnam); and West Asia (Arabs, Jews, Samaritans, Druze, Caucasians [transcontinental], Iranian minorities, Iraqi minorities, Iranian people, Turkmens, Turks). With the rapid development of industrialization, Asian countries face the double burden of under nutrition and over nutrition.

Methodology

Archival research methodology will be utilized in this study. Research materials concerning this topic will be analysed and a conclusion will be made. Information concerning the nutrition, economic status of the four countries will be recorded and compared.

Results

China

According to estimates by the United Nations (UN), China has a population of approximately 1.4 billion and a life expectancy of approximately 75 years. China is experiencing various forms of malnutrition. The Fourth National Nutrition and Health Survey shows that China faces the dual challenge of nutritional deficiencies and over-nutrition [1]. In 2013, the incidence of stunting, underweight, and wasting among children under 5 years of age in poverty-stricken areas was 18.7%, 5.2%, and 3.0%, respectively, while the overall prevalence in China was 8.1%, 2.4%, and 1.9%, respectively. The under-five mortality rate fell from 45.7 and 13.8 (per 1,000 live births) in 2000 in rural and urban areas to 19.1 and 7.1 in 2011, and the maternal mortality rate it fell from 69.6 to 29.3 (for every 100,000 live births). In rural and urban areas, the decline was 26.5 and 25.2 between 2000 and 2011. However, inequality in maternal and child health persists between urban and rural areas, between different regions and between different groups, and the Overall development of the maternal and child health services network is lagging behind ([2], P 1218). China is also facing a serious decline in breastfeeding rates. Statistics show that the EBF rate for children under 6 months has fallen from 27.8% in 2008 to 20.8% in 2013, which is much lower than the world average of 38% 4. Rapid rise: from about 5.4% in poverty-stricken areas in central and western China in 2009 to about 13.5% and 9.9% in a small sample of children from low- and middle-income groups in 2011. Diabetes, cardiovascular and cerebrovascular diseases and cancer have increased the demand for PHN services in China.

India

Like China, India is also struggling with various nutritional problems, on the one hand, malnutrition, on the other hand, the increasing rate of overweight and obesity. The latest data¹¹ shows that of the 150.8 million stunted (underweight) children worldwide, India accounts for 31% (approximately 47 million), and all children with wasting (underweight) (approximately 25.5 million) are found in India globally. In India, according to the National Family Health Survey (NFHS4), only 41.6% of children under the age of 3 were breastfed within the first hour after birth, while only 54.9% of children they were fully breastfed within 6 months after birth. The prevalence of multiple micronutrient deficiencies in the two undernourished groups mentioned above further exacerbates this situation. There are considerable differences between regions (12.4% to 65.1%): 239 of the 640 regions in India have stunting levels above 40% and 202 regions have prevalence rates between 30% and 70%. 40% [3]. Granular analysis of NFHS4 data shows that trends in overweight and obesity, even one state in India (including 29 states and 7 federal territories) has not reported a decline in overweight/obesity rates in recent years. It is well known that these various forms of malnutrition (MOM) make the population vulnerable to non-communicable diseases and shorten their productive life and overall health. According to Green., *et al.* [4], p 9331, It is accepted that the prevalence of diabetes and hypertension is increasing, especially among young people. Almost all benevolent policies to improve the nutritional status of the poor have been considered and passed laws in India. These measures range from supplementing micronutrients during pregnancy, early childhood and adolescence to providing cooked food for young and school-age children and providing food subsidies and employment to poor families. The persistence of poverty and malnutrition is a sign of failure in the implementation of the system. Furthermore, the PHN's food security policy that only addresses the problem of caloric adequacy does not guarantee nutritional security. On the positive side, these plans have recently received support since the beginning of universal health coverage, which provides comprehensive primary care services to health and wellness centers ([5], pp 326-339).

Nepal

In the 1990s, Nepal was one of the countries with the highest levels of malnutrition in the world, with almost two-thirds of young children stunted. However, from 2001 to 2011, despite political and social upheaval, Nepal's decline in stunting was the fastest in the world ([6], pp 30-33). Improvements in child growth scores and stunting rates growth are closely related to health and nutrition interventions, especially the use of prenatal and neonatal care [7] it has expanded rapidly over time. The government's main plan clearly points to the ambitious goal of improving prenatal, neonatal and postnatal care through rapid expansion of health outreach staff and financial incentives. The benefits of maternal education and the accumulation of wealth are other important factors that predict considerable nutritional

benefits. The rapid improvement of sanitation facilities, especially the reduction of open defecation, also contributed to this success. Much work remains to be done in Nepal. According to the 2016 Nepal Demographic and Health Survey, approximately 17 children were underweight and 31% were overweight/obese, confirming the coexistence of underweight and overweight/obesity among Nepalese adults. The prevalence of underweight (18.30% in women and 15.83% in men, $P < 0.001$) and overweight/obesity (32.87% in women and 28.77% in men, $P < 0.001$) among women is higher. The survey also reported that the start of breastfeeding in different provinces of Nepal ranges from 45% to 70% within the first hour of life. Approximately 66% of children aged 0-5 months are exclusively breastfed. Only 47% of children between 6 and 23 months of age receive a varied diet, and 36% of them receive a minimum acceptable diet. Anemia is a major problem: 53% of children under 5 years of age and 69% of children 6 to 23 months old are anemia. Similarly, 44% of teenage girls, 46% of pregnant women, and 41% of women of childbearing age suffer from anemia [8].

Thailand

Since the late 1980s, Thailand has made significant strides in child nutrition. From 1987 to 2006, the prevalence of stunting (under forage) in children under 5 years of age dropped significantly from 23% to around 16%. However, this impressive progress stalled somewhat between 2006 and 2012. However, recent findings indicate that stunting is reduced. From 2015 to 2016, the prevalence of stunting in children under 5 years of age was less than 11%. In a similar trend, between 1993 and 2006, the prevalence of underweight (underweight) in children fell dramatically from 16% to 7%, while the prevalence of wasting (underweight) fell from 7% to 5% during the same period. However, the prevalence of underweight and wasting increased slightly from 2006 to 2012 and then decreased slightly from 2015 to 2016. Iron deficiency anemia is rampant in Thailand. The prevalence of anemia among children under 30 years of age has dropped significantly from 41% in 2015. From 1990 to the early 2000s, it was 25%, but gradually increased to 30% in 2011 [9]. The prevalence anemia in women of childbearing age is around 24%. In 2010, about 43% of pregnant women were found to have low iodine concentrations in their urine. The overweight rate of children under 5 years of age has risen steadily, from 1% in 1987 to 8% in 2006 and to 11% in 2012, although it recently fell to 8% between 2015 and 2016. In 1990, 12% of men and 17% of women were overweight, while the prevalence in 2014 is 26% and 33%, respectively. In 1990, only 1% of men and 3% of women were obese; in 2014, 6% of men and 11% of women were obese.

Discussion

Poverty and other social inequalities in Asia are related to malnutrition. Migration and displacement are also important issues. With the rapid development of industrialization, migration from rural areas to cities (or from one city to another) is increasing, and people expect better economic opportunities. This has also created a new kind of poverty in urban slums, with major changes in sedentary lifestyles and access to high-energy processed foods. For example, an analysis of Indian internal migration (city-to-city or country-to-city) shows that it is associated with a higher risk of overweight, especially among women ([10], pp 416-425).

China's National Food and Nutrition Plan (2014 - 2020) recommends equal emphasis on the quantity and quality of food; balance between production and consumption; equal emphasis on heritage and development innovation; combination of counseling and intervention. It sets clear food and nutrition goals for 2020, including food production, food processing, food consumption, nutritional intake, and nutritional disease control. Three key tasks are proposed: establish a stable, effective and well-supervised food quantity safety system; achieve complete food quality and safety through effective monitoring; and a nutrition improvement system that can guide people's consumption and can be evaluated periodically. The plan listed 3 types of food, 3 key areas and 3 vulnerable groups as the approach to improve food and nutrition. The three types of foods are high-quality edible produce, nutritious instant processed foods, dairy products, and soy products. The three key areas are poverty-stricken areas, rural areas, and newly urbanized areas with large floating populations. The three vulnerable groups are pregnant and lactating women, children and adolescents, and the elderly.

India has a number of plans and policies aimed at addressing malnutrition, especially malnutrition, weight loss and stunting. India has 31% of stunted children and half of the wasted children in the world. Recently, it has taken an important step towards a comprehensive so-

lution to the huge multi-dimensional problem of malnutrition - the National Nutrition Mission (NNM, or POSHAN Abhiyaan) to achieve the goal of no malnutrition in India by 2022. NNM is an ambitious overall platform recently launched that aims to promote NPH through an extensive list of activities and initiatives. Maternal and child health and nutrition is also an important focus area. The Ministry of Women and Child Development launched the Swasth Bharat Preraks (SBP) program as an opportunity for young Indian leaders to contribute to the building of the country by promoting the effective and successful implementation of NNM. These SBPs are undergoing training and are expected to become game changers for the rapid implementation of NNM. Programs to prevent and treat overweight, obesity and non-communicable diseases are still evolving. In many governmental and non-governmental forums, there is more and more awareness and discussion around these issues, but strong intervention is still expected [11-14].

Conclusion

Public health and nutrition has two main areas that require academics and researchers to pay attention to plans and policies. A big problem is correcting and improving the diet consumed. In general, Asian diets pay less attention to meat and milk, while they pay more attention to grains, fish, fruits, and vegetables. This situation is changing as Asia's economic growth and rapid urbanization have shifted people's diets towards more processed foods, more refined fats and carbohydrates, more milk and meat, and fewer grains.

The second area of focus is to promote better integrated actions around the three pillars of under-nutrition: specific nutrition, nutritional sensitivity and an enabling environment. If all of the above aspects are not integrated, there will be no effective policy or plan to alleviate MOM. This should be emphasized and assessed through valid nutrition and health data, either through appropriately designed repeat surveys or through the establishment of a well-functioning vital event registry. Particular attention needs to be paid to early nutrition from fetus to young child, because this has long-term physiological planning effects on health, function, and chronic disease. Therefore, the implementation of appropriate maternal and child nutrition policies and plans, with a focus on preventing malnutrition in the early stages of life, should be a high priority.

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