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Disparities in Rural Areas' Availability of Health Care in South East Asia: A Review

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Abstract

Residents of remote areas have less access to medical professionals and other resources, making it harder for them to get the quality care they need, and as we all know many health outcomes, including those aimed at by the international community's Millennium Development Goals (MDGs), cannot be improved without access to high-quality health care. The disparity in access to healthcare and health outcomes between rural and urban areas as well as within each of these areas continues to be a difficult problem. This article review provides in-depth knowledge and understanding of the various challenges that are currently being faced by rural healthcare in Southeast Asia. It presents a comprehensive evaluation of the research "Challenges in public health facilities and services: evidence from a geographically isolated and disadvantaged area in the Philippines," and "Inequality in the health services utilization in rural and urban china."

Keywords: Public Health Status, Rural Areas, Health Access, Health Outcomes, Healthcare

Introduction

Over the past few years, there has been a growing consensus that access to healthcare should be regarded as a fundamental human right [1]. With this, it is not difficult to comprehend the urgent and rising demand placed on governments in developing regions to meet the fundamental health needs of their people, particularly in light of the World Health Organization's definition of health as a condition of full physical, mental, and social well-being [2]. The majority of countries' governments now understand the significance of health and healthcare equity. However, substantial gaps remain in health and health care consumption, both among and between urban and rural inhabitants, on account of the latter's lower income, fewer health resources, and less access to health insurance [3]. In fact, Between 2000 and 2004, the infant mortality rate in impoverished rural regions was 6.4%, which was more than five times higher than in the affluent metropolitan areas (1%) [4].

There has been an imbalance in economic development between urban and rural regions ever since 1978, when reforms were initiated with an emphasis on the urban economy. Rural regions lagged considerably behind metropolitan ones when it came to the development of essential services like transportation, communication, healthcare, and educational institutions [5]. Despite the significant advancement of health care in urban areas and the health of the population as a whole having vastly improved, the situation is quite the contrary in rural areas [6]. Numerous published researches found that people living in rural locations have a worse overall health status than those living in metropolitan areas worldwide [7]. The availability, acceptability, and financial accessibility of medical treatment pose significant obstacles for individuals living in rural locations all over the globe, which is a primary factor in the poor health condition of such populations [8]. Due to a lack of even the most basic forms of health care, avoidable and treatable illnesses continue to be the leading causes of death in rural regions [6].

A study conducted by Liu (2016) shows a large disparity that was found between rural and urban Chinese residents' yearly per capita incomes, which prompted researchers to conclude that access to health care is more of a financial burden for rural inhabitants than for their urban counterparts in China [9]. The disparities and inequalities in China's healthcare system have also been extensively explored in recent research. One such study is Xie's (2009) examination of the China Health and Nutrition Survey data for 9 provinces. Hospital health care consumption was more unequally skewed toward the affluent in rural regions than in metropolitan ones [10]. On the basis of numerous survey data, Fu (2014) investigated the differences between urban and rural hospitalizations and discovered an urban-rural discrepancy in inpatient care. [11]. Unfortunately, most of them only looked at inequality within a certain population [12, 13] or for a particular service, [14,15], since there wasn't enough data to look at the whole picture. More information is needed to provide a complete picture of health care access disparities in urban and rural areas.

With this, and in light of the fact that rural areas are home to a disproportionately high number of people living in poverty and carrying a disproportionately high disease burden, there is an urgent need to focus specifically on bettering the health of people living in rural and remote areas, particularly if the trend toward urbanization is to be stopped [8]. This study intends to delve more into the difficulties of public health care in regions deemed to be geographically isolated and economically disadvantaged within South East Asia.

Methodology

Data and information from books, journals, and other sources related to the study of healthcare disparities in rural South East Asia were looked up and collated for this journal review. Resources like JSTOR, the British Dental Journal, the National Library of Medicine, and Oxford Academic, are what were utilized by the authors for review. The terms ``Rural Areas Availability of Health Care South East Asia," "Availability of Health in Rural Areas of Southeast Asia," "Disparities of Healthcare in Rural Areas South East Asia," or a combination of these terms and their corresponding keywords, were used to assist compile these articles. To make sure no relevant details were missed, each article was hand-searched and studied thoroughly.

Result and Discussion

The results and discussion of this article are presented and discussed in relation to the issues in health care services provided in rural areas. Large disparities in access to healthcare services remain with differences observed among socio-economic groups, geographical regions, and rural/urban residences [16]. In a report on equity in health and healthcare in the Philippines, the poor were shown to suffer a greater burden of diseases [17] with high inequity regarding health outcomes between socio-economic groups [16]. The factors that influence the population's health status in rural regions are summarized in the table below.

Fig 1. Factors Affecting the Health Status of the Population in Rural Areas

PROBLEM		**RELATED LITERATURE**	**DISCUSSION**
Albularyo-based treatment and other old beliefs and practices	Despite the availability of health professionals and BHWs, there is still a sizable community that chooses to see quack doctors rather than seek out legitimate medical care. Those who sought help from Albularyos (faith healers) before going to medical clinics did not see improvement in their ailments. A common misconception is that horrible things would happen to you if you visit a health facility, thus encouraging individuals to try Albularyos first. Another strange practice that has been observed by medical professionals is patients putting amoxicillin directly over cuts and scrapes rather than swallowing the drug. That's why people aren't getting their wounds properly cared for. In addition to that, many expectant mothers choose for the riskier but more reassuring hilot (a childbirth procedure defined mostly by "massage") rather than the safer but more reassuring lying-in at a health facility [17].	Culture has a significant role in the interpretation of health information and messages, above and beyond the influence of language. It has an outsized effect on health literacy and health outcomes through its influence on people's perceptions and definitions of health and sickness, preferences, and impediments to the treatment process, and stereotypes [18]. Each culture has its own set of health beliefs that serve to explain sickness and its causes, as well as its own set of therapeutic practices to deal with the demoralizing consequences of illness [19]. According to the study of Lieban (1976), which drew on data from the Cebu City Health Department, pneumonia and bronchitis are two of the main killers of young children in Cebu City. Rapid illness progression in children is thought to be a contributing factor to the high mortality rates seen among Cebu City's young residents due to severe respiratory ailments. Furthermore, many kids who are sick with these conditions never see a doctor or wait too long to see one until it's too late. It was also noted that there were a number of pertinent incidents when the youngster was first brought to a manghihilot for piang [20]. Concomitantly, the research of Coulson (1971), shows that more instances of severe incapacitating diseases were treated by traditional than by modern practitioners [21].	It has been hypothesized that this pattern of events occur because traditional medical systems often satisfy the desire of people to know the underlying effects of certain illnesses through their response to types of queries that are typically believed to be beyond the realm of possibility by modern medicine [22]. These are not just issues about how a person becomes sick as a result of a disease process, but rather about who is targeted by such hardship and why. Traditional medical systems often provide an explanation by attributing the sickness to sanctions or evil deeds taken by spirits or people endowed with exceptional abilities [23].

		This leads to the conclusion that a more widespread and rapid application of modern treatment for some severe ailments would have reduced the number of fatalities caused by such afflictions [20]	
Poverty/Lack of income	The economic status of the residents in rural areas deeply affects their health status. It severely culminates in the malnourishment of the children. Furthermore, money becomes a huge problem not only with putting proper meals on the table and drinking purified water, but it is also a big cause with the inability to travel and pay expensive fares to go to health centers and hospitals to seek medical care.	A significant amount of data, like the study of Woolf, S. et al (2015) and Martinez, M. E., & Ward, B. W. (2016), suggests that those who live in poverty or are on the verge of poverty have substantially worse health outcomes and limited access to health care than people who do not [24,25]. Furthermore, low-income communities and rural areas often have a greater number of environmental risks that are harmful to health (such as poor air and water quality, bad housing conditions) and less services that promote health (such as full-service grocery stores selling inexpensive and nutritious meals, parks and recreational facilities that stimulate physical activity) [26,27]. In line with this, a lack of resources might put low-income people at risk for poor diet and weight gain [28]. According to the study of Drewnowski, A. (2009) and Edin, K. et al (2013), those who are food insecure, whether they have a pre-existing medical condition or not, may resort to unhealthy coping mechanisms such as buying a low-cost diet that focuses on foods that are high in energy but low in nutrients, in order to make ends meet because they have limited financial means [29,30]. According to the study of Singh, G. K., & Siahpush, M. (2006), life expectancy at birth was shown to be significantly different across counties with high and low socioeconomic rankings, with a disparity of 4.5 years [30]. Another study from Muennig, P. et al (2010), states that having a household income of less than 200 percent of the federal poverty line is associated with an 8.2 year reduction in quality-adjusted life expectancy by age 18 according to another study [31].	Due to the extra risk factors linked with insufficient household resources as well as under-resourced communities like the rural areas, food-insecure populations and those living on a low income might be more susceptible to poor nutrition and obesity. This may include a lack of opportunity for physical exercise, increased exposure to marketing of items that encourage obesity, restricted access to health care, and cycles of food scarcity and overeating [28].

Geographical location and sea conditions	The population's general health is significantly impacted by how far they must travel to access better medical facilities. Due to the distance from these health facilities, intensive medical care and thorough check-ups are just a few of the things that are difficult for the poor population to access. The cost and travel time also make it difficult for them to meet their health needs.	According to the study of Goddard and Smith (2001), Geographical access to services is strongly correlated with the use of health care in which these impacts could manifest as provider induced demand, where people in places with a high level of health care provision are driven to utilize services more frequently than people in areas with lower levels of health care provision [16]. Furthermore, there can be significant regional cultural factors that affect how people use health care and could affect the level of illness below which people decide not to seek medical attention. Birch and Abelson (1993) stated that equity goals will play a significant role in determining how much the health care financing system should attempt to alleviate these disparities [17].	Geographical location can have a direct impact on a person's health through the environment or less evident geographic factors. It can also have a significant impact on the type of health care provided through historical and cultural legacies and regional price differences and it can have an impact on the utilization through unequal access to services due to the geographic distribution of health care facilities. The prospect that health care input prices may differ throughout regions, indicating that the cost implications of providing a typical package of treatment may vary, complicates geographic resource allocation even further. [32].
Environment	Unsanitary water supplies are also an issue in certain areas, particularly as a result of the habit of open defecation that is common among some of the locals. In addition to improper waste disposal, the respondents disclosed that in certain communities, over half of all houses lack access to indoor plumbing, which has an impact on the nearby groundwater and even the ocean [7].	CDG revealed that 8 out of 10 of the rural population continues to lack basic drinking water supply. This leads to 1.7 billion cases of diarrhea among children below 5 years old, and an estimated 446,000 die due to having poor sanitation and consuming unsafe water [33]. Based on the data from Bappenas in 2018, the accessibility to drinking safe water in Indonesia is 87.75%. According to Prof. Suprihanto, 52% of the rivers in Indonesia are extremely polluted. Therefore, their source of raw water comes from the groundwater because it is a natural reservoir and is relatively free compared to an artificial reservoir [34]. Furthermore, there is a report that the municipality of Phnom Penh in Cambodia stated that 40% of the residents have no garbage collection. A poor waste management system resulted in illegal dumping at informal dumpsites and accumulated household waste in drainage systems and waterways [35].	Very small systems are relied on by residents of rural areas who do not have access to a rural public water supply, which is estimated to account for approximately thirty percent of all rural residents. Most rural residents have private wells of varying depths, and the owners are responsible for monitoring the water quality, in contrast to the urban residents who receive an annual Consumer Compliance Report produced by the EPA, about the levels of approximately 80 contaminants that are monitored in their water. In most cases, only coliform bacteria and nitrate levels are checked in these wells, but Thorne points out that well water is subject to less stringent testing than that of water from urban public drinking water systems [36].
Electricity	Maintaining a reliable power grid has always been a problem. Electricity is scarce in five barangays, which has a severe influence on the health care	Direct variables including increasing the network of health institutions, educating health staff, and health finance have received a lot of attention from policymakers in	Access to energy is a major facilitator of access to medical technology, and is thus a significant factor of how effectively needed health

	services provided in the centers. The generator ensures that the residents of Barangay Talisoy have reliable power from 8 a.m. to 5 p.m. This makes lying-ins in such barangays less than desirable for expectant mothers.	developing nations in an effort to improve health outcomes [37]. However, United Nations (UN) Sustainable Development Goal (SDG) and the "Global Strategy for Women's, Children's, and Adolescents' Health (2016-2030)" acknowledge that reaching health objectives needs an enabling environment that combines health with other sectors like basic infrastructure, among the most crucial of which is electricity [37,38]. As a matter of fact, the World Health Organization (WHO) states emphatically that "many life-saving operations simply cannot be conducted" in the absence of electricity, calling it a "key facilitator" of universal health care access [39]. A lot of research including the studies of Bhandari, L (2007) and Singh, A. (2016), emphasized that electricity is a supply-side necessity for health facilities to deliver safe, good-quality health services, and it is also a known factor of people's access to health information and their use of health services [40,41].	services may be provided to a population. There are several potentially lifesaving operations that cannot be carried out without electricity. As a result, progress towards universal health care and other MDGs in the health sector is hampered (MDGs) [3]. Having consistent access to power may greatly enhance fundamental aspects of healthcare delivery. Investing in enabling infrastructure is necessary for achieving the health SDGs, in addition to focusing on direct issues inside health systems like health workforce and health funding [42].
Equipment and facilities	Of the three barangays, two do not have their own primary care facility. Only one empty room in the Barangay hall was made available to those two communities (Village Local Office). In addition to that the other four health centers, with the exception of the primary health center, do not have any facilities that are appropriate for sanitary reasons, nor do they have their own supply of water. Most lying-ins exist solely in concept, without the mattresses and other amenities often associated with such services. Even basic medical supplies, including nebulizers, are in short supply and even nonexistent in certain Barangays, much less available for use during times of need. In some Barangays, there isn't even an adult scale to be used by mothers.	Rural areas in low- and middle-income nations are not only plagued by poverty and a high illness load [43], but they also lack the resources necessary to provide effective healthcare to the local population. For instance, it is not uncommon for rural hospitals to run out of essential medications. The Philippines' average life expectancy in 2014 was 68.2, much below the global average and other East Asian nations. This was partially due to shortcomings in the healthcare delivery system [44]. The risk of dying young in the Philippines is highest for those living in the poorest areas. In 2014, the number of inhabitants in poorer parts of the Philippines was about ten years less than the average life expectancy in wealthier portions of the country [45].	Quality healthcare in the Philippines is hampered by a dearth of medical facilities and cutting-edge technology. Half of the Philippines' population lives in rural regions, where access to quality healthcare may be difficult due to a lack of trained professionals and outdated equipment [46]. Larger cities like Cebu City tend to be home to the country's finest medical facilities. But even in the nation's capital, many still have trouble getting the treatment they need, let alone in rural areas where there's a lot of staffing shortages, an insufficient number of hospital beds, and broken medical equipment [47].

Conclusion

In rural areas, there is a lack of healthcare facilities and services, which substantially impacts individuals and families with lower incomes, eventually leading to poor health outcomes. The articles in this issue emphasise an unstable health infrastructure in rural areas, despite the efforts and resources that the government and others have invested in building effective long-term solutions. Reforming the primary care delivery system is important to acknowledge the goal of providing universal healthcare to all. Needing strong governance in the healthcare sector, which includes developing plans, providing proper implementation tools to individuals, and providing policy data based on empirical evidence. The related articles provide guidance to policymakers on how to enhance health outcomes in a decentralised community.

The constant development of the healthcare system creates more opportunities for addressing rural health issues and the emergence of new threats to the relatively unsubstantial rural healthcare sector. Research that is relevant to policy should be continued, and a thorough examination of the changing nature of rural healthcare delivery should be conducted. This will help healthcare workers develop strategies to make healthcare services accessible to rural communities and providers without also compromising high-quality services that are also cost-effective, especially for those who live in rural areas.

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