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Strengthening Primary Healthcare in Bangladesh: Can Thailand Serve as an Aspirational Model for Seamless Care?

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Abstract

Bangladesh has maintained a pluralistic health system over the decades. While the country has made significant progress in various health outcome indicators, it continues to face management and financial challenges. This study compares Bangladesh's primary healthcare system with those of its neighboring countries, India and Thailand, to identify existing gaps between theory and practice. By focusing on ten key areas of healthcare, Bangladesh can improve accessibility, quality, and affordability, ultimately ensuring better health outcomes, particularly for the poor, marginalized, and vulnerable populations.

Keywords

Primary Health Care, Health Outcome Indicators, Bangladesh, Cross Country

1. Introduction

According to the World Health Organization (WHO), Primary Health Care (PHC) can be defined as the way of addressing an individual's maximum health needs that encompasses complete physical, mental and social wellbeing through their whole life. It is important as it maintains or improves health by preventing, promoting, curing, rehabilitating and palliating health care services that promotes equity and equality of country's socio-economic development. Globally PHC came into existence in 1978 from Alma-Ata conference where main target was to achieve 'Health for All' by 2000. In order to ensure quality health care to the target group people, 134 countries participated in this conference. Any kind of political, social or economical inequality in health outcomes status of people is unaccepted under this revolutionary approach.

As one of the signatories of the Alma-Ata declaration, Bangladesh was also supposed to ensure Health for All by 2000. But due to the unavailability and inaccessibility of basic health care services to the vast number of poor people, it didn't come in force. In this regard, PHC service has been provided for both rural and urban poor, as well as the marginalized and vulnerable people of Bangladesh. If we look at the health care service delivery in Bangladesh, there are a number of service centers available from village to the district level, like Community Clinics (CCs), Union Health and Family Welfare Centers (UHFWC), Upazila Health Complexes (UHC) and District Hospital (DH). Some private hospitals and NGOs are also providing primary health care service in Bangladesh. Recently more than 14,000 CCs [1] are functioning to provide basic health care, especially maternal and child health care at the doorstep of the poor people. In together around 6000 public and private hospitals/clinics [1] are working here to facilitate health care services.

Secondary healthcare is provided by District Hospitals, General Hospitals, and hospitals with 100–250 beds. Tertiary healthcare is delivered through Medical College Hospitals, Specialized Institutes, and Maternity Hospitals at various regional levels [1].

1.1. Existing Health Facility Centres in Bangladesh

Primary healthcare services in Bangladesh are delivered through different levels of the healthcare system. Below is a brief overview of these health facilities, organized from the lowest to the highest level.

Community Clinics (CCs) is providing the doorstep health care facility for the poor, marginalized and vulnerable group of people in Bangladesh. It's a model where both community people and the government work together through their active participation. Recently in 2023, the United Nations adopted the first ever resolution titled 'Community based primary health care: a participatory and inclusive approach to universal health coverage'.

CHCP is playing main duty working six days in a week who is assist by one HA and one FWA. Each CC consists of One CG and three CSGs who are from the main body of community people. Though basic preventive health care service has been provided by each CC, special care goes for mother and children, it includes ANC, PNC, child birth, child health care, immunization, family planning, referral to higher level of health centres etc. More than 14000 community clinics are now providing all these services to the doorstep of underprivileged people in both rural and urban area of Bangladesh. But the provision of quality services in community clinics is challenged by shortages of drugs, equipment, funding, staff, and other essential logistics [2].

Union Health and Family Welfare Centers (UHFWCs) are the next step wider service centres of Bangladesh. The government of Bangladesh has established around 3,900 UHFWCs in proximity to the rural populations providing family planning, menstrual regulation, vaccinations and general, reproductive, and maternal health services. In this facility, primarily two paramedics, Sub-As-

sistant Community Medical Officer (SACMO) and Family Welfare Visitor (FWV) provide outdoor services six days a week. About 1,500 UHFWCs have been upgraded with necessary human resources and equipment to provide normal delivery services round-the-clock. In Bangladesh, about 63 percent of deliveries occur at home assisted largely by unskilled or traditional birth attendants. This means that UHFWCs and FWVs are not optimally utilized to increase the rate of institutional deliveries [3].

Upazila Health Complexes (UHCs) are located at the sub-district level, following the union level, to provide healthcare services to rural populations. In Bangladesh's government healthcare delivery system, there are 460 UHCs, each equipped with 31 beds to offer inpatient care. Additionally, they provide outpatient care, primary healthcare, family planning, and various preventive healthcare services. Each UHC serves a population ranging from 100,000 to 400,000, depending on its size [4]. They also serve as referral centers for numerous grassroots-level community clinics. The healthcare services at UHCs are provided by medical graduates, paramedics, and nurses, supported by personnel responsible for laboratory services and medical supplies [5].

District Hospitals (DHs) works as referral centers of these primary level facilities and delivers the secondary level of healthcare including treatment for non-communicable diseases and a number of other specialized cares (e.g. Cardiac, Neuroscience, and Orthopedic hospitals). Tertiary hospitals (e.g. Medical college hospitals, specialized hospitals) of various kinds provide supports to the primary and secondary level health facilities along with specialized health services. There are 62 DHs across the country and each of the districts has at least one such hospital except Rajshahi and Dhaka. In some districts, the hospitals are called 'general hospital' or '250-bed hospital'. DHs provide primary and secondary care through the outpatient and inpatient services and emergency departments. DHs can contribute considerably toward achieving the health-related targets in SDGs by providing both primary and secondary level health care services along with specialized services as well [6].

Urban Primary Health Care Services: With the growing densely population in urban area of Bangladesh, people are suffering from poor health status day by day. With the financial support of Asian Development Bank, The Local Government Division of the Government of Bangladesh had taken initiative to provide primary health care services to the urban people through partnership among urban local bodies and Non-Government Organizations under the project UPHCSDP–II [4]. The primary goal of the project was to enhance the health of the urban poor and reduce mortality and morbidity, particularly among women and children, by expanding access to quality primary healthcare services [7]. The project consisted of four key components:

1) Delivering primary healthcare through partnership agreements.
2) Strengthening urban primary healthcare infrastructure.
3) Building the capacity of city corporations and their partners.

4) Supporting project implementation and conducting operationally relevant research.

1.2. Rationale of the Study

Besides government support in providing primary health care services, lots of private hospitals/clinics and NGOs are also providing health care services to the people as well. Though the overall healthcare is provided either by government or non-government organizations, it depends mostly on the public sector for financing, policy setting and delivery mechanisms [8]. Current Health expenditure of Bangladesh is only 2.39% of Gross Domestic Product [9] whereas out-of-pocket (OOP) expenditure as percentage of current health expenditure is 72.53% [10] in 2022 (WHO, 2019). Bangladesh is still lagging behind in health care services in spite of having a comprehensive National Health Policy and other initiatives.

A key service of these health facilities is to reduce child and maternal mortality. Regular check-ups from day one are essential for ensuring a healthy baby and mother that are intended to be free at health centers across Bangladesh. This paper aims to find out the challenges to achieve lower child and maternal mortality rates in Bangladesh and suggested doable policy suggestions compared to other south Asian countries like India and Thailand.

Due to their geographical, economic, and structural similarities, India and Thailand are the best comparable countries to Bangladesh regarding the health system. Like Bangladesh, India has a mixed public-private healthcare system and faces similar challenges in rural healthcare delivery, disease burden, and government health expenditure, making it a realistic benchmark. Meanwhile, Thailand, with its successful implementation of universal healthcare, lower maternal and infant mortality rates, and well-developed primary healthcare facilities, serves as an aspirational model for Bangladesh's healthcare reforms. Additionally, India's Ayushman Bharat health insurance scheme provides insights for Bangladesh's health financing, while Thailand's efficient public healthcare system and medical tourism industry offer valuable lessons. By studying both, Bangladesh can develop a strategic roadmap to improve healthcare access, quality, and financial protection for its population.

Therefore, this paper contributes by identifying the current challenges and gaps in primary healthcare services in Bangladesh and proposing policy recommendations based on insights from two well-comparable neighboring countries, ultimately aiding in the enhancement of Bangladesh's primary healthcare system.

2. Literature Review

Several studies have examined the primary healthcare (PHC) system across various countries, including Bangladesh, with mixed findings regarding its effectiveness and challenges. While some studies highlight significant progress in healthcare indicators, others emphasize persistent gaps in infrastructure, governance, and resource allocation.

One of the key challenges in healthcare delivery, as identified by Santosh and Suria [11] is the non-need-based allocation of resources in Bangladesh and Pakistan. Factors such as high population pressure, a shortage of healthcare professionals, and inadequate research opportunities contribute to inefficiencies. Similarly, Rubana *et al.* [12] highlighted broader contextual factors affecting healthcare systems in low- and middle-income countries, including competition with other health projects, public sector reforms, and bureaucratic constraints.

The effectiveness of PHC in Bangladesh remains a debated topic. While some studies have acknowledged its role in improving health outcomes, others point to systemic challenges such as a lack of public health facilities, scarcity of skilled workforce, inadequate financial resources, political instability, and governance issues [3] [8] [13]-[15]. To improve healthcare management, some suggested implementing an NID-based hospital record system at Upazila Health Complexes [16] [17].

Urban primary healthcare is another critical aspect of Bangladesh's overall healthcare system, as 52% of the urban population lives in slums [18]. Studies have emphasized the need for increased investment to enhance the technical efficiency of district hospitals and urban healthcare initiatives such as the UPHCP-II project, which has been recognized as effective in improving health outcome indicators [6] [19]-[21].

Patient perspectives play a crucial role in evaluating the effectiveness of PHC services. Studies on government hospitals have identified several issues affecting patient satisfaction, including a shortage of healthcare professionals, misuse of resources, medicine shortages, long travel distances, extended waiting times, and a lack of empathy from healthcare providers [15] [22]-[24]. In contrast, private hospitals have been found to offer better healthcare services in terms of nursing, cleanliness, and drug availability [24] [25]. However, due to financial constraints, the poor and women primarily depend on public healthcare services [26].

The rural healthcare system in Bangladesh also faces significant challenges. An study [27] has been conducted across 12 villages and found that eight SERVQUAL model variables were negatively related to patient satisfaction. [28] further explored the causes of patient dissatisfaction and identified a lack of documented processes and limited patient awareness of available healthcare channels as key concerns.

The COVID-19 pandemic further exposed weaknesses in Bangladesh's healthcare system. An study found healthcare professional's increased workload, psychological distress, PPE shortages, social exclusion, and a lack of financial incentives during the crisis [29]. The study underscored the importance of institutional support for healthcare professionals, both during emergencies and normal periods, to ensure a resilient healthcare delivery system.

While existing research primarily focuses on specific healthcare facilities, this study aims to provide a comprehensive overview of the PHC system in Bangladesh using secondary data analysis. It will compare Bangladesh's healthcare system with selected South Asian countries, link findings to Sustainable Development

Goal (SDG) 3—Good Health and Well-being—and propose policy recommendations to enhance the efficiency and accessibility of healthcare services for target populations.

3. Methodology

This study is based on secondary data analysis, drawing from two key World Bank databases: World Development Indicators and Health, Nutrition, and Population Statistics. Another database is from WHO's Global Health Observatory. Additionally, it incorporates a wide range of secondary sources, including journal articles, policy papers, news reports, research papers, and other relevant documents. The research has been conducted through an extensive review of existing published materials on Bangladesh's healthcare system, with relevant calculations performed using STATA 18 software.

This paper exclusively reviews English-language articles and reports, analysing both national and international sources to identify the most common challenges within Bangladesh's healthcare system. The review process was structured around key themes, including Primary Healthcare (PHC), PHC in Bangladesh, and PHC in South Asia, following three key steps: identifying relevant literature, collecting data, and synthesizing findings. By examining the sector's existing challenges, this study aims to propose policy recommendations to enhance healthcare services in Bangladesh, ensuring that the target population receives adequate primary healthcare within the available resources.

4. Results

4.1. Bangladesh Health Policy and Achievements

The National Health Policy of Bangladesh (2011) has the following three specific targets to ensure primary and emergency health services for all. Along with these three specific targets, there are 19 goals of National Health Policy of Bangladesh, 2011. It includes ensuring primary health services to the people at all levels, particularly to the poor, marginalized and vulnerable people of both rural and urban area. Bangladesh is working hard to achieve all the health related indicators under Sustainable Development Goals (Goal 3) by 2030. She is also committed to achieve universal health coverage by 2032.

Table 1 presents key health outcomes in Bangladesh over the past five decades, highlighting improvements in population health indicators from 1970 to 2020. Annual population growth rate has declined steadily, from 2.5% in 1970 to 1.1% in 2020. This reflects improvements in family planning, healthcare services, and socio-economic conditions. The infant mortality rate has significantly dropped from 169 in 1970 to 24.1 in 2020 per 1000 live births. This reduction is due to improved maternal and child healthcare, vaccination programs, and better nutrition. The neo natal mortality rate declined from 93.8 in 1970 to 17 in 2020 per 1000 live births. This suggests progress in newborn care, skilled birth attendance, and improved medical interventions. The under 5 mortality rate fell from 273 in 1970

Table 1. Health outcome status of Bangladesh for the last few decades.

Health Outcomes	1970	1980	1990	2000	2010	2020
Population growth rate (annual, %)	2.5	2.4	2.1	1.9	1.1	1.1
Infant Mortality Rate (per 1000 live births)	169	138	101	63.1	38.9	24.1
Neonatal Mortality Rate (per 1000 live births)	93.8	89	65.5	44.1	29.4	17
Under-5 Mortality Rate (per 1000 live births)	273	205	146	86.1	49.2	28.8
Maternal mortality ratio (modeled estimate, per 100,000 live births)	-	-	-	441	301	123
Life expectancy at birth (in years)	42.6	51.9	56	65.8	68.6	72
Total Fertility Rate (births, per woman)	6.9	6.3	4.5	3.2	2.3	2
Birth Rate, crude (per 1000 people)	47.4	45.1	35	29	21.4	18.1
Death Rate, crude (per 1000 people)	22.3	15.6	11.7	6.9	6.1	5.8

Source: Health, Nutrition and Population Statistics, WDI, World Bank.

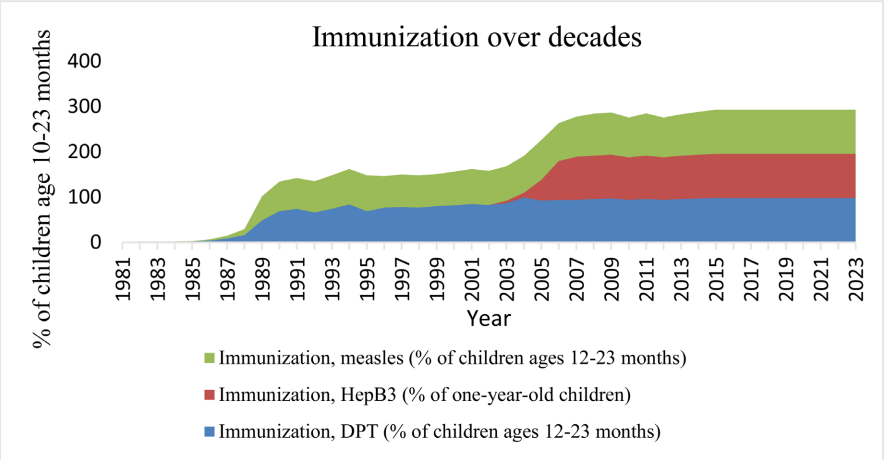
to 28.8 in 2020 per 1000 live births. This is a strong indicator of better child healthcare, nutrition, and disease prevention efforts. Data was unavailable before 2000, but the maternal mortality rate dropped from 441 in 2000 to 123 in 2020 per 100,000 live births. This reflects improved maternal healthcare, access to skilled birth attendants, and safer delivery practices.

On the other hand, life expectancy at birth has increased from 42.6 years in 1970 to 72 years in 2020. Factors such as better healthcare, disease prevention, improved nutrition, and sanitation have contributed to this progress. The total fertility rate decreased from 6.9 in 1970 to 2.0 in 2020, approaching replacement-level fertility. This is due to increased use of contraception, improved education (especially for women), and family planning initiatives. The crude birth rate declined from 47.4 in 1970 to 18.1 in 2020 per 1000 people. A lower birth rate indicates greater reproductive health awareness and access to family planning. The crude death rate has decreased from 22.3 in 1970 to 5.8 in 2020 per 1000 people. This improvement is linked to better healthcare services, disease prevention, and longer life expectancy.

Overall, Bangladesh has made remarkable progress in healthcare over the past 50 years, especially in reducing child and maternal mortality. The decline in fertility rates and birth rates indicates the success of family planning programs. Life expectancy has increased, showing overall improvements in living conditions and healthcare. The Expanded Program on Immunization (EPI) has successfully improved immunization coverage, as illustrated in the following graph (Figure 1). However, continued investment in maternal and child health, primary healthcare, and disease prevention is essential to sustain and further improve these outcomes.

4.2. Challenges Faced in Health Sector of Bangladesh

Although Bangladesh has made substantial progress in various health indicators and services, it still encounters numerous challenges in this sector. This paper



Source: Authors calculation from WDI, World Bank.

Figure 1. Immunization status of Bangladesh over decades.

looks at factual evidence to describe the main challenges facing health care delivery in Bangladesh. Some of the key problems include:

- lack of adequate health professionals;
- provider absenteeism;
- scarcity of skilled workforce and misuse of public resources;
- inadequate financial resource allocation;
- political instability;
- lack of adequate infrastructure in health sector;
- Insufficient budget allocation in health sector;
- scarcity of drugs, ambulance and medical equipment;
- administrative mismanagement;
- lack of incentives and absence of coordination.

It implies that the primary barriers to accessing healthcare services in Bangladesh include inadequate facilities, poor quality of existing infrastructure, shortages of essential medicines, and an overwhelming patient load that leaves doctors excessively busy. Additional challenges include long travel distances to healthcare centers, extended waiting times upon arrival, and extremely short consultation periods. Many patients also report a lack of empathy from healthcare professionals, who often display a casual and indifferent attitude, prioritize financial gain, and sometimes exhibit incompetence or disregard for patients' suffering. These systemic failures are frequently highlighted in print media, shaping public perceptions and fostering dissatisfaction with healthcare providers and the system as a whole. As a result, a significant portion of Bangladesh's population remains deprived of quality healthcare services.

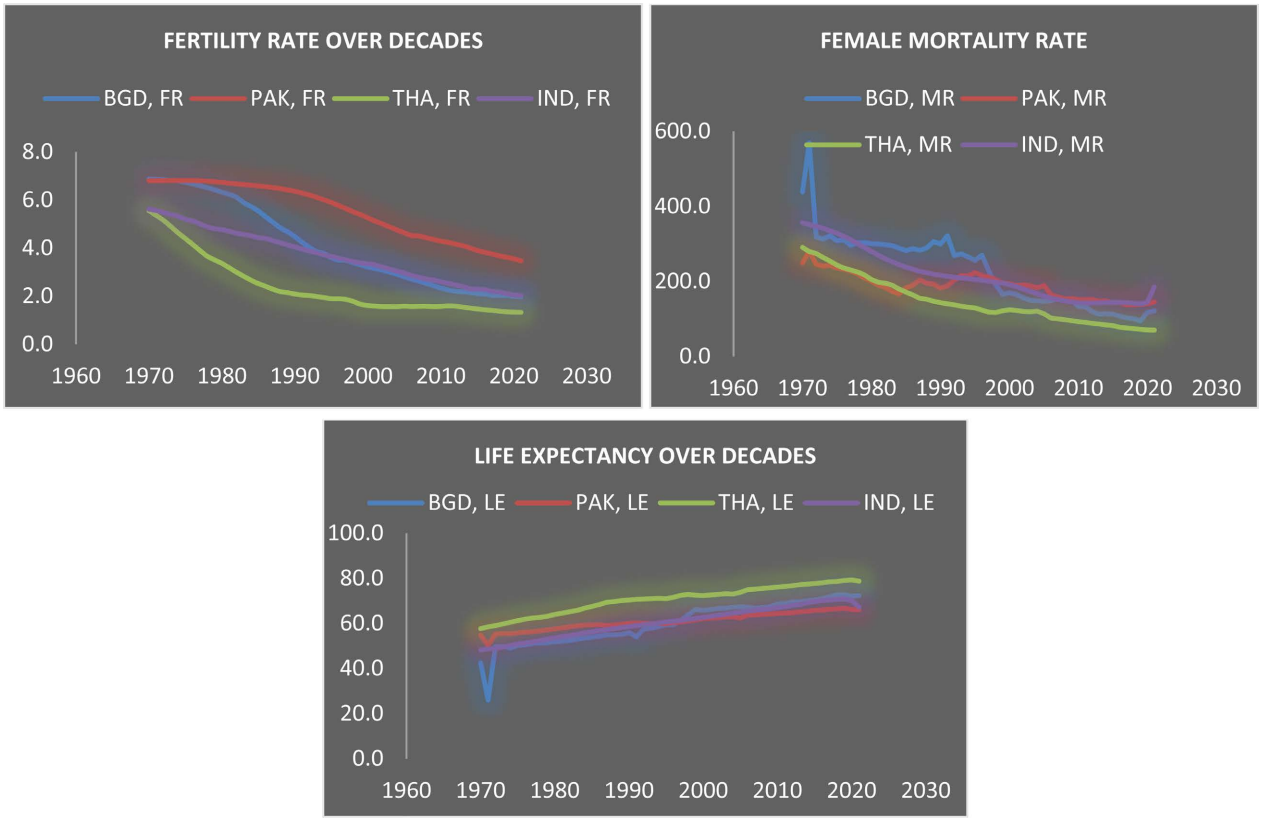
This study necessitates a comparison with neighboring countries that share similar socio-economic conditions to Bangladesh. By analyzing primary healthcare (PHC) systems in these comparable nations, valuable insights can be gained regarding effective policies, challenges, and best practices. This comparative approach will help identify gaps in Bangladesh's healthcare system and inform pol-

icy recommendations for improving PHC services.

4.3. Cross Country Comparison

Based on the data availability of full time span of comparison, Bangladesh has been compared with some neighboring countries such as India, Pakistan, and Thailand in terms of key health outcomes provides a clearer perspective on its progress.

Following figures (Figure 2) show the relative progress of these countries under fertility rate, female mortality rate and life expectancy over decades.



Source: Authors calculation from WDI, World Bank.

Figure 2. Comparison of health outcomes over decades between Bangladesh, India, Pakistan and Thailand.

The first graph shows the fertility rate trends over several decades for Bangladesh (BGD), Pakistan (PAK), Thailand (THA), and India (IND). Some key observations are all four countries have experienced a decline in fertility rates over time. Thailand has seen the steepest decline, reaching the lowest fertility rate among the four. Bangladesh and India follow a similar downward trend. Pakistan's fertility rate remains the highest, with a slower decline compared to the others. Looking at Bangladesh's Progress, it can be reported that Bangladesh started with a relatively high fertility rate but has managed to bring it down significantly over the decades. Its current fertility rate is lower than Pakistan's but still higher than Thailand's. This trend indicates Bangladesh's significant progress in controlling pop-

ulation growth through family planning initiatives, education, and improved healthcare. However, further reductions may be needed to sustain economic and social development.

The second graph illustrates the female mortality rate trends over several decades for Bangladesh (BGD), Pakistan (PAK), Thailand (THA), and India (IND). Some key observations are all four countries have experienced a steady decline in female mortality rates over time. The trend indicates improvements in healthcare, maternal care, and overall living conditions. Specifically, Bangladesh had a sharp peak in the early 1970s, likely due to historical events and health crises. Over time, it has shown significant progress, though fluctuations remain visible. Currently, Bangladesh's female mortality rate is lower than Pakistan's but higher than Thailand's. After 2010, the decline has slowed in Bangladesh, India, and Pakistan, suggesting possible healthcare challenges or other socio-economic factors affecting female health. A slight increase in mortality rates in recent years (especially in Pakistan and Bangladesh) could indicate emerging health concerns.

Overall Bangladesh has made remarkable progress in reducing female mortality but still faces challenges compared to Thailand and India. Strengthening maternal healthcare, nutrition, and disease prevention could further improve female health outcomes. Addressing health system inefficiencies and gender-based health disparities is crucial for sustaining progress.

The third graph illustrates life expectancy trends over several decades for Bangladesh (BGD), Pakistan (PAK), Thailand (THA), and India (IND). Some key insights are all four countries have shown a steady rise in life expectancy over time. This indicates overall improvements in healthcare, nutrition, disease prevention, and living conditions. Particularly Bangladesh experienced a sharp drop in life expectancy in the early 1970s, likely due to the 1971 Liberation War, which led to widespread mortality. After that, it showed remarkable recovery and continuous improvement, keeping pace with its neighbour. Since the early 2000s, the gap between Bangladesh, India, and Pakistan has narrowed, showing improvements in healthcare accessibility. Thailand continues to have the highest life expectancy, but all countries show positive growth. The increase in life expectancy aligns with reductions in infant mortality, improved healthcare services, and better disease management. Bangladesh has made significant progress, overcoming historical challenges and nearly matching India's life expectancy. Continued investments in healthcare, disease prevention, and elderly care will be crucial for sustaining this upward trend.

Table 2 below provides a comparison of the social insurance coverage and universal health coverage status across four countries.

Table 2 describes that Bangladesh, India, Pakistan, and Thailand exhibit distinct differences in health insurance and universal health coverage (UHC). Bangladesh lags in health insurance coverage, with less than 1% of its population insured, compared to India's 40% and Thailand's nearly 100%. While Bangladesh's UHC index improved from 23 in 2000 to 52 in 2021, it still trails behind

Table 2. Current status of health insurance coverage and universal health coverage index of Bangladesh, India, Pakistan and Thailand.

Country	% of population covered by health insurance	UHC service coverage index (SDG 3.8.1)						
		2000	2005	2010	2015	2017	2019	2021
Bangladesh	Less than 1%	23	27	37	45	48	50	52
India	Almost 40%	30	34	49	57	60	64	63
Pakistan	Less than 2%	22	28	33	40	43	44	45
Thailand	Nearly 100%	43	59	68	76	81	82	82

Source: Author's calculation from WHO and [30]-[32].

India (63) and Thailand (82). Pakistan, with slightly better insurance coverage, remains close at 45. To catch up, Bangladesh must expand health insurance, increase healthcare investment, and strengthen service delivery.

5. India and Thailand's Health Strategies: Key Insights for Bangladesh

From the above explanation, it is clear that both Thailand and India have made substantial progress in nearly every aspect of healthcare. This has sparked my interest in exploring the health policies and strategies that have been implemented by India and Thailand over the past decades.

Thailand's primary health care policy is built around the *Universal Health Coverage (UHC)* system, which has been instrumental in improving the country's overall health outcomes, including child mortality. Since 2002, Thailand has implemented a Universal Health Coverage Scheme (UHC), ensuring that all Thai citizens have access to essential health services without facing financial hardship. UHC is funded through a combination of government budget allocations and taxation, ensuring that healthcare is affordable and accessible to everyone [33]. In order to decentralize the health care service, the country has established primary health care networks at the local level, with *Community Health Workers (CHWs) and village health volunteers* playing a crucial role in delivering basic health services [34]. These networks are part of a decentralized system that empowers local health centers to provide preventive care, maternal and child health services, vaccinations, and treatment for common illness.

Besides that, the Thai government emphasizes *health promotion and preventive care*, including public health campaigns, vaccination programs, maternal and child health services, and health education [35]. Thailand has successfully reduced child mortality rates through initiatives like immunization programs and nutritional interventions. Thailand has also created effective public-private partnerships, particularly in rural areas, to ensure wider access to health services. Community health centers work alongside local businesses and NGOs to improve health outcomes. The government integrates *traditional medicine* with modern healthcare in primary care settings, particularly in rural areas, where it is widely

used for prevention and treatment of common ailments. Focusing on health equity, Thailand's primary health care system is designed to reduce health disparities by ensuring that even the poorest populations have access to essential services. Programs like the *30-Baht Scheme* (which later became the UHC scheme) helped improve access to health care for lower-income groups [36].

Overall, Thailand's comprehensive and equitable primary health care policy has contributed significantly to improving public health, reducing mortality rates, and ensuring that healthcare is accessible to all, regardless of income.

India's primary health care policy focuses on providing accessible, affordable, and quality healthcare to its vast population, especially in rural and underserved areas. The key components of India's primary health care policy include.

India's *National Health Policy (NHP),* revised most recently in 2017, emphasizes universal health coverage, affordable healthcare, and the promotion of preventive healthcare. It aims to reduce the burden of communicable and non-communicable diseases and improve access to quality healthcare services [37]. A major strategy, the *National Rural Health Mission (NRHM)*, has been launched in 2005, which focuses on improving healthcare infrastructure in rural areas [38]. *Primary Health Centers (PHCs) and Sub-Centers* are the backbone of rural healthcare in India, providing essential health services, maternal care, vaccinations, and family planning. India's healthcare delivery system is supported by ASHA (*Community Health Workers and Accredited Social Health Activists*) workers, who act as community health workers and facilitate access to health services, particularly in rural areas. ASHAs are involved in health education, immunization campaigns, maternal health support, and promoting hygienic practices [39].

The *Universal Immunization Program (UIP)* aims to provide free vaccination services to all children and pregnant women, significantly reducing the burden of preventable diseases like polio, measles, and diphtheria [40]. *Ayushman Bharat* is a flagship health insurance scheme that provides free health insurance to over 100 million low-income families, helping them access quality healthcare from 2018 [41]. The scheme also includes the creation of Health and Wellness Centers across India to deliver comprehensive primary healthcare services. India runs various disease control programs targeting malaria, tuberculosis, HIV/AIDS, and leprosy. These programs are integrated into the primary healthcare system to ensure that prevention and treatment are available at the grassroots level. Besides, India integrates *traditional systems of medicine*, such as Ayurveda, Yoga, and Homeopathy, into its healthcare framework, particularly at the primary care level, through the Department of Indian Systems of Medicine and Homoeopathy [42]. This country is also focusing on health equity to reduce disparities by ensuring access to healthcare services for vulnerable and marginalized populations, including tribal communities and low-income groups.

Overall, India's primary health care policies focus on improving health outcomes through universal access, community involvement, preventive health

measures, and government-led initiatives aimed at addressing the country's diverse health challenges.

Bangladesh's slower progress in primary healthcare compared to Thailand and India can be attributed to its limited resources and infrastructure, which constrain the effectiveness of its healthcare system. Political economy of Bangladesh also significantly impacts its primary healthcare system through factors like limited funding, political instability, and unequal resource distribution. Political prioritization of certain sectors often leaves healthcare underfunded, especially in rural and underserved areas. Corruption and inefficiencies in the allocation of resources also contribute to the underdevelopment of primary healthcare. Additionally, political interests sometimes prioritize urban-focused healthcare over rural needs, leaving vast parts of the population with inadequate access to primary care services. These factors collectively limit the growth and reach of Bangladesh's primary healthcare system.

6. Conclusion and Policy Suggestions for Bangladesh

Compared to Thailand and India, Bangladesh's primary healthcare policy has also successfully improved child and maternal health, disease prevention, and health service accessibility through community-based healthcare, immunization programs, and public-private collaboration. However, challenges like workforce shortages and healthcare financing remain key areas for improvement. Given their similar geographical location and socioeconomic status, Thailand's significant progress across various health outcome indicators can serve as an aspirational model for Bangladesh. Keeping in mind how Thailand and even India did such progress, the government and the stakeholders can focus on the following policy suggestions to improve the healthcare facilities.

6.1. Strengthening Infrastructure of Primary Healthcare Facilities

To enhance healthcare access, there is a need to increase the number of Community Clinics (CCs) and equip them with modern medical facilities. Additionally, Upazila Health Complexes and Union Health Centres should be upgraded with improved infrastructure, advanced equipment, and a skilled workforce. Introducing services for non-communicable diseases at these clinics and health centres will further strengthen the healthcare system, ensuring comprehensive care for all.

6.2. Increasing Healthcare Workforce and Training

To tackle the shortage of healthcare professionals, it is essential to recruit more doctors, nurses, and health assistants, particularly in rural areas. Regular skill development and modern medical training should be provided to Community Health Workers (CHWs), doctors, and nurses. Financial incentives and career benefits can encourage professionals to work in remote areas, while increasing their salaries to a decent living standard. Strengthening accountability among healthcare professionals, ensuring they deliver quality care with respect, will fur-

ther improve the healthcare system's effectiveness.

6.3. Expanding Universal Health Coverage (UHC)

To support low-income families, affordable health insurance programs should be introduced to cover medical expenses, alongside increased funding for free or subsidized healthcare services. Strengthening the monitoring system will ensure effective implementation of these services, ensuring access to necessary drugs and improving healthcare delivery for the underprivileged.

6.4. Strengthening Maternal and Child Health Services

Increasing access to free antenatal and postnatal care, safe delivery services, and neonatal care is crucial for improving maternal and child health. It is essential to make skilled birth attendants mandatory in every community clinic, union health centre, and upazila health complex. Additionally, efforts to combat child malnutrition should be strengthened, while expanding vaccination coverage to ensure healthier outcomes for mothers and children.

6.5. Enhancing Public-Private Partnerships

Strengthening partnerships with NGOs like BRAC and ICDDR,B can significantly enhance service delivery, particularly in underserved areas. Additionally, offering incentives to private hospitals and pharmaceutical companies will encourage them to expand their services, especially in rural regions, improving access to quality healthcare for all.

6.6. Digital Health and Telemedicine

Expanding telemedicine services through mobile health (mHealth) solutions can provide virtual consultations to remote areas, improving healthcare access. Additionally, implementing digital patient records via Electronic Health Records (EHR) will enhance healthcare management and efficiency, ensuring seamless care and better coordination across healthcare providers.

6.7. Strengthening Disease Prevention and Public Health Awareness

Increasing awareness on hygiene, nutrition, family planning, and disease prevention through health education campaigns in educational institutions, religious organizations, and public places is essential for promoting healthier communities. Additionally, strengthening programs focused on the prevention of non-communicable diseases like diabetes, hypertension, and heart disease will help reduce the burden of these conditions and improve overall public health.

6.8. Increasing Healthcare Budget & Funding

Allocating a larger share of GDP to healthcare will ensure better infrastructure and services, improving overall healthcare access and quality. Additionally, seek-

ing support from global organizations like the WHO, World Bank, and UNICEF can provide valuable resources and expertise to drive healthcare development and address critical health challenges effectively.

6.9. Strengthening Pharmaceutical and Supply Chain Management

Ensuring the availability of essential medicines requires improving the distribution of free or subsidized medicines at government hospitals, with a strong monitoring system to guarantee patients receive this support. Strengthening the regulation and monitoring of pharmaceutical production and distribution will further ensure quality and accessibility. Additionally, integrating traditional systems of medicine such as Ayurveda, yoga, and homeopathy into the healthcare framework will complement basic health services and provide a more holistic approach to healthcare.

6.10. Strengthening Emergency and Specialized Care

Establishing more cardiac, cancer, and trauma care centers in both rural and urban areas is vital to improving specialized healthcare access. Enhancing ambulance and emergency services by expanding response systems with modern ambulances and trained paramedics will ensure timely care. Additionally, prioritizing health equity is essential to reduce disparities, ensuring that all communities receive equal access to high-quality healthcare services.

By implementing these policy suggestions, Bangladesh can enhance healthcare accessibility, quality, and affordability, ensuring better health outcomes for its population. The focus should be on expanding primary care, improving workforce training, leveraging technology, and increasing government investment and monitoring for proper implementation.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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