

Government Health Expenditure and Policy for Public Health Outcomes: A Systematic Literature Review

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ABSTRACT

INTRODUCTION:The level of good governance, the efficiency of the healthcare system, and socioeconomic vulnerabilities all affect public health outcomes. Despite potential gains in terms of health outcomes, public healthcare investment has been extremely low in low-income countries. By improving the consolidation of healthcare system performance, this study helps the government and policymakers improve the quality of life in developing countries. **MATERIALS AND METHODS:**This study aims to assess the government health expenditure and policy for public health outcomes. The research is based on a review of empirical studies and reports. The PubMed search engine was used to locate research publications on government health expenditure and policy for public health outcomes. The PubMed Open Database was applied to find the publications using the keywords “health expenditure” and “health policy”. All papers that were published from January 1, 2013, to January 31, 2024, were checked for the study. 121 research papers were discovered during the initial inquiry; five duplicate articles were eliminated, and 84 were irrelevant to the study. Finally, 25 research papers and reports were selected for evaluation with the study titled “Government Health Expenditure and Policy for Public Health Outcomes: A Systematic Literature Review”. **RESULTS:**Raising the nation’s social health insurance (SHI) coverage does not guarantee universal health care (UHC) or improved financial security. Extremely few people in poverty have health insurance and attempts to give them coverage through exemptions and waivers have not had the intended effect. To prevent families from being ruined due to family health problems, an innovative insurance plan needs to be created. Supply-side strategies, or health infrastructure, are needed to expand access to high-quality medical treatment. **CONCLUSIONS:**The quality of life in developing nations is directly improved by the consolidation of healthcare system performance, suggesting that policymakers should step in and offer financial and political help through a variety of policy options. Curative and preventive care are provided by health systems, which can greatly enhance people’s health. Developing a robust health finance system has been a primary objective for numerous countries worldwide, as increased public spending on healthcare leads to better health outcomes and more effective healthcare services. Financial limitations are one of the largest barriers to obtaining high-quality healthcare. A national health insurance program increased public financing for healthcare, and the construction of community-based clinics in rural areas could all contribute to the nation’s transition to universal health care. Policymakers ought to pay greater attention to the quality of care since it significantly affects the amount of money that patients must pay out-of-pocket. Governments must develop new internal financing sources and devise strategies to refocus on health promotion and prevention.

Keywords: Government health expenditure, health policy, public health outcomes



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BACKGROUND

Investing in health care is fundamental to human capital since it increases worker productivity, overall welfare, and quality of life [1, 2]. health care expenditure has been linked to lower mortality rates, lower morbidity, and longer life expectancies [3, 4, 5]. Epidemics of disease can be prevented by increasing health spending [6, 7]. Yoga is useful for preserving health and reducing work-related stress [8, 9]. Growth in the GDP per capita is positively correlated with health status, and investments in health that improve human capital are powerful drivers of economic development [10, 11, 12, 13].

Public health outcomes are influenced by the state of good governance, the effectiveness of the healthcare system, and socioeconomic vulnerabilities [14]. Using health spending wisely and efficiently improves health, which raises the likelihood of a prosperous country. A rise in public health spending resulted in longer life expectancies and a decline in the newborn mortality rate [15]. In addition to

promoting longer life expectancies and quicker economic growth as a result of those longer life expectancies, higher government spending also suggests a larger workforce, which can stimulate faster growth [16, 17]. The variety of the healthcare system, which is seen in the level of public health spending, is taken into account while designing and planning public health improvements [18].

Public healthcare spending has been very low in low-income nations, even if there may be benefits in terms of health outcomes. The growing expense of healthcare has outpaced government spending [19, 20, 21]. Consequently, hospital commercialization has been fuelled by insufficient funding [22]. In order to raise money for the upkeep of medical equipment, hospitals must raise service fees [23]. Accessibility to finance is crucial for improving the health of the impoverished [24, 25]. The financial standing of households will continue to be severely impacted by high out-of-pocket healthcare costs [26]. There is a positive

impact on the self-reported health habits and awareness of Nepal's many ethnic groups due to microfinance intervention [27].

Policymakers are interested in the association between health outcomes and healthcare spending since most emerging countries have steadily rising healthcare costs [28, 29, 30]. This study contributes to the government and policymakers toward developing the quality of life in developing nations through the improved consolidation of healthcare system performance. To explore the government health expenditure and policy for public health outcomes, the following questions were designed for this paper:

- What are the key factors that affect government health expenditures?
- What is the nexus between government policies and health expenditures?
- How does a government policy improve public health outcomes?

MATERIALS AND METHODS

This study aims to assess the government health expenditure and policy for public health outcomes. The research is based on a review of empirical studies, reports, and data. The PubMed search engine was used to locate research publications on government health expenditure and policy for public health outcomes. The PubMed Open Database was applied to find the publications using the keywords "health expenditure" and "health policy". All papers that were published from January 1, 2013, to January 31, 2024, were checked for the study. 121 research papers were discovered during the initial inquiry; five duplicate articles were eliminated, and 84 were irrelevant to the study. Finally, 25 research papers and reports were selected for evaluation with the study titled "Government Health Expenditure and Policy for Public Health Outcomes: A Systematic Literature Review". The inclusion and exclusion criteria for this research are mentioned in Figure 1.

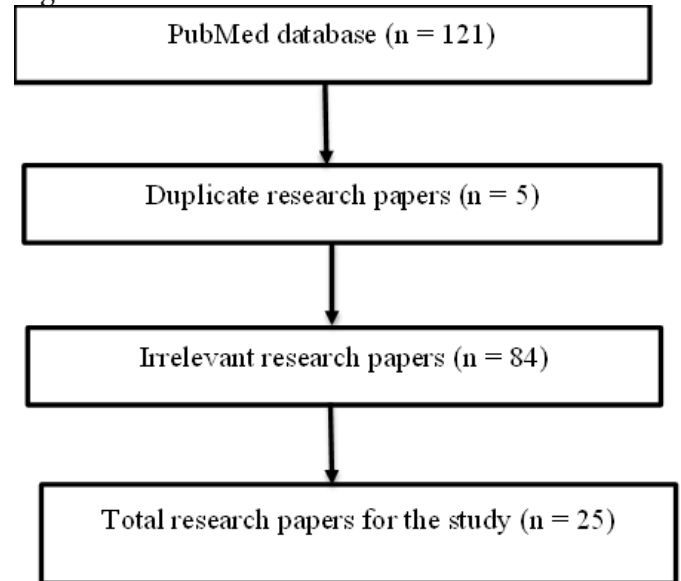
RESULTS

Health issues are linked to significant financial costs for both individuals and households. Financial difficulties and the catastrophic health costs they entail cause unmet medical demands, delayed access to prompt and adequate care, delayed medication use, and hospital stays. Based on the systematic literature review, the following results are found:

Key Factors Affecting Government Health Expenditures

A substantial proportion of people have experienced catastrophic health expenditures due to out-of-pocket payments for health care [31]. The rate of uncontrollably high medical costs and destitution brought on by out-of-pocket medical expenses [32]. The lack of fiscal capability

Figure 1: Inclusion and exclusion criteria for the study



and commitment to health on the side of the Government of Ghana (GoG) is one of the main issues plaguing the healthcare system [22]. When compared to medium- or high-spending regions, low-spending regions had noticeably lower health outcomes following an out-of-hospital cardiac arrest [33]. Two variables are used to evaluate and quantify financial protection: impoverishing health spending and catastrophic health spending. The main determinant of the difference in financial protection in low- and middle-income countries (LMICs) was government health spending as a percentage of GDP [34]. Effective multimorbidity prevention and management strategies have the potential to yield significant benefits in terms of better health, increased productivity at work, and societal benefits [35]. The healthcare delivery system value estimates take into account important health factors that are typically decided upon outside of the health sector, such as population age, rates of obesity and physical inactivity, education levels, and overall economic costs. They also concentrate on the health system's capacity to treat a wide range of conditions [36]. In order to implement health funding reforms towards universal health coverage (UHC), nations must identify sufficient and long-term revenue streams for health promotion and prevention [37]. Health and healthcare-related societal challenges, such as those resulting from the growing number of people without health insurance and those with limited access to prescription drugs and medical care, are of utmost importance [38].

Changes in consumer preferences, technology advancements, health insurance policies, and health providers' service delivery methods are some of the variables that contribute to the growth in health expenditure [39]. These discrepancies could have several causes, such as variations in the ages of the population, the design of the healthcare systems, and other aspects of the macroeconomic environment [40]. There were still substantial financial obstacles to receiving public health

treatments, which made the likelihood that a household would become impoverished due to illness worse [41]. It was vital to consolidate costs in the extremely disjointed and ineffective Greek healthcare system [42]. Family size, health shocks in the family, and household income are important indicators of how much a household will spend on healthcare [43].

The use of inpatient or rehabilitation services, the economic position of the household, and the presence of elderly or disabled family members were the main factors influencing the current health expenditure (CHE) [44]. Low-income rural families are particularly susceptible to the severe financial consequences of excessive medical costs because they are unable to cover those costs [45]. One of the most important ways to measure health spending is to look at the proportion of overall government and private health spending per person [46]. Government and consumer spending priorities shift as nations grow and become wealthier [47]. Health services could be more easily accessed by marginalized people if there were adequate supplies of medications for non-communicable diseases, more healthcare workers, better care quality, and more community clinics and other public health facilities opened in rural areas [48].

The likelihood of experiencing catastrophic expenses is significantly higher when the head of the household is unemployed, has a chronic illness, is older, has a large household, has a lower household social-economic status, and lives in a marginalized area of the nation [49]. There are large gaps in service and cost coverage as a result of poor public health spending and the conflict between needs and resources [50]. To increase the sustainability of the health system, there is broad agreement that prioritizing human resources for family planning, illness prevention, and health is essential [51]. To lower the costs of mental illnesses to individuals as well as society at large, a national strategic action plan for avoiding mental disorders and promoting mental health and well-being is desperately needed [52].

Similar to numerous other nations in the area, Indonesia boasts a flourishing private healthcare industry, accounting for over half of all healthcare services and two-thirds of health financing. This results in large out-of-pocket expenses for the underprivileged, which restricts their access to healthcare and forces many of them into poverty [53]. One of the key contributing factors to older individuals living in rural poverty is catastrophic health expenditures [39]. The population-weighted median annual rate of change of catastrophic payment incidence, regardless of the indicator selected, has been rising in over half of the countries using the non-food version of the catastrophic payment indicator, and catastrophic payment incidence has been declining in about half of the countries using the SDG indicators [54].

Nexus Between Government Policies and Health Expenditures

Social Health Insurance (SHI) and the government health budget are two major sources of funding for healthcare [31]. Social health insurance schemes in China have not eased the financial burden on the elderly or decreased the likelihood of catastrophic spending. According to this study, having health insurance boosts the use of medical services, which may raise the risk of CHE [32]. Many people are deprived of access to quality treatment as a result of increased strain on scarce resources and equipment. To enhance the medical facilities, district and municipal hospitals should receive sufficient funding [22].

Health outcomes were not better in high-spending regions than in medium-spending regions, but they were significantly worse in low-spending regions. Reduced regional expenditure leads to lower-quality in-hospital and posthospital care systems, which negatively impacts the results [33]. The variables that were found to have independent and significant associations with variation in catastrophic spending were Gross Domestic Product (GDP), current health expenditure (as a percentage of GDP), external health expenditure from external sources (as a percentage of current health expenditure), and household out-of-pocket payment (HOOP) [34].

A robust primary health care (PHC) system is necessary to refocus attention on non-communicable disease (NCD) prevention and health promotion [35]. The correlation between the value of health care and the features and policies of the health system was measured across time, and it shouldn't be interpreted as causative [36]. Thailand has a unique financing model for health promotion and prevention since local and health authorities collaborate with two separate public funds that are funded by distinct sources of income and are used for different types of preventative initiatives [37]. Greek public health and healthcare appear to be at risk from the recent attempts to restructure the National Health System, which have mostly focused on short-term gains through spending reductions rather than long-term implications [38].

Compared to other disease expenditures, the increase in circulatory, neoplasms, endocrine, nutritional metabolic, digestive, and musculoskeletal disorders was more significantly influenced by population aging [39]. Health spending is low relative to GDP and government spending, but it is closer to the OECD average as a percentage of total government spending [40]. Developing supply-side initiatives, or health infrastructure, is essential to expanding access to high-quality medical treatment [41]. The necessity for significant structural changes or the right of everyone to have health care regardless of their financial situation was ignored in favour of rapid and simple fiscal adjustments as policy responses [42].

An innovative insurance plan must be developed to keep households from becoming ruined as a result of family health emergencies [43]. The likelihood of experiencing CHE would rise with the use of inpatient and rehabilitative treatments, the presence of elderly or disabled family members, and low household income [44]. In order to

increase the amount of medical insurance funds available and enhance medical insurance's capacity to lower risk, it is also essential to fortify the system as a whole [45]. Urban and suburban social insurance programs did not perform appreciably better in established provinces when it came to lessening the financial burden associated with healthcare and reducing the regressiveness of the health finance system, but they did do better in developing districts or rural areas [55].

The proportion of households below the poverty line and the percentage of households with out-of-pocket health expenses to national health expenditures have a positive correlation with the catastrophic household percentage, as does the proportion of households below the poverty line and the total share of health expenditures in GDP [46]. Growth in government spending is positively and significantly correlated with the total income elasticity of health spending in high-income nations [47]. To minimize the coverage gap and lessen disparities in access to healthcare, the nation must create solid and efficient policies and put them into practice [48]. Pre-payment systems should be extended to more vulnerable populations, such as the elderly, the poor, those with chronic illnesses, and people living in disadvantaged areas of Kenya [49]. Enhancing the quality of care, decreasing patient co-payments for pharmaceuticals and medical supplies, expanding the benefit package for these items, and budget prioritizing are all necessary ways to strengthen the role of public finance in Central and Eastern European (CEE) nations [50].

The priorities determined in collaboration with the government and healthcare professionals in the recipient country are frequently subordinated to the interests of bilateral agencies when allocating bilateral health development aid [51]. By creating strategic action plans to support mental health and well-being and enhance the mental health care system, the government should prioritize mental health more [52]. The percentage of the population that should be covered by health insurance does not appear to be correlated with the incidence of catastrophic payments. The correlation between catastrophic spending and the percentage of GDP allocated to health is partially positive [54]. In nations like Indonesia, where over half of the population lives in rural areas with little access to qualified medical personnel and high-quality medications, the importance of subsidies is particularly felt [53]. Compared to their counterparts, men, older persons, and households in economically disadvantaged areas benefit more from health insurance when it comes to reducing poverty [39].

Government Policy for Improving Public Health Outcomes

Universal health care (UHC) and better financial protection for the nation cannot be achieved by high SHI coverage (breadth) alone. Other aspects of UHC, like as cost coverage (height) and health service coverage (depth), require policy interventions [31]. The expansion

of health insurance use and the progressive enhancement of medical support to lower household liability for health expenditure [32]. Modern amenities should be added to already-existing healthcare facilities in order to enhance the provision of healthcare. To mitigate the impact of declining external resources, there should be efforts to enhance public-private partnerships, enhance health revenues, improve resource mobilization strategies, and exempt medical and diagnostic equipment and logistics from taxes [22].

Patient outcomes do not seem to be improved by increasing spending in higher-spending areas. It shows that concentrating on the median spending may be the best option for national policymakers in nations looking to set budget targets since it allows for cost savings without sacrificing patient outcomes [33]. Reducing the number of individuals who incur catastrophic health expenditures in LMICs requires government actions focused on enhancing socioeconomic development, financing healthcare, and putting in place efficient health insurance programs targeted at the underprivileged [34]. For the health systems to manage multimorbidity more successfully, they must move from single-disease paradigms to new forms of financing and service delivery [35]. Various health policy improvements are aimed at raising the value of medical care [36].

Governments must identify new internal funding sources and devise plans to reorient their priorities to health promotion and prevention [37]. Since there are already concerning problems, greater effort should be focused on enacting more sensible and practical policies that will have long-lasting positive benefits for public health and healthcare [38]. It would be preferable to expand the Program for the Universal Coverage of Essential Public Health Services' service offering in order to further lower the rate of disease prevalence [39]. International comparisons of government consumption and GDP expenditures and uses should pay more attention to the problem of national needs and priorities [40].

The government and foreign donor organizations focused their efforts on bolstering the health system's supply-side operations and repairing its infrastructure by enacting laws that would increase the availability of healthcare professionals [41]. A tax-based national health insurance program, hospital sector restructuring and consolidation, and the development of a suitable information infrastructure could all have a positive impact on the system [42]. The burden of high out-of-pocket healthcare costs is to be reduced in Bangladesh by policymakers creating an alternate source of funding for healthcare [43]. The household would be better protected financially with extra insurance [44]. Governments should take action to help impoverished and low-income rural families bear the financial risks associated with various diseases and to increase their access to medical care [45].

China's healthcare reforms should prioritize enhancing the equity of benefit distribution in addition to increasing

coverage [55]. In order to make the best policy decisions possible, the causes of the rise or fall in the number of households with catastrophic health expenditures as well as the observed changes in health expenditure ratios can be assessed through additional research [46]. A national health insurance program, more public financing for healthcare, and the development of community-based clinics in rural regions could all contribute to the nation's transition to universal health care (UHC) [48]. Reducing supply-side obstacles, such as the lack of healthcare facilities nearby, particularly in rural and marginalized communities, and raising the standard of service should be top priorities for policymakers [49].

Policy attention should be paid more attention to the quality of care, as it plays a significant influence on patients having to pay out-of-pocket [50]. The government's preference for budget support mechanisms is out of balance with the majority of other health actors' priorities for better governance and efficiency, which causes international actors to favour project-based financing over government-preferred budget support mechanisms [51]. Collaboration between the public and private sectors is necessary for an all-encompassing and well-coordinated response to mental health issues [52]. When a larger portion of health spending is allocated through social security funds and other government financial protection programs, the likelihood of catastrophic payments declines [54]. The government should pay adequate attention to assessing equity in health systems reform [53]. Different reimbursement expenditure ratios for different populations should be given policy attention in order to lift them out of poverty through more complete insurance packages [39].

DISCUSSION

This study finds that many individuals must pay for their own medical care out of pocket, which has resulted in catastrophic health expenditures. One more option for paying for medical care is through health insurance. The degree of awareness and perception of health insurance is influenced by career and educational attainment [56, 57]. Universal health care (UHC) and better financial protection for the nation cannot be achieved by high social health

insurance (SHI) coverage [58; 59]. The coverage of health insurance for impoverished populations is extremely low, and efforts to provide coverage for the poor through exemptions and waivers have not produced the desired outcomes [60]. An innovative insurance plan must be developed to keep households from becoming ruined as a result of family health emergencies. To increase access to high-quality medical care, supply-side measures, or health infrastructure, must be developed [61].

The government health budget and Social Health Insurance (SHI) are the two main sources of funding for healthcare [62, 63]. The use of services and the necessity for healthcare are important factors that influence catastrophic health costs [64]. To support the acquisition of improved hospital resources that may improve healthcare, more healthcare spending is necessary [65]. The lack of fiscal capacity and commitment to health on the side of the government is one of the main issues facing the healthcare system [66]. Strategies for the prevention and control of multimorbidity have the potential to produce major advantages for society, improved health, and enhanced productivity at work [67, 68].

CONCLUSIONS

Health systems provide curative and preventive care that can significantly improve people's health. Building a strong health finance system has been a top goal for many nations throughout the world as public spending on healthcare improves the effectiveness of healthcare services and improves health outcomes. One of the biggest obstacles to receiving high-quality healthcare is financial constraints. The government's main response has been to create a mandatory national health insurance program that will help attain universal coverage. The establishment of community-based clinics in rural areas, more public funding for healthcare, and a national health insurance scheme could all aid in the country's shift to universal healthcare. The quality of care should receive more attention from policymakers because it has a big impact on how much patients must spend out-of-pocket. Governments need to come up with plans to shift their focus to health promotion and prevention and find new internal funding sources.

ADDITIONAL INFORMATION AND DECLARATION

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