

**THE GHANAIAN PERSPECTIVE ON THE LINK BETWEEN  
PUBLIC HEALTH AND EDUCATION DEVELOPMENT IN THE  
POST-COVID-19 ERA**

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**ABSTRACT**

The paper explores the relationship between health and educational advancement in Ghana following the COVID-19 pandemic. Issues such as inequalities in opportunities, economic impacts, the importance of improved public health facilities, and challenges during the country's recovery period are examined. Through a method and the Social Determinants of Health (SDH) framework, it discusses limitations in resources, disparities in healthcare access, the need for coordinated recovery strategies, and changes in public health education approaches. It underscores how public health and education development are intertwined, recommending policies that support fairness, tackle factors, and incorporate technology into education. By shedding light on Ghana's challenges post-COVID-19, this study aids in understanding the situation and emphasizes the significance of taking a holistic approach to strengthening both healthcare and educational systems in the nation.

**Keywords** *Education development, Social determinants of health, Interconnectedness, Equity, Resilience, Ghana*

## **INTRODUCTION**

The advent of COVID-19, a new coronavirus disease, signaled the beginning of a global disaster that significantly changed many facets of human life. The virus has spread throughout the world and affected public health, education, agriculture, and the economy.

An enduring legacy of the COVID-19 pandemic has been the nearly total closure of educational institutions across the globe, including colleges, universities, and schools. These closures had an unparalleled impact on the educational environment as of April 26, 2020, affecting almost 1.8 billion students. Approximately 98% of all learners worldwide were affected by the 189 countries that have instituted statewide closures, according to UNESCO. The global education system was profoundly affected by the epidemic, as evidenced by the suspension of the International Baccalaureate and Cambridge International Examinations (UNESCO, 2020).

Beyond the walls of the classroom, learners, teachers, families, communities, and the overall economy are all impacted by these institutional closures. The provision of disability services, food insecurity, and the shift to digital learning, homelessness, and healthcare issues are some of the new economic and social issues. In addition to having interrupted schooling, childcare difficulties, dietary inadequacies, and adding to the financial strain on households when parents are unable to work, vulnerable children experience more dangers.

Students were considered high-risk due to their close contact with teachers and peers. COVID-19, which is caused by a unique strain of the coronavirus, presented a serious threat to them. The virus first appeared in China in December 2019, and on January 30, 2020, the World Health Organization declared it a Public Health Emergency of Global Concern. Globally dispersing since then, the virus has had both short-term and long-term socioeconomic repercussions on people and national economies.

Africa had reported 33,389 instances as of April 28, 2020, with noteworthy figures from several nations. South Africa, Egypt, Ghana, Nigeria, Tanzania, Uganda, and Rwanda are just a few of the countries dealing with the pandemic's aftereffects, which have had a significant influence on people's lives and national economies. Beyond health issues, there are also effects on economic stability, disruptions in education, and risks to individuals' physical and emotional well-being.

As explained by Olingo (2020), the closure of schools and companies has made matters worse by increasing health hazards, causing widespread job and income losses, social isolation, and economic fragility. Ghana is one of the countries affected. Since the pandemic's initial discovery in Wuhan, China, several sectors have seen significant disruptions in Ghana, including businesses, funerals, religious practices, and most importantly, the educational system.

In response, the field of public health becomes increasingly important in forming public policy to address the social determinants affecting population health and well-being. This means that public health education needs to adopt a new paradigm that emphasizes the creation and integration of an agile change culture, the acceptance of structural changes, and a move in the direction of lifelong learning.

## **METHODOLOGY**

Being a qualitative review, it adopted a comprehensive synthesis and analysis of current literature, reports, and studies (Pipkin, Hogg, & Armitage, 2021). The qualitative review approach allowed for a full study of data to produce new insights, discover patterns, and construct theoretical frameworks connected to public health and education in Ghana post-COVID-19. The findings, ideas, and recommendations from the literature were evaluated and contextualized to contribute to the current knowledge on this topic. The review provided a full analysis of the difficulties, possibilities, and initiatives surrounding public health and education development in Ghana following the epidemic.

## **THEORETICAL FOUNDATION**

The basis of this research paper is the Social Determinants of Health (SDH) framework, which goes beyond the traditional emphasis on individual behaviors or genetics and acknowledges the significant impact of wider social, economic, and environmental factors on health outcomes. The SDH paradigm asserts that several factors, including income, education, employment, social support, and the physical environment, significantly influence health outcomes and inequalities among people. By adopting this approach, the study recognizes the interrelatedness of health and social issues, offering a perspective to examine the connection between public health and educational progress in post-COVID-19 Ghana.

Within the Ghanaian context, the SDH framework is especially pertinent as it corresponds to the complex difficulties and possibilities encountered by the country during the COVID-19 outbreak. Compah-Keyeke's (2013) research highlights the significance of government investment in healthcare and education, emphasizing the need for comprehensive strategies to accomplish wider development objectives. This is in full conformity with the SDH framework, which demands knowledge of how economic factors, including public spending, influence health outcomes.

Agyekum's (2020) focus on social, cultural, and economic variables as predictors of health outcomes enhances the comprehensive methodology of the SDH framework. Recognizing the interdependence of these issues becomes crucial in uncovering the complexity of the link between public health and education growth in Ghana post-COVID-19.

Antwi (2008) and Quansah (2016) contribute to the understanding of health education and socioeconomic determinants, such as maternal education and family income, by highlighting the complex network of influences on health outcomes. Their observations are consistent with the viewpoint of the SDH paradigm, which asserts that disparities in education and income are not separate problems but rather fundamental factors that influence public health. Addressing these social variables emerges as a critical strategy for improving overall public health in Ghana.

The SDH framework provides a sound theoretical platform for understanding the link between public health and education development in the post-COVID-19 era from the Ghanaian perspective. This approach not only acknowledges the complexity of health determinants but also drives the creation of comprehensive policies that go beyond acute health issues to address the core causes of disparities in the Ghanaian context.

## **IMPACT OF COVID-19 ON PUBLIC HEALTH IN GHANA**

*“Sometimes it takes a natural disaster to reveal a social disaster” Jim Wallis.*

In evaluating the impact of COVID-19 on public health in Ghana, Jim Wallis's statement, 'Sometimes it takes a natural disaster to reveal a social calamity,' becomes particularly important. The pandemic, analogous to a natural disaster, has not only immediately damaged public health but has also uncovered underlying socioeconomic and healthcare system concerns that may have been less visible before the crisis. By studying the implications of COVID-19 on the Ghanaian public health environment, we obtain insights into how this global health emergency has brought

to light pre-existing vulnerabilities and inequality within the healthcare system. This revelation is vital for understanding the broader ramifications of the epidemic and, in turn, guiding measures for post-COVID-19 recovery and the growth of public health and education in Ghana.

Ghana has seen severe repercussions from the COVID-19 pandemic, including a sharp rise in illnesses and fatalities; as of April 29, 2020, the nation reported 1,550 infections and 11 fatalities (Nation Media Newsplex Team). This health issue has substantial economic ramifications, impacting vital areas like public health infrastructure and education development, in addition to exposing pre-existing socioeconomic gaps that disproportionately affect minority groups. A lack of resources and capacity to handle the increase in COVID-19 cases has resulted in difficulties in delivering appropriate healthcare services, which has a direct impact on the healthcare system due to the demand on the economy.

Ghana's public health education system needs to adjust to the post-COVID-19 era by undergoing structural changes, encouraging lifelong learning, and making other modifications. A culture of continuous learning among educators and public health professionals may need to be promoted, new pedagogical and technology approaches may need to be integrated, and educational curricula may need to be reviewed. To further improve public health education in Ghana, new pedagogical and technical approaches, human and social competency development, and the adoption of intersectoral and interprofessional approaches are considered essential. The public health and education sectors in Ghana can benefit from these initiatives by fostering interprofessional collaboration, developing necessary competencies, and integrating cutting-edge pedagogical and technology techniques.

A study by Adu et al. (2021), reveals that numerous issues have arisen as a result of colleges and companies closing their doors. This includes high rates of unemployment, risks to one's physical and mental well-being, social isolation, and heightened economic vulnerability (Olingo, 2020). With the government putting policies like more testing, contact tracing, and isolation into place, the study highlights the need for improved public health infrastructure. To improve readiness for upcoming pandemics, additional funding for public health is necessary.

## **IMPACT OF COVID-19 ON EDUCATION DEVELOPMENT IN GHANA**

Over a billion pupils have been impacted by the COVID-19 epidemic, which has caused schools to close in several nations (Viner et al., 2020). By March 18, 2020, 107 nations including Ghana had closed their national schools due to the pandemic, affecting 862 million children and youth globally. One important social distancing strategy that has helped slow the virus's spread is the closing of schools (World Bank, 2020).

Ghana's Mid-March 2020 School and university closures caused chaos in the academic calendar and unease among students, particularly those getting ready for tests (Sintema, 2020). Concerns over the fate of Basic and Senior High School students in their last year and their admittance to higher education institutions in September 2020 have been raised by the closure (UNESCO, 2020a). The deficiency in the nation's emergency education scenario planning and readiness has been made evident by the absence of viable alternatives and solutions (UNESCO, 2020a).

In addition, the effects go beyond scholarly issues; surveys indicate that lockdowns have a global spike in domestic violence, while Ghana-specific statistics are not given (Manusher Jonno Foundation, 2020). Over 94,000 private school teachers in Ghana are expected to have lost their jobs by May 2020 due to the scenario (GNACOPS, 2020).

The move to 100% online teaching and learning in tertiary education in Ghana has presented difficulties for instructors as well as students. Although attempts have been made to go on with education via online platforms, major adaptations and efforts are needed to sustain strong academic standards during this shift (Hodges et al., 2020). Students' demands for internet data assistance to engage in online learning have brought attention to the difficulties associated with infrastructure and technology (African Journal of Emerging Issues, 2021).

Lack of teacher training and a dearth of e-learning tools and equipment have made it difficult to deploy emergency remote learning, which is described as a temporary shift in instructional delivery to an alternative modality in response to emergencies (Hodges et al., 2020). Online learning has been made less effective in Ghana by the restriction on mobile phones for Senior High School pupils, which is in addition to budgetary limitations and technological obstacles for parents living in rural and periurban areas (African Journal of Emerging Issues, 2021).

The effects of COVID-19 on education in Ghana include alterations to the academic schedule, unpredictability for students, difficulties in making the switch to online learning, and more general societal problems like domestic abuse and teacher job losses. These difficulties highlight the necessity for all-encompassing approaches to deal with the pandemic's complex effects on schooling. Since the health crisis has had a major effect on the education sector and the overall economy, the pandemic has also brought attention to the need for enhanced public health infrastructure and processes in Ghana. All things considered, the COVID-19 pandemic has had a major impact on Ghana's educational progress, underscoring the necessity of funding infrastructure, technology, and teacher preparation programs to facilitate distance learning and guarantee that all students have access to high-quality instruction.

### **THE INTERCONNECTION BETWEEN PUBLIC HEALTH AND EDUCATION DEVELOPMENT**

In Ghana, the relationship between public health and education development becomes crucial in the post-COVID-19 age, as noted by Haruna (2022). Haruna emphasizes the necessity of a curriculum that skillfully incorporates social justice considerations and successfully meets domestic needs in her support of a comprehensive approach. Magaña-Valladares (2022) highlights how important it is to advance public health education to prioritize health equity and general well-being. Arroyo (2022) emphasizes the transformative function of public health schools in developing health leaders and providing vital health and social services. Furthermore, Effiong's (2020) observations emphasize the favorable relationship between public spending on health and education, which considerably boosts economic growth.

When taken as a whole, these viewpoints emphasize the need for a comprehensive paradigm that integrates public health and education. This strategy highlights the critical function of public health education while also giving health equity priority. This work includes managing health hazards through the strategic creation of community wellness programs, providing essential health and social services, and training future health leaders. These researchers shed light on the symbiotic relationship between public health and education, which provides a fundamental framework for managing the complex difficulties Ghana faces in the post-COVID-19 era.

The study conducted by Adu et al. (2021) on the Impact of the COVID-19 Pandemic on the Education Sector in Ghana: Learner Challenges and Mitigations, sheds light on the crucial

relationship between education development and public health, offering key insights for the Ghanaian perspectives in the post-COVID-19 era.

- **Public Health's Effect on Education Development**

There have been major interruptions in public health as a result of the COVID-19 epidemic, which has also affected the education sector. The complex relationship between public health and education is made clear by the closing of schools and the use of remote learning. The crisis makes it more difficult for educational institutions to provide high-quality instruction, which emphasizes how important it is to have a strong public health infrastructure to support the advancement of education.

- **Inequality in Access to Education and Public Health Implications**

The use of remote learning has resulted in a heightened awareness of disparities in educational access, particularly among marginalized pupils. This has implications for public health. There could be a lack of knowledge and awareness concerning health issues, such as COVID-19, as a result of this educational disparity's effects on public health. Because an educated population is better able to understand and respond to health concerns, reducing this discrepancy becomes essential to promoting public health in Ghana.

- **Impact on the Economy and the Public Health-Education Nexus**

Families' ability to pay for school-related expenses has been challenged by the pandemic's economic effects. Public health and education development may be negatively impacted for some time by this economic hardship. With education's importance in increasing health literacy and illness prevention, less investment in education owing to financial constraints may result in a drop in education quality, which would then harm public health.

- **Requirement for Better Public Health Infrastructure**

The pandemic highlights how urgently Ghana needs to improve its public health systems and infrastructure. Public health issues must be effectively addressed to further the growth of education. A population in excellent health is more able to access and benefit from education. The relationship between education development and public health supports a holistic strategy to address health and education issues in the post-COVID-19 age.

The clear relationship between public health and education development in Ghana which has been exacerbated by the COVID-19 pandemic highlights the necessity of tackling public health



issues to support education growth. Meanwhile, putting money into education becomes a key tactic in developing a knowledgeable populace that can competently handle public health concerns.

### **CHALLENGES FACED IN POST COVID-19 RECOVER**

Several difficulties have plagued Ghana's post-COVID-19 recovery phase, severely hindering the country's attempts to recover from the pandemic's aftermath. The health crisis is a tough obstacle, as highlighted by Afriyie (2020), who attributes challenges to resource restrictions and inadequate personnel levels, hence exacerbating the already straining health system in Ghana. The strain's effects are shown by the nation's inability to control the rising number of COVID-19 cases.

The pandemic has resulted in a significant rise in trash generation, mostly from the disposal of personal protective equipment (PPE), which has complicated Ghana's recovery efforts. According to Adusei-Gyamfi (2022), this presents a challenge to the country's waste management system, calling for creative solutions to ensure efficient disposal.

Ghana has taken aggressive steps to address the difficulties of post-COVID-19 rehabilitation in response to these difficulties. To stop the virus's spread, there should be more surveillance, better case detection, and efficient contact tracking. Ghana's recovery effort is notable for its admirable political commitment despite the challenges. The adoption of strong public health initiatives has required careful balancing while considering the complex interactions between socio-cultural and economic factors (Sarkodie, 2021).

The complex character of Ghana's post-COVID-19 recovery is highlighted by the convergence of waste management and health sector concerns with coordinated government initiatives. To traverse the complex dynamics of Ghana's recovery, there is a need for ongoing research, creative initiatives, and evidence-based policies. These factors are highlighted by the burden on the health system, waste management issues, and budget limitations. It emphasizes the continual scholarly investigation required for the nation's recovery process. Constant vigilance is needed to minimize unintended repercussions and prepare for potential future outbreaks.

### **STRATEGIES TO IMPROVE PUBLIC HEALTH AND EDUCATION DEVELOPMENT**

Several strategies have been suggested to enhance public health and education development, aligning with the theme of improving public health and education. Kolbe (2019) and Kolbe (2015) advocate for the implementation of school health programs as a pivotal strategy capable of

positively impacting both health and education outcomes. In the pursuit of comprehensive improvements, Tang (2008) emphasizes the importance of adopting evidence-based approaches, to addressing social and economic disparities within the education sector. Leger (2000) further accentuates the necessity for an integrated approach to school health, emphasizing the consideration of both public health and educational perspectives. These proposed strategies collectively underscore the potential efficacy of school-based interventions in fostering advancements in both public health and education.

Following the COVID-19 epidemic, Ghana must build integrated recovery strategies to address complex difficulties in public health and education development. Public health education must undergo a paradigm change in the post-COVID-19 age. The system ought to accept structural modifications, promote lifelong learning among educators and medical professionals, and modify curricula to consider newly emerging health issues. This shift is essential to maintaining the resilience of the public health system and improving the country's readiness for pandemics in the future. Comprehensive school health programs are emerging as a critical tactic to overcome the disruptions the pandemic has produced in the educational sector. These initiatives, which take their cues from Kolbe's observations, ought to go beyond standard health metrics and adopt a comprehensive strategy that considers the socioeconomic differences influencing educational access. These programs can successfully lower health disparities and increase community and student knowledge of public health by fusing public health and educational viewpoints.

When addressing the obstacles that economic troubles offer to families and their capacity to invest in education, evidence-based strategies are essential. Prioritizing evidence-based interventions in public health and education will help to ensure that resources are used effectively. By supporting health equity through resource allocation and decision-making based on knowledge, this strategy supports maintaining investments in education.

A crucial component of sustainable learning is its technology integration, especially in an environment where online education is becoming common. To solve the infrastructure and technological challenges brought to light by the epidemic, Ghana has to make investments in both technology and infrastructure to support remote learning. Fair access should be the goal of initiatives, with an emphasis on helping students who live in rural regions and encounter significant difficulties.

Intersectoral cooperation becomes a strategic necessity, particularly when considering the waste management issues brought on by the increase in the disposal of personal protective equipment (PPE). Ghana might investigate creative approaches to controlling PPE waste by taking inspiration from international models, such as UBY Materials. Environmental sustainability and efficient waste management techniques can result from joint efforts between the public health and waste management sectors.

Finally, social support programs are essential, especially for the vulnerable informal trash industry that has suffered financial losses as a result of the pandemic. Economic downturns can be lessened for informal waste managers, many of whom are women, by providing targeted training, education, and gender-responsive policies. The overarching objective of creating a robust and sustainable waste management system is in line with these efforts.

## **CONCLUSION**

By adopting the Social Determinants of Health (SDH) paradigm, the study has underlined the challenges encountered by Ghana in its recovery stage, including resource restrictions, waste management issues, and healthcare discrepancies.

Beyond just putting pressure on the healthcare system, the pandemic's effects have exposed long-standing socioeconomic and healthcare inequities. This insight highlights the need to employ various ways to comprehensively address these difficulties. It is vital to go beyond emergency reactions and embrace long-term strategies that develop resilience and readiness for future pandemics.

In the aftermath of the epidemic, efforts to build lasting development in public health and education in Ghana should be anchored in these principles. Strategies focused on fostering equity, addressing social determinants, and integrating technology in education can pave the path for a robust and responsive healthcare system.

Moving forward, policymakers, educators, and healthcare professionals need to heed these lessons and implement evidence-based efforts to create resilience, equity, and sustainable development in Ghana's public health and education sectors.

## **RECOMMENDATIONS**

Based on the data and insights offered in this research, numerous recommendations can be proposed to guide future activities and initiatives.

1. **Integrated recovery plans:** Ghana should create and implement integrated recovery plans that meet the various problems in public health and education development post-COVID-19. These methods should encompass evidence-based policy, creative efforts, and continuous research to avoid unintended impacts and prepare for potential future outbreaks.
2. **Paradigm Shift in Public Health Education:** It is important to undertake a paradigm shift in public health education to adapt to the post-COVID-19 environment. This change should involve adopting structural alterations, supporting lifelong learning among educators and healthcare professionals, and altering curricula to reflect new health challenges. Additionally, the integration of cutting-edge pedagogical and technology strategies should be prioritized to strengthen the agility and resilience of the public health education system.
3. **Comprehensive School Health Programs:** Ghana should prioritize the introduction of comprehensive school health programs as a critical tool to bridge the gap between public health and education. These programs should go beyond typical health measures and incorporate socioeconomic differences influencing educational access. By taking a holistic approach, these efforts can effectively minimize health inequities and promote community and student knowledge of public health issues.
4. **Intersectoral Collaboration:** Encouraging collaboration between the public health and education sectors is vital for addressing the linked difficulties arising from the epidemic. This collaboration should focus on cultivating interprofessional collaboration, building required capabilities, and synchronizing efforts to support the growth of education and public health.
5. **Embracing the Social Determinants of Health Framework:** The adoption of the Social Determinants of Health (SDH) framework should guide future policies and interventions, noting the considerable impact of larger social, economic, and environmental factors on health outcomes. By acknowledging the interrelatedness of health and socioeconomic issues, Ghana may design focused measures to address underlying gaps and promote equitable access to education and healthcare.

By implementing these recommendations, Ghana can pave the road for a more resilient and sustainable future, fostering advancements in public health and education development in the post-COVID-19 era.

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