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Original Article

Assessing the Provision of Healthcare Services and their Effects in Rural **Secondary Schools in Tanzania**

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Academic Performance, Healthcare Services. Mental Health, Rural Schools. Student Well-being.

This study assessed the provision of healthcare services and their impact on students in rural secondary schools in Tanzania, with a focus on academic performance, attendance, and overall well-being. Using a quantitative research approach with a survey design, data were collected from 329 respondents, including both students and teachers, across 15 randomly selected secondary schools in Mbeya Rural District. Findings revealed significant gaps in healthcare provisions, such as a dependency on untrained school staff and a lack of essential resources, including mental health counselling, routine medical checkups, and physical fitness evaluations. Students strongly acknowledged the connection between healthcare services and their academic performance, highlighting that health-related challenges, like absenteeism and difficulty concentrating, adversely affected their learning outcomes. Based on these findings, the study recommends several actions: assigning trained healthcare personnel to rural schools to provide consistent care and health education, increasing funding for medical supplies, incorporating mental health counselling into school programs, and establishing comprehensive health education initiatives. Additionally, affordable health insurance and reliable transportation to nearby healthcare facilities are suggested to alleviate health-related educational barriers. These measures aim to build a stronger school health system that addresses students' immediate health needs while promoting long-term academic success and well-being, fostering more supportive educational environments in rural areas.

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INTRODUCTION

Countries around the world are implementing propoor reforms to advance universal health coverage. This widespread trend to expand coverage has resulted in the inclusion of the target to achieve universal health coverage by 2030 in the Sustainable Development Agenda. Progress is monitored through indicators that measure gains in financial risk protection and access to quality essential healthcare services (Cotlear, 2018). In this regard, any development depends on a healthy and educated workforce, meaning that both education and health are crucial for human development. Together, these factors contribute to the well-being of individuals. However, health is central to a person's well-being because one cannot attend school or study effectively if they are not healthy. Therefore, when discussing human capital, health and education are indispensable and inseparable aspects (Ntawigaya, 2021).

Schools are essential for young people to acquire knowledge, socio-emotional skills such as selfregulation and resilience, and critical thinking abilities, which lay the foundation for a healthy future. Access to education and safe, supportive school environments has been linked to improved health outcomes. In turn, good health is associated with lower dropout rates, higher educational attainment, better academic performance, and increased employment and productivity. The World Health Organization (WHO) has long recognized the connection between health and education, and the potential role schools can play in promoting student health and well-being. In 1995, WHO launched the Global School Health Initiative, aimed at strengthening health promotion efforts in schools. One key approach is pairing children with health services (Adhanom, 2021).

According to WHO (2021), school health services are those provided by a health worker to students in primary or secondary education, either within the school premises or through an external health service that has an official agreement with the school to offer health services to its students. Across all WHO regions, school-age children and adolescents (aged 5–19 years) face a range of largely preventable health issues, including unintentional injuries,

interpersonal violence, sexual and reproductive health concerns. communicable and noncommunicable diseases, and mental health challenges. Additionally, as they transition from childhood to adulthood, these children adolescents have positive physical, psychosocial, and neurocognitive health development needs. Although the demand for quality healthcare for 5–19-year-olds is substantial, the availability and quality of such services globally are variable, with limited coverage (WHO, 2021).

Tracing the historical background of healthcare service provision in Tanzanian schools, the United Republic of Tanzania (URT, 2018) reports that health services for school children in mainland Tanzania were introduced in 1921 under colonial rule, focusing on health screenings in coastal and urban areas. In 1923, health education was recommended for primary education. After independence in 1961, mobile health teams provided vaccinations, basic treatments, and sanitation improvements. By the mid-1960s, these services deteriorated, and by 1970, few schools received them due to insufficient funding and unclear guidelines. In 1978, school health services were revitalized, recognizing the importance of healthy behaviours in school-age children, who constituted 25% of the population. Health policy emphasises providing basic services to children. In 1994, the School Health Guidelines were revised to include broader interventions, and in 2014, the National Health Promotion Policy adopted a comprehensive approach, promoting health in schools through the settings-based model. Moreover, according to Ulisubisya, & Akwilapo (2018), in 2018, Tanzania developed Policy Guidelines on School Health Services to outline the institutional framework for implementing school health programs and provide provisions for guiding interventions. These guidelines serve as the foundation for all school health interventions in both public and private schools, with the expectation that they will enhance the health and educational outcomes for learners, staff, parents, and surrounding communities.

Baltag et al. (2015) conducted a study across various countries around the world on the provision of health services in schools, where they found that school

health services exist in at least 102 countries. They discovered that these services are usually provided within school premises in 97 countries, and by dedicated school health personnel in 59 countries. The services cover 16 areas, with the top five interventions including vaccinations, sexual and reproductive health education, vision screening, nutrition screening, and nutrition health education. However, in their conclusion regarding the study, they confirm that most countries have some form of school health services (SHS), but many of these programs are not evidence-based, poorly implemented, underfunded, and/or delivered with limited reach and scope. In light of the findings by Baltag et al., it is clear that the provision of healthcare services in schools remains a significant challenge in many countries around the world.

Ideally, we believe that schools should have health centres either within the school premises or nearby to facilitate the continuous provision of healthcare services, serving both students and the entire school community. The URT (2018) defines the linkages between school communities and nearby health facilities as primarily focused on vaccination, referral, screening, and treatment for communicable diseases, non-communicable diseases (NCDs), emerging diseases, emergencies, disasters, and neglected tropical diseases (NTDs). At the school level, the participation of teachers, health workers, learners, parents, and the surrounding community in school health is encouraged, but it is not yet fully optimal.

Since health lays a vital foundation for human welfare and national development, the health sector still demands significant priority (Msafiri, & Katera, 2020). Contrary to expectations, Swere (2016) reports that the health sector continues to face challenges, including a lack of adequately qualified medical professionals in hospitals, insufficient funding for public health, poor communication, inadequate infrastructure, and lengthy travel times to medical facilities. Moreover, Tanzania still lags behind in the equitable provision of health services, where adequate availability of health providers, medical equipment, and diagnostic accuracy are predominantly found in urban areas rather than rural areas (Msafiri, & Katera, 2020). Likewise, Wang, &

Rosemberg (2018) note that access to quality health services is still limited for the poor, who are primarily found in rural areas, compared to the wealthy, who predominantly reside in urban areas.

The study explores the state of healthcare services in rural secondary schools in Tanzania, highlighting the influence of global challenges like technological advancements, scientific research, climate change, and environmental shifts on the health and education sectors. These global changes contribute to disease outbreaks, disproportionately affecting students in areas with poor infrastructure and limited expertise in managing health crises. The study aims to identify the availability of essential healthcare services in rural schools, examine the challenges rural schools face in providing these services, and assess the impact of healthcare services on students' health and academic performance. Hence, by focusing on these objectives, the research seeks to shed light on how gaps in healthcare provision affect educational outcomes in underserved areas, emphasizing the urgent need for solutions to improve student wellbeing and academic success.

METHODS AND MATERIALS

This study used a quantitative approach, which emphasizes breadth, statistical descriptions, and generalizability, focusing on objectivity, control, and precise measurement (Leavy, 2017). A survey design was adopted, as it provides numeric descriptions of trends, attitudes, or opinions of a population by studying a sample, enabling generalization about the population (Creswell, 2014). A questionnaire was the sole data collection tool, distributed to students and teachers. Mbeya Rural was selected to represent rural areas in Tanzania, as most studies focus on urban areas, overlooking challenges in rural schools. Poor road and communication infrastructure often hinder access and limit available information. Pierce, & Scherra (2014) highlight the unique challenges of rural research, such as identifying participants, health addressing concerns, overcoming environmental barriers, and managing ethical considerations, recommending awareness of these issues to maintain data integrity. Out of 62 secondary schools in Mbeya Rural, 15 were randomly selected: Ifundu, Ilembo, Iwalanje, Izuo, Juhudi, Mwaselela,

MwashiwaWala, Nsalala, Ntonzo, Onical, Shisyete, Songwe, Swila, Ushindi, and Usongwe. In each school, 20 students were randomly chosen, and two health teachers were purposefully selected, resulting in 329 respondents, as one school had only one health teacher. The data were analyzed using descriptive statistics, including frequencies and percentages, with Microsoft Excel. This approach identified patterns in the availability and quality of healthcare services, challenges, and their impact on students' health and academic performance in rural schools. Research ethics were observed, including obtaining a permit from Teofilo Kisanji University and Mbeya Rural authorities, ensuring voluntary participation, maintaining and respondent confidentiality and anonymity.

RESULTS

This section presents and discusses the research findings based on the three objectives of this study as follows.

Availability of Required Healthcare Services Provided in Rural Schools

This subsection presents the results addressing the first objective of healthcare services in schools. Both students and teachers participated as respondents since the issue concerns both providers (teachers) and beneficiaries (students) of these services. Their combined responses are shown in Table 1 below.

Table 1: Healthcare Services Offered in Schools

Healthcare services offered	Students' Responses		Teachers' Responses		
	Frequency	Percentage	Frequency	Percentage	
	(n)	(%)	(n)	(%)	
First Aid Services	300	100	26	89.66	
General Health Education	275	91.67	23	79.31	
Vaccination Programs	280	93.33	21	72.41	
Mental Health Counselling	0	0	10	34.48	
General Screening/Medical Checkups	0	0	7	24.14	
Physical fitness Checkup	0	0	5	17.24	

Source: Field data, 2024

Table 1 highlights the healthcare services available in schools based on responses from students and teachers. First Aid Services are the most common, reported by 100% of students (300) and 89.66% of teachers (26). General Health Education is also widely available, confirmed by 91.67% of students (275) and 79.31% of teachers (23). Vaccination **Programs** are present in many acknowledged by 93.33% of students (280) and 72.41% of teachers (21). However, Mental Health Counseling is largely absent, with 0% of students and only 34.48% of teachers (10) reporting availability. Similarly, General Screening/Medical Checkups are scarce, with 0% of students and 24.14% of teachers (7) confirming their presence. Physical Fitness Checkups are the least available, reported by 0% of students and 17.24% of teachers (5). These findings indicate that while basic services like First Aid, Health Education, and Vaccinations are commonly available, specialized services such as mental health counselling, health screenings, and fitness checkups are significantly lacking.

Healthcare Services Providers

This subsection presents results on the availability of healthcare providers in schools, based on teacher responses, as they are better positioned to provide insights into this aspect of school administration. The findings are summarized in Table 2.

Table 2: Teachers' Responses on Healthcare Services Providers

Healthcare Services Providers	Frequency (n)	Percentage (%)
Trained Nurses employed by the school	13	44.83
Volunteering Teachers	26	89.66
Health workers from nearby school health centres	8	27.59

Source: Field data, 2024

Table 2 highlights the types of healthcare providers in schools, as reported by teachers. Volunteering teachers provide most services, accounting for 89.66% of responses, indicating a heavy reliance on teachers rather than trained professionals. Trained nurses employed by schools represent 44.83%, showing that less than half of schools have dedicated nurses. Health workers from nearby health centres are involved in only 27.59% of cases, reflecting limited external professional support. These statistics reveal a reliance on volunteering teachers

and a shortage of trained nurses and external health workers in schools.

Major Challenges Faced by Rural Schools on Healthcare Services Provision

This subsection presents results on the challenges rural schools face in providing healthcare services, based on responses from both students and teachers, who may offer different perspectives due to varying experiences and impacts. Table 3 summarizes their combined responses.

Table 3: Challenges Facing Rural Schools on Healthcare Services Provision

	Students' Responses		Teachers' Responses	
Challenges	Frequen	Percenta	Frequen	Percenta
	cy (n)	ge (%)	cy (n)	ge (%)
Poor customer care from school healthcare providers.	280	93.33	0	0
Inadequate Medical Supplies and Drugs	300	100	22	75.86
Inadequate Health Personnel	280	93.33	21	72.41
Healthcare facilities are far from schools	261	87	8	27.59
Lack of school transportation to healthcare facilities	255	85	17	58.62
Many students do not have health insurance	0	0	20	68.97
Lack of sufficient funds to purchase the necessary	0	0	26	89.66
medical equipment and medications				
Lack of healthcare training for health teachers who do	0	0	29	100
not have medical expertise				

Source: Field data, 2024

Table 3 reveals significant challenges faced by rural schools in providing healthcare services. From the students' perspective, 93.33% reported poor customer care, 100% noted inadequate medical supplies and drugs, 93.33% highlighted a lack of health personnel, 87% mentioned healthcare facilities being far from schools, and 85% cited a lack of transportation to these facilities. Teachers shared similar concerns but emphasized financial and training issues. Specifically, 75.86% reported a shortage of medical supplies and drugs, 72.41% noted inadequate health personnel, and 89.66% pointed to insufficient funds for medical equipment and medications. Additionally, 68.97% observed that many students lack health insurance, and 100% stressed the absence of healthcare training for teachers. Both groups agree on the major challenges, with students focusing on service delivery issues and teachers highlighting financial and training limitations.

The Impact of Healthcare Services on Students' Health and Academic Performance in Rural Schools

This section presents findings from the third objective, addressing two key questions: assessing understanding of the importance of healthcare services in relation to academic progress and exploring their impact on students' health and academic performance in rural schools.

The Relationship between Healthcare Services and School Academic Performance

This section presents results from the third objective on the impact of health on students' academic performance. Only students were surveyed to assess their understanding of healthcare services and their connection to academic progress, as they are most affected by the lack of healthcare services in schools. Their responses are shown in Table 4 below.

Table 4: Students' Responses on the Relationship between Healthcare Services and School Academic Performance

Responses	Frequency (n)	Percentage %
High Relationship	234	78
Moderate Relationship	45	15
No Relationship	21	7

Source: Field data, 2024

Table 4 shows that 78% of students believe healthcare services strongly affect academic performance, indicating a significant impact on their academic outcomes. 15% report a moderate relationship, acknowledging some influence but less impact, while 7% see no relationship, suggesting they don't view healthcare services as affecting their academic performance. These responses highlight the importance of addressing healthcare challenges in schools to improve academic success.

The Impact of Health on a Student's Academic Performance

This section presents results from the third objective on the impact of health on students' academic performance. Only students were surveyed, as they are primarily affected by the challenges arising from the lack of healthcare services. Their responses are shown in Table 5 below.

Table 5: Students' Responses on the Impact of Health on Students' Academic Performance

Responses	Frequency	Percentage
	(n)	(%)
Dropping out of school due to prolonged illness	280	93.33
Absenteeism due to not attending school without prior notice because of	120	40
illness		
Loss of concentration on studying due to health issues	290	96.67

Source: Field data, 2024

Table 5 shows that 93.33% of students attribute school dropout to prolonged illness, highlighting health issues as a major barrier to education. Additionally, 40% reported absenteeism due to illness without prior notice, and 96.67% experienced a loss of concentration in their studies due to health problems. These findings emphasize the critical role of health in academic challenges and the need for effective healthcare interventions in schools to reduce dropouts, absenteeism, and loss of focus, thereby improving educational outcomes.

DISCUSSION

Healthcare Services Offered in Rural Schools

The results in Table 1 indicate that rural secondary schools provide basic healthcare services, such as First Aid, with large percentages of students and teachers reporting their availability. This suggests a baseline provision of immediate care for minor injuries and emergencies. According to Qureshi et al. (2018), schools are environments where children are vulnerable to injuries and minor ailments, requiring

immediate first-aid care, often provided by teachers in the absence of a health professional. Kumar et al. (2013) recommend that schools develop standard operating procedures based on specific needs, with teachers trained in first aid to handle emergencies effectively.

Alongside first aid, vaccination services are available in many schools, likely due to government-coordinated programs targeting large populations. This explains the widespread availability of vaccination services. Kim et al. (2023) highlight the School Vaccination Check Program (SVCP), a public health initiative aimed at achieving high vaccination coverage under the National Immunization Program (NIP) by verifying students' vaccination schedules. Maintaining high vaccination coverage is essential for controlling infectious disease outbreaks.

There are limitations in the range of services available, particularly for complex health needs like mental health counselling and routine screenings. The absence of mental health support, as reported by

students and recognized by teachers, reflects a significant gap. The National Center for School Mental Health (NCSMH, 2023) emphasizes the importance of universal mental health screening to identify social, emotional, and behavioural difficulties early, enabling proactive intervention. Routine screenings allow tailored support for students across all levels of need. Thus, rural schools need to expand healthcare services to include general health assessments to support students academically and physically.

Therefore, while basic healthcare services are relatively well-established in rural schools, there is a clear need for a more comprehensive approach. Access to mental health services, alongside physical health services, is crucial for supporting students' academic and personal growth. We recommend that schools enhance their healthcare systems to include regular mental health counselling, general screenings, and physical fitness checkups to promote healthier environments and more resilient students.

Healthcare Services Providers in Rural Schools

The data from Table 2 show that rural schools rely on volunteer teachers, who lack formal healthcare training, with occasional involvement of external health professionals for specialized services. In contrast, private schools employ nurses in addition to volunteer teachers. According to Qureshi et al. (2018), most schools do not have permanent healthcare professionals like doctors or nurses. Instead, teachers serve as the primary caregivers. Although public schools often lack trained healthcare staff, designating certain teachers as "health teachers" without formal healthcare training, it is crucial that these teachers receive short-term training to improve their ability to manage basic healthcare within the school. This would help mitigate risks associated with inadequate healthcare provision. Nielsen et al. (2017) argue that addressing health workforce shortages in rural areas requires collaboration among businesses, government, universities, community colleges, and local leaders to recruit health professionals. In our view, the government, along with education and health stakeholders, must prioritize preparing teachers to manage healthcare services in schools, as health is essential for students' academic success.

Healthcare should not be provided casually by untrained individuals; as good health is vital for life. Scholars like Bohnenkamp et al. (2015) stress that school nurses are crucial in delivering mental health services and are valuable members of the student mental health team. Their expertise in both physical and mental health, along with knowledge of community resources, enables them to identify and address student health concerns effectively.

We believe that employing trained healthcare professionals in schools can reduce the health-related burdens on teachers and ensure students receive the care necessary for their well-being and academic success. Therefore, we recommend transitioning from reliance on volunteer teachers to a sustainable model that includes professional healthcare staff. This approach aligns with global recommendations for school health services, prioritizing student welfare and improving educational outcomes.

Challenges Facing Rural Schools on Healthcare Services Provision

Table 3 shows significant healthcare service delivery challenges in rural schools, with issues reported by students, teachers, or both groups. The discussion is outlined below.

Students reported poor customer care from school healthcare providers, a challenge that directly impacts them more than teachers, suggesting a lack of empathy and insufficient training. This contradicts Omachi's (2022) emphasis on patient satisfaction as a key indicator of healthcare quality, which influences service utilization and health outcomes. Poor customer service discourages students from seeking care, leading to untreated conditions that affect their health, focus, and academic performance, and disrupt teaching. Maricha (2024) highlights that poor service causes frustration and delays. Therefore, trained healthcare providers are needed to ensure attentive and professional care in schools.

Teachers reported a lack of health insurance for students, limiting access to necessary care, especially in rural areas with few affordable options. Without insurance, many low-income students avoid medical care, worsening health issues and affecting

attendance, focus, and academic progress. This aligns with Mori's (2023) observation that many sub-Saharan African countries, including Tanzania, struggle to expand health insurance coverage. As of 2019, only 32% of Tanzania's population had insurance, with just 1% covered by private health insurance (International Trade Administration, 2022). This issue impacts both students and teachers, increasing teacher responsibilities and affecting the We learning environment. recommend implementing a mandatory health insurance system for all students to support their health and academic progress.

A challenge reported solely by teachers was the lack of funds for medical equipment and medications, preventing rural schools from acquiring essential resources to manage health issues and emergencies on-site. This funding gap hinders timely health interventions, allowing minor ailments to worsen, and disrupting students' focus and attendance. Swere (2016) confirms that access to quality health services in poor and rural areas remains low. Tanzania faces challenges with inadequate funding and a shortage of facilities, leading to public hospitals failing to meet their goals. Elias, & Mushi (2024) highlight that the shortage of medicines and supplies is a major issue in public health facilities. Given that public hospitals, prioritized for resources and healthcare professionals, face such challenges, schools are likely experiencing an even worse situation. The lack of funds for medical equipment and medications impacts students' health and creates additional stress for teachers, who are often the first responders to health issues. This financial strain can reduce teacher morale, increase burnout, and compromise teaching quality, ultimately affecting the school environment and students' academic experience. Therefore, schools, in collaboration with the government and stakeholders, must allocate sufficient budgets for medical supplies to avoid challenges in healthcare provision.

The unanimous concern among teachers about the lack of healthcare training for those assigned health responsibilities highlights a critical gap in rural schools. This issue is common in developing countries. For example, Gowri, & Missiriya (2016) found that in three districts in India, most schools

lacked a school nurse and relied on teachers with little healthcare knowledge. In their study, 78% of teachers lacked adequate knowledge of student healthcare. This low level of knowledge is due to teachers receiving no specialized training in school health beyond their education qualifications (Odeyemi, & Chukwu, 2015).

Teachers designated as "health teachers" without professional healthcare training may struggle to meet student health needs, risking student safety and well-being. This lack of training can lead to inadequate responses to health crises, strain teachers, and lower the quality of healthcare and education. There is a critical need for teachers to have comprehensive knowledge and skills in student healthcare, with targeted training essential to address existing knowledge gaps (Gowri, & Missiriya, 2016; Odeyemi, & Chukwu, 2015; Bosede et al., 2022). This situation underscores the need for formal healthcare training programs for teachers to better support student health, enhancing both learning and teacher morale.

Both students and teachers reported the lack of essential medical supplies and drugs in rural schools. Wales et al. (2014) highlight that shortages of essential medicines in public health facilities have persisted in Tanzania despite reform efforts. In rural schools, the lack of basic health resources leaves students vulnerable to health issues that affect attendance and performance, while also burdening teachers with added stress, undermining their effectiveness. This unmet health need exacerbates educational disparities for rural students. Jaeger et al. (2018) emphasize that inadequate infrastructure and supplies hinder performance. Therefore, schools, in collaboration with the government and stakeholders, must ensure the timely availability of medical supplies to create a healthier learning environment.

The lack of trained healthcare personnel in rural schools is a significant issue, with all government schools lacking professionally trained healthcare providers, while some private schools have taken steps to hire them. This shortage leaves students vulnerable to preventable health issues, limiting timely intervention. According to WHO (2013), this is a critical challenge to achieving universal health coverage. Without adequately skilled professionals,

many citizens cannot access necessary services. Jaeger et al. (2018) stress that trained healthcare workers are vital for effective health systems. In schools, this shortage compromises students' well-being, lowers trust, and reduces motivation and focus on academics. For teachers, taking on healthcare duties without training increases workload, stress, and burnout, affecting teaching quality. Therefore, we recommend that every school hire at least one healthcare professional to ensure timely and professional care, especially in emergencies.

Finally, both students and teachers reported challenges related to the distance to healthcare facilities and the lack of reliable transportation in rural schools, creating significant barriers to accessing timely medical care. Syed et al. (2013) note that transportation barriers are more pronounced in rural areas due to limited transit options, higher costs, and greater distances to healthcare providers. These challenges compounded by factors such as inadequate infrastructure, chronic illnesses, and socioeconomic obstacles (Bushy, 1993; Ricketts, 2001; Pierce, 2007). In rural schools, limited healthcare access and transportation delays increase health complications for students and add stress to teachers, disrupting the learning environment and affecting academic focus. Mseke et al. (2024) suggest that the time required to reach healthcare services can inform better planning in rural areas. To address these issues, the government and stakeholders should establish health centres near schools, and schools should consider purchasing dedicated vehicles to transport students to healthcare facilities.

Therefore, significant barriers in rural schools such as inadequate healthcare services, lack of trained staff, limited medical supplies, and restricted access to health facilities—compromise both student academic performance. health and shortcomings affect students' well-being and place undue pressure on teachers, disrupting the learning environment. Addressing these issues requires increased training, funding, specialized infrastructure development, and policy reforms. These efforts will improve student health, engagement, and academic outcomes while relieving

teachers and creating a healthier, more supportive environment for educational and community development.

The Relationship between Healthcare Services and School Academic Performance

Data from Table 4 show that most students perceive a strong relationship between healthcare services and academic performance. This finding supports Shaw et al. (2015), who argue that student health is closely linked to academic success. Unhealthy children are at higher risk for school-related issues, including failure, grade retention, and dropping out. The few students who reported no perceived relationship likely haven't faced health issues severe enough to affect their learning, leading them to undervalue healthcare services. Orok et al. (2024) note that factors like age, study level, and family income influence students' perceptions of healthcare utilization. Therefore, the significant recognition of the healthcare-academic link highlights the essential role of health in educational success.

The Impact of Health Issues on a Student's Academic Performance

This subsection discusses the impact of healthrelated issues on students' academic progress, as shown in Table 5. The findings reveal three main effects: high dropout rates due to prolonged illness, without notice, and absenteeism loss concentration. These results align with numerous studies indicating that compromised physical or mental health hinders students' ability to perform effectively. Das, & Dhar (2023) emphasize that good mental health enables individuals to realize their abilities, cope with stress, and contribute to their communities. Matingwina (2018) also highlights that healthy students are less likely to face school problems and tend to perform better, while poor health increases the risk of school failure, low concentration, grade retention, and dropout.

Any illness in a student significantly impacts mental health due to worry about treatment and falling behind in school. When a student falls ill, they often lose concentration, skip classes, or even drop out. Pascoe et al. (2020) report that continuous stress related to education negatively affects learning capacity, academic performance, sleep quality,

physical and mental health, and substance use outcomes. Good physical and mental health is essential for success, enabling commitment and focus. Das, & Dhar (2023) emphasize that mental health is crucial for holistic growth, enhancing cognitive functions, attention, memory, and motivation—key factors for academic success.

Hence, to protect students' health, there is a critical need for healthcare resources and programs in schools to prevent dropout, absenteeism, and concentration issues. Schools, in collaboration with the government and educational supporters, can implement structured healthcare interventions to address health-related issues and help students stay in school and thrive academically.

CONCLUSION AND RECOMMENDATIONS

In conclusion, this study underscores the critical role of accessible healthcare services in enhancing students' academic performance, attendance, and overall well-being, particularly in rural school settings. Findings reveal significant gaps in healthcare provisions, with a dependency on untrained staff and a lack of essential resources, such as mental health support, medical checkups, and fitness assessments, that are vital for students' health educational success. The widespread recognition among students of the link between health services and academic performance highlights how health-related issues, including absenteeism and concentration challenges, can hinder learning outcomes. When discussing the issue of health in schools, we argue that, for educational success, structured and well-resourced healthcare interventions in rural schools are essential.

Based on the findings of this study, we recommend the following measures to ensure that the provision of healthcare services in schools, especially rural schools, is conducted at the required standards.

Trained healthcare personnel, like nurses and health educators, should be assigned to rural schools to deliver consistent, professional health services, conduct screenings, and provide essential health education.

Governmental and non-governmental organizations should prioritize funding for rural

schools to enhance their healthcare facilities, provide essential medical supplies, and ensure that students have access to necessary medications and healthcare equipment.

- Schools integrate mental health counselling into their health programs by training teachers in basic mental health support and ensuring visiting health personnel provide resources, counselling, and referrals as needed.
- Schools should implement comprehensive health education programs that promote both physical and mental well-being for students, and provide teachers with training to identify and address common student health issues through workshops and support from local health practitioners.
- The government should introduce affordable, subsidized health insurance options for students to reduce financial barriers to healthcare, covering regular checkups, minor treatments, and emergency care to support student health and relieve families' financial burdens.
- Reliable transportation services to nearby health facilities should be established for rural schools, enabling students to access timely medical care and reducing health-related absenteeism.

Hence, through these recommendations, a stronger school health system that supports students' immediate health needs while promoting long-term academic success through enhanced physical and mental well-being will be established.

REFERENCES

Adhanom, T. (2021). Foreword. In *World Health Organization (WHO), WHO guideline on school health services* (p. 1). Geneva: World Health Organization. https://iris.who.int/bitstream/handle/10665/341910/9789240029392-eng.pdf?sequence=1

Baltag, V., Pachyna, A., & Hall, J. (2015). Global overview of school health services: Data from 102 countries. *Health Behavior & Policy Review*, 2(4), 268-283. http://dx.doi.org/10.14485/HBPR.2.4.4

- Bohnenkamp, J. H., Stephan, S. H., & Bobo, N. (2015). Supporting student mental health: The role of the school nurse in coordinated school mental health care. *Psychology in the Schools*, *52*(7), 714- 727. https://doi.org/10.1002/pits.21 851
- Bosede, A. O., Obembe, T. A., & Adebayo, A. M. (2022). Knowledge of school teachers and the associating factors in the effective delivery of the school health programme in Nigeria. *Pan African Medical Journal*, 43(4), 1–12. https://doi.org/10.11604/pamj.2022.43.4.30838
- Bushy, A. (1993). Rural women: Lifestyle and health status. *Nursing Clinics of North America*, 28, 187-199.
- Cotlear, D. (2018). Preface to the second round of the Universal Health Coverage Study Series. In H. Wang & N. Rosemberg (Eds.), *Universal health coverage in low-income countries:*Tanzania's efforts to overcome barriers to equitable health service access (p. 9). Universal Health Coverage Study Series No. 39. Washington, DC: World Bank Group. Retrieved from https://openknowledge.worldbank.org/server/api/core/bitstreams/195dfc11-a552-5d8d-80e9-b0ce6dcd297a/content
- Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed methods approaches (4th ed.). Thousand Oaks, CA: SAGE Publications, Inc.
- Das, D., & Dhar, D. (2023). Impact of mental health on academic achievement: A qualitative study. *International Journal of Research Publication and Reviews*, 4(8), 2833–2840.
- Elias, L., & Mushi, L. (2024). Effectiveness of prime vendor system on availability of medicines and medical supplies in the selected public health facilities in Arusha district council. *BMC Health Services Research*, 24(161), 1-9. https://doi.org/10.1186/s12913-024-10581-4
- Gowri, M., & Missiriya, S. (2016). Knowledge and practice of school teachers on health care of school children. *International Journal of Pharma and Bio Sciences*, 8(1), (B) 227–231. https://doi.org/10.22376/ijpbs.2017.8.1.B

- International Trade Administration. (2022).

 Tanzania Country commercial guide:

 Healthcare. https://www.trade.gov/countrycommercial-guides/tanzania-healthcare
- Jaeger, F. N., Bechir, M., Harouna, M., Moto, D. D., & Utzinger, J. (2018). Challenges and opportunities for healthcare workers in a rural district of Chad. *BMC Health Services Research*, 18(7), 1-11. https://doi.org/10.1186/s12913-017-2799-6
- Kim, S. J., Kwon, S. L., Lee, J. Y., Oh, J., & Kwon, G.-Y. (2023). Why school is crucial to increase vaccination coverage for children: Evaluation of school vaccination check program in South Korea 2021–2022. *Vaccine*, *41*(21), 3380-3386. https://doi.org/10.1016/j.vaccine.2023.04.038
- Kumar, S. D., Kulkarni, P., N, S., B, P., Hugara, S., & NC, A. (2013). Perception and practices regarding first-aid among school teachers in Mysore. *National Journal of Community Medicine*, 4(2), 349-352.
- Leavy, P. (2017). Research design: Quantitative, qualitative, mixed methods, arts-based, and community-based participatory research approaches. New York, NY: The Guilford Press.
- Magaka, K., & Swere, R. S. (2016). Challenges hindering the accessibility of Tanzania's health service: A literature review. *International Journal of Economics and Finance*, 8(8), 242-245. http://dx.doi.org/10.5539/ijef.v8n8p242
- Maricha, J. (2024, February 18). Addressing the challenge of poor customer service in public institutions. *The Citizen*. https://www.thecitizen.co.tz/tanzania/news/national/addressing-the-challenge-of-poor-customer-service-in-public-institutions-4528720
- Matingwina, T. (2018). Health, academic achievement and school-based interventions. In *Health and Academic Achievement* (pp. 1-12). InTech. https://doi.org/10.5772/intechopen.764 31
- Mori, A. T. (2023). Mandatory health insurance for the informal sector in Tanzania—Has it worked
- 156 | This work is licensed under a Creative Commons Attribution 4.0 International License.

- anywhere? Frontiers in Health Services, 3, Article 1247301. https://doi.org/10.3389/frhs.2 023.1247301
- Msafiri, D., & Katera, L. (2020). Healthcare delivery environment and performance in Tanzania. *Repoa Brief*, No. PB 5/2020 September. https://www.repoa.or.tz/wp-content/uploads/2021/02/SDI-Health-Designed-Sept-2020.pdf
- Mseke, E. P., Jessup, B., & Barnett, T. (2024). Impact of distance and/or travel time on healthcare service access in rural and remote areas: A scoping review. *Journal of Transport & Health*, 37, Article 101819. https://doi.org/10.1016/j.jth.2024.101819
- National Center for School Mental Health (NCSMH). (2023). School mental health quality guide: Screening. University of Maryland School of Medicine. https://www.schoolmental health.org/media/som/microsites/ncsmh/documents/quality-guides/Screening.pdf
- Nielsen, M., D'Agostino, D., & Gregory, P. (2017). Addressing rural health challenges head on. *Missouri Medicine*, 114(5), 363-366. https://pmc.ncbi.nlm.nih.gov/articles/PMC6140 198/pdf/ms114_p0363.pdf
- Ntawigaya, N. J. (2021). Education and disability: A shift from separation to inclusiveness. In S. N. Kabue, E. Kalengyo, J. Ndavula, & A. Okola (Eds.), *The changing scenes of disability in church and society: A resource book for theological and religious studies* (pp. 151-178). Nairobi, Kenya: Ecumenical Disability Advocates Network (EDAN).
- Odeyemi, K. A., & Chukwu, E. E. (2015). Knowledge, attitude and practice of school health among primary school teachers in Ogun State, Nigeria. *Nigerian Journal of Paediatrics*, 42(4), 340–345. https://doi.org/10.4314/njp.v42i4.11
- Omachi, S. (2022). Patients' Satisfaction and customer care in healthcare delivery system in the era of global challenges in Nigeria. In Managing resources for sustainable development of education in Nigeria: A

- condenkschrift in honour of Professor Isaac Odiba (pp. 151-168). Kogi State University Printing Press.
- Orok, E., Nwifama, S., Oni, O., Ojo, T., Oluwadare, T., Bamitale, T., Kukoyi, O. (2024). Students' perception of healthcare services and factors affecting their utilization at a Nigerian university: A cross-sectional study. *Scientific Reports*, *14*, 23893. https://doi.org/10.1038/s41 598-024-75573-0
- Pascoe, M. C., Hetrick, S. E., & Parker, A. G. (2020). The impact of stress on students in secondary school and higher education. *International Journal of Adolescence and Youth*, 25(1), 104–112. https://doi.org/10.1080/02673 843.2019.1596823
- Pierce, C. (2007). Distance and access to health care for rural women with heart failure. *Online Journal of Rural Nursing and Health Care*, 7(1), 27-34. https://core.ac.uk/reader/215543140
- Pierce, C., & Scherra, E. (2014). The challenges of data collection in rural dwelling samples. *Online Journal of Rural Nursing and Health Care*, 4(2), 25-30. https://doi.org/10.14574/ojrnhc.v4i2.197
- Qureshi, F. M., Khalid, N., Nigah-e-Mumtaz, S., Assad, T., & Noreen, K. (2018). First aid facilities in the school settings: Are schools able to manage adequately? *Pakistan Journal of Medical Sciences*, 34(2), 272-276. https://doi.org/10.12669/pjms.342.14766
- Ricketts, T. (2001). The rural patient. In J. Geyman, T. Norris, & L. Hart (Eds.), *Textbook of rural medicine* (pp. 15-26). New York: McGraw-Hill.
- Shaw, S. R., Gomes, P., Polotskaia, A., & Jankowska, A. M. (2015). The relationship between student health and academic performance: Implications for school psychologists. *School Psychology International*, 36(2), 115–134. https://doi.org/10.1177/01430 34314565425
- Swere, K. M. R. (2016). Challenges hindering the accessibility of Tanzania's health service. A literature review. *International Journal of*
- 157 | This work is licensed under a Creative Commons Attribution 4.0 International License.

- *Economics and Finance*, 8(8), 242-245. http://dx.doi.org/10.5539/ijef.v8n8p242
- Syed, S. T., Gerber, B. S., & Sharp, L. K. (2013). Traveling towards disease: Transportation barriers to health care access. *Journal of Community Health*, 38(5), 976–993. https://doi.org/10.1007/s10900-013-9681-1
- Ulisubisya, M. M., & Akwilapo, L. D. (2018). Foreword. In *United Republic of Tanzania: Policy guidelines on school health services in Tanzania*. Dar es Salaam: Ministry of Health, Community Development, Gender, Elderly and Children. https://hssrc.tamisemi.go.tz/storage/a pp/uploads/public/636/3a9/bff/6363a9bff38be7 75591405.pdf
- United Republic of Tanzania. (2018). *Policy guidelines on school health services in Tanzania*. Dar es Salaam: Ministry of Health, Community Development, Gender, Elderly and Children. https://hssrc.tamisemi.go.tz/storage/a pp/uploads/public/636/3a9/bff/6363a9bff38be775591405.pdf
- Wales, J., Tobias, J., Malangalila, E., Swai, G., & Wild, L. (2014). Stock-outs of essential medicines in Tanzania: A political economy approach to analyzing problems and identifying solutions. London: Overseas Development Institute. https://twaweza.org/wp-content/uploads/2021/02/Stock-outs-of-essential-medicines-in-Tanzania-ODI-TWA-final-March2014.pdf
- Wang, H., & Rosemberg, N. (2018). Universal health coverage in low-income countries: Tanzania's efforts to overcome barriers to equitable health service access. *Universal Health Coverage Study Series No. 39*. Washington, DC: World Bank Group. https://openknowledge.worldbank.org/server/api/core/bitstreams/195dfc11-a552-5d8d-80e9-b0ce6dcd297a/content
- World Health Organization. (WHO, 2013). Transforming and scaling up health professionals' education and training: World Health Organization guidelines 2013. Geneva: Author. https://iris.who.int/bitstream/handle/10 665/93635/9789241506502_eng.pdf

World Health Organization. (WHO, 2021). WHO guideline on school health services. Geneva: World Health Organization. https://iris.who.int/bitstream/handle/10665/341910/978924002939 2-eng.pdf?sequence=1