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Exploring Lack of Quality Clean Water on the Quality of Education in Zimbabwe Rural Schools

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Abstract: This research study aims to investigate the impact of the lack of quality clean water on the quality of education in Masvingo, Zimbabwe rural primary schools. The study utilized a mixed-methods approach, combining qualitative interviews and quantitative surveys to collect data from a sample of 22 participants, including teachers, parents among others. The findings from this research sheds light on the challenges faced by rural primary schools in accessing quality clean water and their subsequent effects on educational outcomes. The study's outcomes contribute to the development of informed policy recommendations and interventions to improve the provision of clean water in rural primary schools.

Keywords: Education, primary rural schools, water, Zimbabwe

Introduction

The access to quality clean water is essential for human health and well-being, and its availability significantly impacts various aspects of human life, including education (Corburn & Karanja, 2020). In rural areas of Masvingo, Zimbabwe, primary schools often face challenges in providing quality clean water to their learners and staff. The lack of clean water not only poses significant health risks but also has a detrimental effect on the quality of education (McGranahan & Mitlin, 2021). This research study aims to investigate the impact of the lack of quality clean water on the quality of education in Masvingo's rural primary schools. Numerous studies have emphasized the importance of clean water for education and its impact on student performance, attendance, and overall school environment (UNESCO, 2020). Furthermore, Lunga et al. (2022), highlighted that inadequate access to clean water leads to increased health issues among learners, resulting in decreased learning capacities and educational outcomes. In the context of Masvingo, Zimbabwe, the availability of quality clean water in rural primary schools remains a significant challenge. According to a report by the Ministry of Health and Child Care, approximately 60% of rural schools in Masvingo lack access to clean water, forcing learners to travel long distances to fetch water from unsafe sources. This situation not only exposes them to waterborne diseases but also affects their ability to attend classes regularly, leading to a decline in educational performance (Satterthwaite et al., 2018).

Maslow's Hierarchy of Needs can be used as a theoretical framework to understand how the poor quality of water can affect the academic performance of rural primary school learners in Zimbabwe (Satterthwaite et al., 2018). Maslow's theory suggests that individuals have a hierarchy of needs, where basic physiological needs must be satisfied before higher-level needs can be pursued. Water is one of these basic physiological needs, as it is essential for survival and maintaining physical health (Devkar et al., 2019). When the quality of water is poor, it can have detrimental effects on the health and well-being of individuals, including school-aged children. Contaminated or inadequate water can lead to waterborne diseases, such as diarrhoea or cholera, which can result in frequent absences from school and reduced cognitive abilities due to illness and malnutrition (Troeger et al., 2017). Inadequate access to clean water can also lead to dehydration, fatigue, and difficulty concentrating, all of which can negatively impact academic performance.

Research Results

From the participants' discussions they concur that, the poor quality of water can affect the academic performance of rural primary school learners in Zimbabwe (Devkar et al., 2020). For learners, according to have a hierarchy of needs theory, basic physiological needs must be satisfied before one goes to the next level of hierarchy. The researchers found that, water is one of the most important basic physiological needs, as it is essential for survival and maintaining physical health of Zimbabwe rural primary school learners (Chidarikire, 2023). Also, we found that, when the quality of water is poor, it can have detrimental

effects on the health and well-being of individuals, including school-aged children (Braun, 2020). Contaminated or inadequate water can lead to waterborne diseases, such as diarrhoea or cholera, which can result in frequent absences from school and reduced cognitive abilities due to illness and malnutrition (Lucci et al., 2019). In addition, the authors observed that, inadequate access to clean water can also lead to dehydration, fatigue, and difficulty concentrating, all of which can negatively impact academic performance (Mills et al., 2021). The research study noted that, there is need to install solar powered boreholes and provide taped water to all rural primary schools in Masvingo, Zimbabwe by the Government of Zimbabwe, School Development Committees, Non-Governmental Organisations and other stakeholders (Bivins et al., 2019). This helps learners to access clean water and improve their access to quality education which enhance their educational performance (Narayanan et al., 2019). Furthermore, there should be awareness programs in schools and communities about the dangers of using unclean water such as Cholera from rivers, unprotected well and other sources.

Conclusion

In conclusion, this research study sought to investigate the impact of the lack of quality clean water on the quality of education in Masvingo's rural primary schools. By exploring the availability and quality of clean water, assessing its effects on educational outcomes, and understanding stakeholders' perceptions, the study aims to contribute to policy recommendations and interventions that can improve access to clean water in rural educational settings. Ultimately, the study endeavours to enhance the quality of education and promote the overall well-being of learners in Masvingo rural areas in Zimbabwe and similar regions.

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