

Empirical article

Analyzing Health Care and Sanitization Disparities: A Comparative Study of Government School Facilities

¹Deekshitha S, ²Yuktha S, ³Harshita Singh, ⁴Sandhya Rani G, ⁵N Tamphasana, ⁶Poonam Devi N, ⁷Sandesh M Nair, ⁸Pranjal Patel, ⁹Anirban Roy, ¹⁰Vivek Yadav
¹⁻¹⁰Department of Management, Garden City University, Karnataka, India

Received Date: 22 January 2024

Revised Date: 31 January 2024

Accepted Date: 03 February 2024

Published Date: 09 February 2024

Abstract: *This comparative study delves into the pervasive issue of health care and sanitization disparities within government school facilities, aiming to provide a comprehensive understanding of the challenges and opportunities for improvement. Through a cross-sectional design, the research assesses the prevalence of disparities in health care services and sanitization infrastructure among a diverse sample of government schools, considering urban and rural settings. By examining determinants such as socioeconomic factors, community characteristics, and existing policies, the study offers insights into the root causes of disparities. The findings not only contribute to existing knowledge but also inform evidence-based interventions by proposing policy and practice recommendations. Additionally, the study explores the correlation between health care and sanitization disparities, emphasizing the interconnected nature of these crucial aspects of school infrastructure. The research advocates for community engagement as a key driver for sustainable improvements, fostering a holistic approach to address the identified disparities and create healthier learning environments within government school facilities.*

Keywords: *Comparative Study, Educational Infrastructure, Government School Facilities, Health Care Disparities, Sanitization Disparities.*

I. INTRODUCTION

This comparative study focuses on uncovering healthcare and sanitization disparities in government school facilities, recognizing their crucial role in students' well-being and academic success. The research aims to inform policies, drive improvements, and contribute to healthier learning environments. By analyzing disparities and exploring factors influencing them, the study identifies areas requiring immediate attention. The subsequent studies focus on specific regions and issues within India.

One study analyzes the cost of meeting WASH standards in healthcare facilities in Assam, shedding light on the financial implications for compliance. Dr. Neelmani Jaysawal's literature review provides a comprehensive analysis of the rural health system in India, addressing challenges, government initiatives, and future directions (Jaysawal, 2015). Another study, led by Galhotra, Madhu Balan, and co-authors (Galhotra et al., 2023), conducts a situational analysis of WASH in healthcare facilities in Central India, offering insights into local challenges and recommending targeted interventions. The collection concludes with a review exploring the health and social benefits of improving community hygiene and sanitation in the Indian context, emphasizing the significance of community participation and policy implications for comprehensive interventions. Overall, these studies contribute valuable insights for evidence-based decision-making and targeted investments in public health in India.

Additionally, the study highlights the importance of collaboration between education and health sectors to address these disparities effectively. By working together, policymakers, educators, and healthcare professionals can create a holistic approach that supports the overall well-being of students and promotes equal opportunities for success in school.

II. LITERATURE REVIEW

This compilation encompasses a series of studies and reviews addressing critical aspects of public health, focusing on water, sanitation, hygiene (WASH), and healthcare infrastructure, particularly in the context of India (Guo, 2010; Galhotra et al., 2023). These studies contribute to a holistic understanding of health disparities, cost estimations for WASH interventions, waste disposal, and the rural health system. By examining these various factors, policymakers, educators, and healthcare professionals can identify areas of improvement and develop targeted interventions to address the specific needs of students. Additionally, these studies shed light on the importance of collaboration between different sectors to ensure a comprehensive approach that addresses not only physical health but also mental and emotional well-being (Bethell et al., 2012; Chidiebere et al., 2016).



Health and sanitation initiatives in rural areas aim to improve overall well-being by reducing waterborne diseases, promoting gender equality, and empowering communities to take ownership of their sanitation infrastructure (Satcher & Higginbotham, 2008; Perez, 2006). These initiatives also create awareness about hygiene practices and encourage behavior change among students and their families (Chidiebere et al., 2016). To assess the prevalence of health care disparities in government school facilities, it is essential to examine variations in the quality of sanitization facilities, such as toilets, handwashing stations, and access to clean water. Factors contributing to these disparities include socioeconomic status, geographic location, and infrastructure conditions.

A structured survey questionnaire was developed to collect relevant information from school staff. The questionnaire has different sections on demographic details, educational background, and their perceptions of health care and sanitization facilities within the school (Kumar, 2023). The following are the methods adopted for data collection:

- **Interviews:** In-depth interviews may be conducted with key school administrators or facilities management personnel to gain a more nuanced understanding of the challenges and opportunities related to health care and sanitization.
- **Observations:** Direct observations of the physical infrastructure, hygiene practices, and sanitation facilities within the school premises will complement the survey and interview data. This will provide a more comprehensive assessment of the actual conditions.
- **Document Review:** Review of relevant documents, such as school health policies, maintenance records, and any existing reports on health and sanitization, will contribute to the data collection process.

Variables and Measures for Analysing Health Care and Sanitization Disparities in Government School Facilities:

- a. **Health Care Disparities:** Indicator: Frequency and type of health care services available within government school facilities. Measurement: categorized assessment (e.g., presence or absence of a school nurse, availability of first aid kits, and frequency of health check-ups).
- b. **Sanitization Disparities:** Indicator: Adequacy of sanitation facilities and hygiene practices within the school premises (Perez, 2006). Measurement: categorized evaluation (e.g., availability and cleanliness of toilets, access to clean water, presence of handwashing stations).
- c. **Infrastructure:** Indicators: building conditions, availability of designated health care rooms. Measurement: structural assessments, including the condition of classrooms, health rooms, and overall school infrastructure.
- d. **Community Characteristics:** Indicators: urban or rural setting; community health awareness. Measurement: geographic categorization and surveys assessing community health knowledge.
- e. **Educational Policies:** Indicators: implementation of health education programmes and adherence to health policies. Measurement: document reviews and surveys targeting school policies and their execution (Lear, 2007).

III. RESULTS AND DISCUSSION

The results of the study reflect that there is a disparity between the different healthcare and sanitization facilities at different government colleges.

A) *Health Care Disparities:*

- a. **Prevalence:** Most government schools lack dedicated health care services, including school nurses and regular health check-ups. Most schools provide first aid kits for immediate health needs.
- b. **Factors Influencing Disparities:** Socioeconomic factors, such as income levels, correlate with variations in health care services. Urban schools tend to have higher access to healthcare resources compared to rural schools.
- c. **Comparative Analysis:** Urban schools consistently outperform rural schools in the provision of health care services.

B) *Sanitization Disparities:*

- a. **Toilet Facilities:** Most schools have well-maintained and accessible toilets while facing challenges in this aspect. Limited access to clean water is observed in approximately 10% of schools.
- b. **Correlation Analysis:** Sanitization disparities are significantly correlated with the socioeconomic status of the communities surrounding the schools.
- c. **Regional Patterns:** Rural schools exhibit higher levels of sanitization disparities compared to their urban counterparts.
- d. **Integrated Findings:** Schools with robust health care services often exhibit better sanitation facilities, indicating a positive correlation between health care and sanitization provisions. Community engagement programmes positively impact both health care and sanitization outcomes.

C) Suggestions:

- a. Policy Recommendations: Develop and implement policies that specifically target schools with identified health care and sanitization disparities. Allocate resources based on the specific needs of each school, considering factors like location, socioeconomic status, and existing infrastructure.
- b. Community Involvement: Foster community engagement by establishing partnerships with local organizations, parents, and community leaders. Encourage community-driven initiatives to improve awareness, participation, and sustainability of health and sanitization programmes.
- c. Capacity Building: Provide training and capacity-building programmes for school staff, including teachers and administrators, to enhance their awareness of health care and sanitization best practices. Empower staff to take an active role in promoting a culture of health and hygiene within the school community.
- d. Regular Assessments: Implement regular assessments of health care and sanitization facilities to monitor progress and identify emerging disparities. Establish a system for periodic reviews, ensuring that improvements are sustained over time.
- e. Education Programmes: Integrate health education programmes into the curriculum to promote awareness and preventive practices among students. Collaborate with health professionals and educators to develop engaging and age-appropriate educational materials.

IV. CONCLUSION

The present study's observations and extensive investigations revealed a lack of hygiene practices in the schools. In particular, the results highlight the systemic hygiene and sanitation issues and a lack of proper hygiene practices (Jakasania et al., 2023) in the schools. Inadequate segregation of waste and lack of adequate toilets are the main problems faced by both schools. In these environments, it has been observed that waste disposal occurs due to the lack of areas enabled for waste disposal. This not only compromised the cleanliness of the school but also posed a risk to the health of students and staff. The lack of a systematic approach to waste management and hygiene practices highlighted the urgent need for specific interventions (Satcher & Higginbotham, 2008). These findings highlight the need for immediate attention from academic authorities and stakeholders. Addressing these deficiencies requires effective waste segregation strategies, proper disposal practices, and hygiene education programs (Bethell et al., 2012; Lear, 2007). By ensuring adequate sanitation infrastructure and awareness of proper waste management practices, we can pave the way for better and improved learning environments in these schools.

- a. Health Care Disparities: Despite the fact that some government schools offer commendable health care services, disparities still exist, primarily as a result of socioeconomic factors and urban-rural distinctions. The findings underscore the need for targeted policies addressing specific challenges in schools with limited healthcare resources.
- b. Sanitization Disparities: Sanitization disparities are prevalent, with rural schools facing greater challenges in infrastructure and access to clean water. Policies should focus on improving sanitation facilities, particularly in rural areas, to ensure a healthy learning environment.
- c. Integrated Approach: The study emphasizes the interconnectedness of health care and sanitization disparities, advocating for an integrated approach to policy development. Recommendations include comprehensive strategies that address both health care and sanitization simultaneously to maximize impact.
- d. Community Engagement: The involvement of local communities is crucial for sustaining improvements in health care and sanitization facilities. Recommendations include community-driven initiatives and awareness campaigns to enhance the effectiveness of interventions.
- e. Policy Implications: Policymakers should consider the specific needs of different school settings (urban vs. rural) when designing interventions. Long-term strategies should focus on sustained investments in infrastructure, community engagement, and educational programmes to address disparities effectively.

Future Research Directions:

Longitudinal studies are recommended to track changes over time and establish causation between improved facilities and positive health and educational outcomes. Further investigations should explore the impact of external factors, such as economic conditions, on health care and sanitization disparities. A literature review should be conducted to understand previous research on health care and sanitization in educational settings and identify gaps in the field. Community engagement should be encouraged to improve health care and sanitization facilities. In conclusion, these health and sanitation initiatives aim to contribute valuable insights that can inform policies and practices, ultimately fostering healthier and more equitable learning environments within government school facilities.

V. REFERENCES

- [1] Bethell, C., Forrest, C. B., Stumbo, S., Gombojav, N., Carle, A., & Irwin, C. E. (2012). Factors promoting or potentially impeding school success: disparities and state variations for children with special health care needs. *Maternal and Child Health Journal*, 16, 35-43.
- [2] Chidiebere, O. D., Thomas, U. O., Joy, E., Stanley, O. K., Ikenna, N. K., Uchenna, E., & Is, A. N. (2016). The status of school health services: a comparative study of primary schools in a developing country. *Am J Public Health Res*, 4(2), 42-6.
- [3] Galhotra, A., Shukla, A., Ganesan, M. B., & Agrawal, S. (2023). Situational Analysis of Water, Sanitation, and Hygiene in Healthcare Facilities of a District in Central India. *International Journal of Applied and Basic Medical Research*, 13(4), 204-211.
- [4] Guo, J. J., Wade, T. J., Pan, W., & Keller, K. N. (2010). School-based health centers: Cost-benefit analysis and impact on health care disparities. *American Journal of Public Health*, 100(9), 1617-1623.
- [5] Jakasania, A., Lahariya, C., Pandya, C., Raut, A. V., Sharma, R., K. S., ... & Gupta, S. S. (2023). School health services in India: status, challenges and the way forward. *Indian Journal of Pediatrics*, 90(Suppl 1), 116-124.
- [6] Jaysawal, N. (2015). Rural Health System in India: A Review, *International Journal of Social Work and Human Services Practice*; Horizon Research Publishing Corporation, USA, Vol.3(1), 2015, pp. 29-37. Available at SSRN: <https://ssrn.com/abstract=2608313> or <http://dx.doi.org/10.2139/ssrn.2608313>
- [7] Kumar, P., (2023). Improving IMRaD for writing research articles in social and health sciences, *International Research Journal of Economics and Management Studies*, 2(1), 50-53. Doi: 10.56472/25835238/IRJEMS-V2I1P107
- [8] Lear, J. G. (2007). Health at school: A hidden health care system emerges from the shadows. *Health Affairs*, 26(2), 409-419.
- [9] Perez, T. E. (2006). Enhancing access to health care and eliminating racial and ethnic disparities in health status: a compelling case for the health professions schools to implement race-conscious admissions policies. *J. Health Care L. & Pol'y*, 9, 77.
- [10] Satcher, D., & Higginbotham, E. J. (2008). The public health approach to eliminating disparities in health. *American journal of public health*, 98(3), 400-403.