

## **FECES MANAGEMENT AND SANITATION IN SCHOOLS: INVESTIGATING PRINCIPALS' ATTITUDES IN CROSS RIVER STATE**

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### **Abstract**

Feces management had become a major challenge in most of our secondary schools in Nigeria. The poor state of feces management in secondary schools in Cross River State may be as a result of inability of students to clean the available toilets facilities, poor funding of secondary schools, lack of public awareness on the danger of feces in the school environment and poor implementation of government policies on feces management by the school authorities. This study therefore, examined 'Principals' attitude on school sanitation and feces management practices in secondary schools in Cross River State, Nigeria'. To achieve this purpose of the study, one specific objective was raised to guide the study which was converted to research question and then transformed into hypothesis. Related literatures were reviewed in line with the variable of the study. The design used for the study was survey research design. This design was chosen because it permits inference and generalization to be drawn from a representative sample of the population. The research area is Cross River State, Nigeria. The target population of the study was principals of public secondary schools in the three Education Zones of Cross River State. They are 273 principals in public secondary schools in Cross River State (Ministry of Education, Calabar, Cross River State; 2015/2016 academic year). The instrument employed for data collection was the questionnaire, which was designed by the researcher to test the items. Cronbach Alpha method of reliability was used to determine the reliability estimate of the instrument which ranged from 0.64 to 0.85. Independent t-test analysis was used for data analysis. The findings of the study revealed that principals' attitude toward sanitation significantly influence their feces management practices in secondary schools in Cross River State, Nigeria. It was recommended among others that Principals of public secondary schools in the State should have positive attitudes toward feces management and inculcate maintenance culture in the handling of sanitary facilities sited in their schools.

**Keywords:** Principal's Attitude, Schools, Sanitation, Feces Management.

### **Introduction**

Most public secondary schools in Nigeria generally are facing high level of pollution from poor feces management. The situation is more acute due to lack of adequate feces management facilities in schools, dirty and dilapidated structure of these facilities, lack of adequate knowledge on sanitation issues in schools, indiscriminate defecation of feces and principals' negative attitude toward the school environment. Feces management methods such as simple pit toilet, ventilated improved pit toilet, water closet, pour flush and trench toilet should be provided in secondary schools in Cross River State to help students and staff to use such facilities so as to promote sanitation in schools. There is strong evidence which suggests that individual or group awareness

creation and attitudes towards feces management are critical in the effort to respond to the feces management challenges (Kofoworola, 2007).

The attitude of principals toward sanitation may have a positive influence on their feces management practices in secondary schools. Regular cleaning of the school compound and toilets may prevent transmission of diseases and excreta related infections. Sanitation is the hygienic means of promoting health through prevention of human contact with the hazards of wastes as well as the treatment and proper disposal of feces and sewage. Wastes that can cause health problems include human feces, solid wastes, domestic wastewater, industrial wastes and agricultural wastes.

Hygienic means of prevention can be by using feces management technologies such as toilet systems and septic tanks or simply by personal hygiene practices such as hand washing with soap and behaviour change. Poor hygienic and feces management practices, negative attitudes, persistent negative behaviours toward school sanitation in combination with insanitary conditions in secondary schools in Cross River State create public health threats to school students and staff also. These can contribute to the spread of communicable diseases among them. This is because effective sanitation of the school environment requires the active participation of all the key players in the school setting such as principals, teachers and students. Positive change in behaviours is therefore necessary among staff and students in their various schools.

The attitude of principals toward school environment appears to be crucial as they ultimately play a role in providing knowledge-based solutions to in-coming feces management problems in secondary schools (Eages & Demare, 1999). School sanitation programmes should be instituted to enhance and influence knowledge, attitude and behaviour of students, teachers and the principals through the process of intergenerational influence (Gallagher, Wheeler, McDonough & Namfa, 2000). Improvement in feces management, school sanitation and good hygiene help to promote environmental sanitation in schools. The researcher therefore seeks to assess principals' attitude toward sanitation and feces management practices in secondary schools in Cross River State, Nigeria.

### **Objective of the study**

1. To examine how principals' attitude toward sanitation influence feces management practices in secondary schools in Cross River State.

### **Research Question**

1. To what extent does principals' attitude toward sanitation influence their feces management practices in secondary schools in Cross River State?

### **Research Hypothesis**

1. Principals' attitude toward sanitation does not significantly influence their feces management practices in secondary schools in Cross River State.

## Methods

This study used survey research design. This design was chosen because it provides acceptable and quantitative description of the features of the whole population through a chosen sample. It also permits inference and generalization to be drawn from a representative sample of the population. The research area is Cross River State, Nigeria.

The target population of the study involved principals of public secondary schools in the three Education Zones of Cross River State. They are 273 principals in public secondary schools in Cross River State (Ministry of Education, Calabar, Cross River State; 2015/2016 academic year). The instrument employed for data collection was the questionnaire, which was designed by the researcher to test the items. The instrument had two (2) sections, A and B. Section A dealt with demographic information while section B provided information on principals' attitude toward sanitation. Cronbach Alpha method of reliability was used to determine the reliability estimate of the instrument. Here the researcher ensured that each item requiring response was usually given different numerical score. The reliability coefficient ranged from 0.64 to 0.85. The data was analyzed using independent t-test and was interpreted accordingly.

## Results

### Hypothesis one

Principals' attitude toward sanitation does not significantly influence their feces management practices in secondary schools in Cross River State.

The independent variable was principals' attitude toward sanitation categorized as positive and negative attitude. The dependent variable was feces management practices. Independent t-test analysis was used on the data collected to test the hypothesis; the results are presented in table 1.

The results showed that principals' attitude toward sanitation significantly influence their feces management practices in secondary schools in Cross River State. Only a slight number of principals have more positive attitude towards sanitation (136:15.46) than those with negative attitude (134:14.20). Meanwhile, comparing the mean difference on their feces management practices, it was revealed that there was a significant difference as those principals with positive attitude have better feces management practices than those whose attitudes were negative ( $t = -4.295$ ,  $P < .05$ ). Based on this result, it therefore implies that the null hypothesis stated was thus rejected. This means that principals' attitude toward sanitation significantly influence their feces management practices in secondary schools in Cross River State.

## Discussions

Principals' attitude toward sanitation and feces management practices in secondary schools

The findings of this hypothesis revealed that there was a positive significant influenced of principals' attitude toward sanitation and their feces management practices in secondary schools in Cross River State. For principals'

attitude toward sanitation and feces management practices, the analysis, results and conclusion revealed that only a slight number of principals have more positive attitude toward sanitation (136: 50.4%) than those with negative attitude (134: 49.6%). Meanwhile, comparing the mean difference on their feces management practices, it was further revealed that there was significant difference as those with positive attitude have better feces management practices than those whose attitude were negative ( $t = -4.295$ ,  $P < .05$ ).

The findings of this hypothesis proves that principals' attitude of maintaining proper clean and safe sanitation school learning environment in secondary schools in the study area significantly lead to positive feces management practices. This finding corroborate with the assertion of Ordinioha and Owchondah (2008) who state that unsanitary conditions in schools create public health threats to the staff and students which contribute to the spread of communicable diseases. This indicates that effective and proper feces management practices in secondary school environment require the active participation of all the key players in the school and not only the principals.

Literature reviewed and findings done about principals' attitude toward sanitation in terms of feces management practices in secondary schools in Nigeria, has not produced contrary reports in relation to the fact that even in the study area, government policies has made it in such a way that the schools are inspected frequently by school authorities and Environmental Health Officers to ascertain the level of sanitation in relation to feces management. Studies by Ofovwe and Ofili (2007) have shown that principals' related factor such as poor funding of school system, plays a vital role in the maintenance of proper sanitation and feces management practices, but even with this challenge, schools are being kept clean as students are taught different subjects that involved sanitation and health hygiene; and at the same time given a task to always clean the environment and make it tidy to prevent offensive odour and air pollution.

In another study carried out by Banda (2007), it was discovered that the attitude of school authorities toward feces management in developing countries such as India was not devoid of traditional practices. Principals of schools have more positive attitude toward sanitation of their school premises in terms of feces management practices. Greater number of schools in Nigeria especially those in the cities have their feces been managed with caution. The researcher was of the opinion that, since slight number of principals have more positive attitude toward sanitation than those with negative attitude, this therefore means that some principals especially in the rural areas live care free attitude which made them not to use their students to clean the school environment always. This invariably affected the sanitation aspects of their schools.

### **Conclusion**

Having gone through the findings of the study, it was observed and discovered that principals' positive attitude toward sanitation significantly influence their feces management practices in secondary schools. To yield positive feces management practices in secondary schools, principals have to inculcate positive attitude toward the

management of feces and their mentality should tilt toward sustainable sanitation of school premises, proper maintenance of toilet facilities and monitored students to avoid the practice of open defecation in the bushes, uncompleted buildings and wrap and throw of feces in open spaces within the school premises in order to make secondary schools environment safe, hygienic and healthy for all operating within the school environment. This may also prevent them from suffering from feces related diseases.

### **Recommendations**

Based on the findings of the study, the following recommendations were made:

1. Principals of public secondary schools in the State should have positive attitudes toward feces management and inculcate maintenance culture in the handling of sanitary facilities sited in their schools.
2. Principals should ensure that government provides adequate sanitary facilities to both staff and students to prevent indiscriminate defecation in their schools.
3. Principals should carry out more enforcement and implementation of sanitation policies so as to promote better feces management practices in their schools.
4. Government should provide funds to school Principals to use for the provision of adequate sanitary facilities in schools to prevent indiscriminate defecation in the school premises.

### **REFERENCES**

- Banda, K. (2007). Water handling, sanitation and defecation practices in rural southern India: knowledge, attitude and practices study. *Translocations of the Royal Society of Tropical Medicine and Hygiene*, 101 (11), 1124-1130.
- Eagles, P. F. J. & Demare, R. (1999). Factors influencing children' environmental attitudes. *Journal of Environmental Education*, 30 (4), 33-38.
- Gallagher, J., Wheeler, C., McDonough, M. & Namfa, B. (2000). Sustainable environmental education for a sustainable environment: lessons of thailand for other nations. *Walter, Air and Soil Pollution*, 123 (1-4), 489- 503.
- Kofoworola, O. F. (2007). Recovery and recycling practices in municipal solid waste management in Lagos, Nigeria. *Waste Management*, 27 (9), 1139- 1143.
- Ofovwe, G. E. & Ofili, A. N. (2007). Knowledge, attitude and practice of school health programme among head teachers of primary schools in Egor Local Government Area of Edo State, Nigeria. *Annals of African Medicine*, 6 (3), 99-103.
- Ordinioha, B. & Owchondah, G. (2008). Sanitation facilities and hygiene practices in a semi-urban community in Rivers State, south-south Nigeria. *The Nigerian Health Journal*, 8 (1), 1015.