

Influence of Community-Based Open Defecation-Free Campaigns among Residents of Rural Areas in Oye-Ekiti Local Government Area of Ekiti State

Adebayo John JAMES, PhD

*Department of Mass Communication
Faculty of Communication and Media Studies,
Federal University, Oye-Ekiti, Ekiti State, Nigeria
<https://orcid.org/0000-0002-5274-9975>
adebayo.james@fuoye.edu.ng*

Sanyaolu Oluwaseyi, PhD

*Department of Mass Communication
Faculty of Social and Management Sciences,
Precious Cornerstone University,
oluwaseyisanyaolu@pcu.edu.ng*

Vivien Adedunbi Akin-Morakinyo

*Department of Mass Communication
Faculty of Social and Management Sciences,
Precious Cornerstone University,
vivien.a@pcu.edu.ng*

Femi Stephen Odunewu

*Department of Mass Communication
Faculty of Communication and Media Studies,
Federal University, Oye-Ekiti, Ekiti State, Nigeria
Femi.odunewu@fuoye.edu.ng*

Abstract

The government has implemented water, sanitation, and hygiene campaigns (WASH) to reduce open defecation practices among people. Poor awareness of the importance of hygienic practices has been a barrier to defeating open defecation practices in rural areas of Ekiti State.

The study is designed to investigate the influence of community-based open defecation-free campaigns among residents of rural areas in Oye-Ekiti Local Government Area. A survey method and paired-depth interview were adopted to investigate community-based preventive health campaigns on open defecation practice among residents of rural areas in Oye-Ekiti Local Government Area. Findings showed that unimproved water supply coverage accounts for the open defecation practice in Oye-Ekiti Local Government Area. Findings also showed that Community-based open defecation-free campaigns play mobilizational roles in rural communities and that health education officers perform enlightenment roles in rural communities of the Oye-Ekiti Local Government Area. It is recommended that an office must be dedicated in every Local Government Area to oversee the affairs of the community-based stakeholders with regard to all health campaigns meant for all rural communities in Nigeria. Governments at all levels must partner the Charity Organisations and other Non-Governmental Organisations to make mechanised or motorised boreholes available in the rural communities of Oye-Local Government Area, and all other Local Government Areas in Nigeria to kill the growing cases of open defecation practice in the rural areas of those Local Government Areas.

Keywords: Community-Based, Open Defecation, Campaigns, Residents, Rural Areas

1. Introduction

An open defecation practice occurs in the rural areas of low-income countries (Galan et al., 2013). Open defecation practice involves excreting or defecating in the bushes, in the body of water, open field, lakes, streams, and other places outside designated latrines and toilet facilities. Open defecation practice is a global health issue in developing nations of the world. About 2.4 billion people lack access to basic sanitation facilities globally (Abdulkadir et al., 2023). Nigeria is one of the 61 countries with a high burden of open defecation, especially among rural citizens. Open defecation is found to cause different diseases. Over 2.6 billion people globally do not have household toilet facilities, and thus, 1.8 million people die of diarrhoea and related diseases each year, especially children under the age of five (Abah et al., 2010). Open defecation is one of the major public health concerns associated with poor sanitation coverage (Schaefer, 2017). Many people in rural areas of developing nations still practice open defecation. In most rural communities, people still defecate in the body of water, behind bushes and streams, and inside street gutters (Abdulkadir et al., 2023). The practice of open defecation is an unsanitary practice that has engendered the upsurge in cases of communicable diseases such as dysentery, polio, hepatitis, and diarrhoea. Studies have found that most people who practise open defecation are based in rural areas, are poor, are low-income earners, and cannot afford modern toilet facilities.

A study found that 88% of diarrheal cases in children are caused by open defecation practice, and children living in an open defecation-ridden environment experience growth disorders (Jati et al., 2023). Worm infections are caused by unhygienic practices such as open defecation and other dirty practices. Although, governments at all levels have mounted water, sanitation and hygiene campaigns (WASH) to minimise the incident of open defecation practices among people, inequality in the access to sanitation in rural areas and poor awareness of the essence of hygienic practices have been a challenge to defeating open defecation practices in rural areas of Ekiti State. Countries where open defecation practice is prevalent are usually ravaged by

sanitation diseases. It is estimated that 14% of the people in sub-Saharan Africa still practise open defecation, especially those in the rural areas, who have challenges of poverty and stark lack of social facilities (Nnindini and Dankwah, 2023). Abdulkadir et al. (2023) conducted a study on open defecation as a challenge to public health in the Giwa Local Government Area of Kaduna State. They found that 50 million people and about 10 million households still practice open defecation in the rural areas of Nigeria.

A high level of poverty among people is a factor found to be associated with open defecation practice in rural areas (Busienei et al., 2019). Gala et al. (2013) conducted a study exploring changes in open defecation prevalence in sub-Saharan Africa. They found that only a limited number of countries in sub-Saharan Africa have attained significant improvements in minimising open defecation practices. Besides, the countries' ability to conceive and execute open-defecation-free policies has to do with their level of economic development. Avoiding open defecation is a right step to defeating the menace of diseases induced by open defecation practices among people, irrespective of the sector of society. Construction of latrines and toilets is a means by which open defecation practices are minimised in the rural areas. However, most rural areas lack toilet facilities to guard against open defecation among locals. Bushes, water, and open fields are where people in rural areas practice defecation.

The existence of functional community-based groups could precipitate behavioural change with regard to open defecation practice among locals. Community-based open-defecation free campaigns ensure behavioural change by educating members with evidence-based, current information and high-quality information about open defecation practices and empowering them in the community against open defecation practices and opening their understanding of the need to embrace quality sanitation practices (Chapman et al., 2016). James, Olatunji and Onipede (2025) maintain that social media also provides a platform through which people access information about open-defecation-free environments. Community-based open defecation-free measures are very poor in most developing societies of Africa. Residents of rural areas, apart from the use of traditional newspapers to disseminate concerns of the communities, are dependent on the radio medium for their health information. Although many communities in developing nations like Nigeria have a number of community-based social and economic groups, these groups are hardly used for the purpose of health information, campaigns, and education in such communities. Community-based health campaigns, unlike campaigns in the conventional media of mass communication, such as radio, television, newspapers, magazines and the internet, offer a face-to-face information dissemination process, a door-to-door health-related message sharing processes and one-to-one exchange of health-related information between health education officers, health workers and members of the targeted communities. In most rural communities in developing nations, the absence of community-based health campaigns usually results in health illiteracy among people, as community-based health campaigns have been found to be more effective than any other means of health education and enlightenment among residents of rural areas in developing nations.

Open defecation is a global sanitation issue causing an estimated 1.6 billion deaths every year globally (Appiah-Effah et al., 2024). The number of people practising open defecation has

multiplied due to the population explosion in sub-Saharan Africa. Despite the efforts of the government to eradicate open defecation in Ekiti State, it is widely practised in most rural areas of Ekiti State. Access to information on sanitation and hygienic practices strengthens anti-open defecation practices. Absence of hygienic practices affects the health and economy of the family, community and nation (Sriram, 2011). Inadequate and improved sanitation is associated with deaths arising from diarrhoea, soil-transmitted infection, and trachoma (Boission et al., 2014). The eradication of open defecation practices in rural areas of Oye-Ekiti Local Government Area and the emplacement of positive attitudinal change with regard to open defecation practices among locals remain a serious challenge (Sriram, 2011). Community-based awareness campaigns to curtail and minimise the open defecation practices are conspicuously lacking in most rural areas of Ekiti State. Thus, the objectives of the study are to understand the roles community-based preventive health campaigns can play to eradicate open defecation practices in the rural areas of Oye-Ekiti Local Government Area, to understand the factors that account for the open defecation practices in the rural areas of Oye-Ekiti Local Government Area, to ascertain roles played by officers of environment sanitation to curb the incident of open defecation practice in Oye-Ekiti Local Government Area, and to know barriers that are inherent in community-based preventive health campaigns with regard to open defecation practice.

The study is anchored on the theory of planned behaviour. The theory of planned behaviour has been used to predict health intentions and behaviours. The theory of planned behaviour stresses an individual's determination and intention to engage in specific behaviour at a particular time and place (Japutra et al., 2019). The theory emphasises that an individual's behaviour is driven and controlled by behavioural intentions. As a theory of behavioural change, the theory of planned behaviour's main postulation is that intention is the main influencer of behaviour, and it is determined by an individual's attitude towards behaviour, subjective norms, and perceived behavioural control (Khani et al., 2022). Individuals' commitment and intention to embrace community-based open defecation-free campaigns will certainly impact their behaviour and attitudes towards open defecation practice in rural communities. In the absence of good intention to embrace community-based health campaigns with regard to open defecation, no change of behaviour could be attained with regard to open defecation practice.

The theory of planned behaviour is very relevant to this study because it emphasises the behavioural intention of the people either to embrace or ignore certain community-based health campaigns. Most residents of rural areas, on getting exposed to certain community-based anti-open defecation campaigns repeatedly, have a change of behaviour and intention regarding the ingrained open defecation practices among them.

2. Materials and Methods

Study Design and Participants

A mixed method was adopted for this study. Survey method and paired-depth interview were adopted to investigate community-based preventive health campaigns on open defecation practice among residents of rural areas in Oye-Ekiti Local Government Area. The survey method is the most widely used quantitative research method. Survey method is best used to

gain insights into the perceptions, thoughts, attitudes, behaviours, values, preferences, and opinions of a large population (Ali et al., 2022). A paired-depth interview is a tool used to collect qualitative data. It is also known as paired interviewing, and it involves one researcher interviewing two respondents or subjects simultaneously for the purpose of gathering data about how the pair perceives an issue under investigation (Lichtman, 2017).

A purposive sampling technique was used for this study. As Obilor (2023) affirms, a purposive sample is used to select samples or subsets of the population on the basis of certain characteristics or features possessed by such samples or subsets of the population. Two health education officers were selected in Oye-Ekiti Local Government Area because they possessed the characteristics that aligned with the study's objectives. The two health education officers were selected in Oye-Ekiti Local Government Area because they are knowledgeable about roles community-based preventive health campaigns can play to eradicate open defecation practices in the rural areas of Oye-Ekiti Local Government Area, understand the factors that account for the open defecation practices in the rural areas of Oye-Ekiti Local Government Area, ascertain roles played by health education officers to curb the incident of open defecation practice in Oye-Ekiti Local Government Area, know understand reason people in the rural areas practise open defecation in Oye-Ekiti Local Government Area, and they also know barriers that are inherent in community-based preventive health campaigns with regard to open defecation practice. Therefore, the director and deputy director of health education were selected for the paired-depth interview session.

A simple random sample is a subset of the population in which every member of the population has an equal chance of being selected or included in a study (Arieska and Herdiani, 2018). Adopting a simple random sample, two health education officers were selected in the Local Government Area because they are knowledgeable about open defecation practices and the efforts of the stakeholders to eradicate the menace. Copies of the questionnaire were given to the respondents in some selected rural communities in Oye-Ekiti Local Government Area. The communities are: Ayegbaju-Ekiti, Ire-Ekiti, Itapa-Ekiti, Itaji-Ekiti, Ijelu-Ekiti, and Imojo-Ekiti. The respondents selected are assumed to possess knowledge about the roles the community-based preventive health campaigns can play to eradicate open defecation practices in the rural areas of Oye-Ekiti Local Government Area and to understand the factors that account for the open defecation practices in the rural areas of Oye-Ekiti Local Government Area. The paired-depth interview and questionnaire items bordered on the roles of community-based preventive health campaigns can play to eradicate open defecation practices, the factors that account for the open defecation practices, the roles played by officers of health education officers to curb the incident of open defecation practice, reasons people in the rural areas practise open defecation and barriers that are inherent in community-based preventive health campaigns with regard to open defecation practice.

Convenience sampling enables researchers to select their sample conveniently. Thus, samples are selected on the basis of geographical closeness, expressed willingness to participate in the study (Obilor, 2023). The two health education officers were selected on the basis of their knowledge of the subject matter under investigation, availability, and geographical closeness to the researchers. We used a survey method and paired-depth interviews to harvest the opinions

and views of the respondents about the influence of community-based preventive health campaigns on open defecation practice among residents of rural areas in Oye-Ekiti Local Government Area of Ekiti State. In all, two respondents were selected for the paired-depth interview, while 400 respondents were selected across six rural communities in Oye-Ekiti Local Government Area. 70 respondents were given copies of the questionnaire at Ayegbaju-Ekiti, 70 respondents were given copies of the questionnaire at Ire-Ekiti, 70 respondents were given copies of the questionnaire at Itapa-Ekiti, 70 copies of the questionnaire were administered to the respondents at Itaji-Ekiti, 60 copies of the questionnaire were administered to the respondents at Ijelu-Ekiti, while 60 copies of the questionnaire were given to respondents at Imojo-Ekiti. However, of the 400 copies of the questionnaire administered to the respondents, 376 were returned and found useful and analysed to enrich the study.

Data Collection Procedure

This study used two methods to gather data: a questionnaire and an interview guide. We selected two health education officers who are knowledgeable about the subject matter of the investigation. 376 copies of questionnaires were given to people above 18 years. Research assistants were trained to administer the copies of the questionnaire to the respondents. Research assistants, monitored and guided by the researchers, moved from one house to another, one location to another, including the shopping malls, to administer the copies of the questionnaire to the respondents in the selected rural areas in Oye-Ekiti Local Government Area of Ekiti State.

Data Analysis

Researchers ensured a high sense of confidentiality responsibility as the identities of the interviewees were never disclosed due to ethical considerations. Data gathered through paired-depth interviews were analysed thematically, interpreted, and presented using explanation building in line with research objectives. Inferences were made about the roles played by health education officers to curb the incidence of open defecation practice, the reasons people in the rural areas practise open defecation and barriers inherent in community-based preventive health campaigns with regard to open defecation practice. Data gathered through the questionnaire were analysed, interpreted and presented using frequency and percentage.

3. Results

Quantitative Data Analysis, Interpretations and Presentation for Survey Method

Table 1: Roles Played by Community-Based Open-Defecation Free Campaigns

Items	Frequency	Percentage
Enlightenment Roles	30	8%
Educational Roles	92	24.4%
Informational Roles	53	14.1%
Mobilisational Roles	201	53.5%
Total	376	100

Source: Researchers' Fieldwork, 2025

Table one shows that 30 respondents representing 8% affirmed that community-based open defecation-free campaigns play enlightenment roles, 92 respondents representing 24.4% averred that community-based open defecation-free campaigns play educational roles, 53 respondents representing 14.1% maintained that community-based open defecation-free campaigns play informational roles, while 201 respondents representing 53.5% stated that community-based open defecation-free campaigns play mobilizational roles in their communities.

Table 2: Factors that Account for the Open Defecation Practices in Oye-Ekiti LGA

Items	Frequency	Percentage
Population Growth	40	10.6%
Unimproved Water Supply Coverage	187	49.7%
Lack of Household toilets	112	29.8%
Poverty	37	9.9%
Total	376	100

Source: Researchers' Fieldwork, 2025

Table two shows that 40 respondents representing 10.6% averred that population growth accounts for the open defecation in Oye-Ekiti Local Government Area, 187 respondents representing 49.7% affirmed that unimproved water supply coverage accounts for the open defecation practice in Oye-Ekiti Local Government Area, 112 respondents representing 29.8% averred that lack of household toilets account for the open defecation practice in Oye-Ekiti Local Government Area, while 37 respondents representing 9.9% stated that poverty accounts for the open defecation practice in Oye-Ekiti Local Government Area.

Qualitative Data Analysis, Interpretations and Presentation for Paired Depth Interview

3.1 Theme 1: Roles Played by Health Education Officers to Curb Open Defecation Practice

Data gathered from the paired-depth interview revealed the roles played by health education officers to curb open defecation practices. The interview session showed that Health Education Officers shoulder the responsibilities of enlightenment campaigns in the rural communities in Oye-Ekiti Local Government Area. The interviewees are the Principal and the Senior Health Education Officers in Oye-Ekiti Local Government Area. Providing more information, an interviewee, who is a Principal Health Education Officer in Oye-Ekiti Local Government Area, said that:

Most of what we do is to enlighten people in the rural areas of this Local Government Area to embrace cleanliness, neatness and sanitation, especially regarding open defecation practice. We understand that open defecation causes a lot of health issues such as dysentery, diarrhoea, cholera and many more. We usually go round those villages occasionally to enlighten people about the danger and health effects of open defecation practice. We usually meet them on a market day to deliver our messages. We use public address system to deliver messages against open defecation and other diseases. Besides, we also move from one house to another to educate women about environmental sanitation.

We urge them to clean their gutters and waterlogged spots close to their houses, and we also enlighten them on the need to have a household well to enable them to have access to water freely for sanitation purposes.

Another interview participant, who is a Senior Health Education Officer in Oye-Ekiti Local Government Area, said that:

We move door-to-door, house-to-house, and market-to-market to enlighten the people in the rural areas of Oye-Ekiti Local Government Area on the need to embrace water, sanitation and hygienic practices. As a team, we usually enlighten the rural populace to have a sustainable water system because water is very important to hygiene and sanitation. Besides campaigning against open defecation practice face-to-face, we also brief religious and traditional rulers of each of the rural communities in Oye-Ekiti Local Government Area about the danger of open defecation practices among locals. Being an important stakeholder of each of the rural communities, anti-open defecation campaigns originating from the traditional and religious leaders are widely embraced by the people in the rural areas. Besides, the Local Government Area also partners the traditional rulers and religious leaders to sink mechanised boreholes and motorised wells for the people in the rural areas of Oye-Ekiti Local Government Area.

3.2 Theme 2: Barriers to Curbing Open Defecation Practice in Rural Communities

Data gathered from the paired-depth interview showed the barriers to curbing open defecation practice in rural communities of Oye-Ekiti Local Government Area. The interview session showed that barriers to the issue of open defecation practice have been poverty and illiteracy. The interview participants are the Principal and the Senior Health Education Officers in Oye-Ekiti Local Government Area. Shedding more light on this, an interviewee, who is a Senior Health Education Officer in Oye-Ekiti Local Government Area, said that:

We have always had issues with the illiterate segment of the population in the rural communities of Oye-Ekiti Local Government Area. Most of these people do not understand the importance of hygienic practices. Even during the pandemic or outbreak of a disease, they hardly embrace the health advisories. They can hardly change their ingrained practices of going into the bushes to defecate, even when some of them have household toilets and latrines. Based on our experiences with the residents of the rural communities in this Local Government Area, extremely poor understanding of good, healthy living has shut their minds against hygienic practices. However, when their community stakeholders are involved in the enlightenment campaigns against open defecation practices and other forms of anti-health behaviour, they respond favourably to our health campaigns.

Another interviewee, who happens to be a Principal Health Education Officer in Oye-Ekiti Local Government Area, said that:

Poverty is another issue that has blocked the eradication of open defecation in Oye-Ekiti Local Government Area. Most of the residents of the rural communities in this Local Government Area do not have either latrines or toilets for defecation purposes. Most of the resort to body of water, streams, bushes, open fields and drainages for defecation purposes. Due to the harsh economic situation in most rural communities, they can barely afford to build a latrine for their convenience. Human faeces litter some communities' river banks, bushes, streams and drainages. Stench that oozes out of the faeces causes all manner of sicknesses such as cholera, dysentery, malaria and typhoid. Although different means of enlightenment programmes have been emplaced to fight the menace of open defecation practice in the Local Government Area, the attitude of the residents of those rural communities to embrace those behavioural change messages is very poor.

4. Discussions

Findings showed that most respondents stated that community-based open defecation-free campaigns play mobilizational roles in their communities. The findings align with the position of Chapman et al. (2016), who found that community-based open-defecation free campaigns ensure behavioural change by enlightening members with evidence-based, current information and high-quality information about the dangers of open defecation practices. The essence of community-based open defecation-free campaigns is to mobilise people to embrace attitudinal and behavioural change against open defecation practices in their rural communities. Community-based open defecation-free campaigns are emplaced to mobilise the members of the rural communities to embrace quality sanitation and hygienic practices in the rural areas. Findings revealed that most respondents affirmed that unimproved water supply coverage accounts for the open defecation practice in Oye-Ekiti Local Government Area. The availability of water is crucial to ending the practice. The findings are in tandem with Schaefer's (2017) finding that open defecation is one of the major public health concerns associated with poor sanitation, poor hygienic practices, and inadequate water supply coverage.

Findings showed that Health Education Officers shoulder the responsibilities of enlightenment campaigns in the rural communities in Oye-Ekiti Local Government Area. The findings are in line with the position of Abdulkadir et al., (2023) who found that governments at all levels have emplaced water, sanitation and hygiene campaigns (WASH) to curb the incident of open defecation practices among people, inequality in the access to sanitation in rural areas and poor awareness of the essence of hygienic practices have been a challenge to defeating open defecation practices in rural areas.

Findings revealed that poverty and illiteracy have been barriers to open defecation practice. The findings are in sync with the position of Nnindini and Dankwah (2023), who found that an estimated 14% of people in sub-Saharan Africa still practise open defecation, especially those in rural areas, who face challenges of poverty and a stark lack of social facilities.

5. Conclusion and Recommendations

Community-based open defecation-free campaigns play mobilizational roles in rural communities. Community-based stakeholders, being the closest to the people, must be included

in the anti-open defecation-free campaigns of every Local Government Area in Ekiti State and by extension, all the Local Government Areas in Nigeria. An office must also be dedicated in every Local Government Area to oversee the affairs of the community-based stakeholders with regard to all health campaigns meant for all rural communities in Nigeria.

Unimproved water supply coverage accounts for open defecation. Governments at all levels must partner with Charity Organisations and other Non-Governmental Organisations to make mechanised or motorised boreholes available in the rural communities of Oye-Local Government Area and all other Local Government Areas in Nigeria to stop the growth of open defecation in those areas.

Education officers shoulder the responsibilities of enlightenment campaigns in the rural communities. Local and state governments, through health education officers, ensure strict compliance with the open defecation-free initiatives in affected rural communities in Oye-Ekiti Local Government Areas. Laws that enforce the use of latrines and toilets must be enforced in rural communities of Oye-Ekiti Local Government Area. And defaulters of the laws must be brought to justice to serve as a deterrent to other people inclined to continue practising open defecation.

Barriers to the issue of open defecation practice have been poverty and illiteracy. Attitudinal and behavioural change campaigns targeted at the illiterate members of the rural community of Oye-Ekiti Local Government Area must be put in place to kill the growth of open defecation practices in those rural communities. Health education officers must also be included and involved, not only the community stakeholders but also ordinary members of those rural communities in the conception and execution of sensitisation and enlightenment campaigns meant for the rural communities of Oye-Ekiti Local Government Area.

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