

The Menace of Open Defecation and Diseases in The Nadowli-Kaleo District, Ghana.

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Abstract: A good sanitation practice is very imperative in human lives. Hence, defecating openly is a bane to human health killing children under five years in every 15 seconds. Efforts made by philanthropists to ameliorate this canker proved futile while there are still one billion people defecating openly globally despite the pragmatic strides. In Ghana, for instance, US\$290 million is spent on open defecation yearly when the government needs US\$79 million to combat the menace. Discouragingly, Ghana improves its sanitation by 1% yearly and the Upper West Region is ranked second in open defecation with 78.7%. In the Nadowli-Kaleo district, people are seen defecating into gutters, toilet premises and yet much has not been done. The study investigates factors influencing open defecation in the Nadowli-Kaleo district. The study employed case study design where purposive sampling technique was used to select the communities and respondents. Primary and secondary data were used where Interview guides were utilised and analysed qualitatively. The study revealed among others that inadequate toilet facilities, filth, and attitude are the main causes of open defecation. Socio-cultural, economic, health factors influenced people to resort to defecate openly. This pelted residents with diarrhoea, typhoid, dysentery and snake bites. The study concluded that open defecation constituted a real danger to people's health. It was recommended that the government should support communities with some incentives to empower members to build their own toilet facilities. Environmental sanitation officers should endeavour to ensure proper supervision for toilets to be emptied to eschew unpleasant scent.

Keywords: Menace, Defecation, Diseases, Sanitation, Health

Introduction

Access to improved latrines at home and in public places is a crucial defence against faecal-oral transmission of pathogenic agents to humans and the environment (Mara et al, 2010; Kvarnstrom et al, 2011). This however has been always the opposite, because people around the world, especially in the developing countries cover great distance to access toilet facilities (Arku, 2010). This problem has been noted by the United Nations for which they have endeavoured to make sanitation facilities accessible to 1.8 billion people between 1990 and 2010 (Connor, 2015). Yet, the problem persists. In consequence, there are still 1.1 billion people who have no access to any form of toilet facility which compels them to defecate openly, thereby posing serious sanitation threats to human lives (Feris, 2015). According to Annex (2014), open defecation threatens people's lives with cholera, hepatitis A, diarrhoea, dysentery and other sanitation related diseases, increasing mortality rate of people particularly children globally for which Sub-Saharan Africa is not an exception. Water Aid report (2014) revealed that out of the 1.1 billion people around the world practicing open defecation, 227 million are in Sub-Saharan Africa with many living in rural areas.

In Ghana, for instance, the country is only able to improve its sanitation by 1% every year (Water Aid, 2012). The early assertion by Bartram and Cairncross (2010) espouse that household latrines in Ghana are inadequate and few public toilets are over utilized and poorly managed. The author further noted that the cost of accessing toilet facilities in Ghana has been a major challenge especially among the poor. Mazeau et al (2014) corroborate that the average cost of public toilet per entry often varies from 10 pesewas (US\$ 0.04) (for a "public managed" toilet) to 25 or 30 pesewas (US\$ 0.12) (for a "private managed" toilet). Osumanu and Kosoe (2014) opine that there is a high prevalence of open defecation in all the ten (10) regions of Ghana as a result of lack of access to toilet facilities. The Upper West Region for instance, ranks second in open defecation with a percentage of 78.7 (Water and Sanitation Sector Monitoring Platform, 2013). In the Nadowli-Kaleo District, open defecation is unacceptably high. Though the local government has endeavoured to migrating the district on to the CLTS programme as part of WASH programme which aims at shaming communities from open defecation, the practice is in the ascendency. People, especially children are seen squatting around the premises of public toilets and bushes defecating openly (Dangah, 2012). Therefore, it is not surprising that, only 12.5% of the population have access to toilet facilities at home, 9.9 % use public toilet facilities while 77.6 % of the households have no toilet facility and resort to the bush and fields as a toilet facility (GSS, 2013). This indicates that open defecation is at its peak posing serious sanitation threats to the inhabitants (GSS, 2014). A report by GSS (2015) reiterated that diarrhoea, one of the diseases caused by open defecation ranks third in the Nadowli-Kaleo District. It is against this drawback that

the study sought to investigate the state of open defecation, factors influencing open defecation practices and implications of open defecation. This paper is subsumed into four sections which includes introduction, methods findings and discussion.

Methodology

The study was conducted in the Nadowli-Kaleo District of the Upper West Region of Ghana. According to the GSS report (2014), Nadowli-Kaleo District is centrally located in the Upper West Region of Ghana. The district is bordered to the South by Wa Municipal, West by Burkina Faso, North by Jirapa and Lambussie-Karni Districts and to the East by the Daffiama-Bussie-Issa District. A case study design was employed to collect in-depth information from the respondents as asserted by Yin (2015). This helped to solicit deeper information of the topic under investigation. This confirms Yin (2015) allusion that, case study design offers an in-depth study of a particular situation and narrows down to a very broad field of research into one easily researchable topic. This design was imperative because it allowed the use of a qualitative approach which permits the utilisation of non-probability sampling and unstructured interview guide to target appropriate respondents. The study targeted 52 household’s heads, 2 Environmental sanitation officers and a healthcare Officer. This was adequate to attain the standards of thematic saturation in qualitative research as stressed by Creswell (2014). A purposive sampling was used to select two communities within Kaleo and the respondents. This was done via purposive criteria (Yin, 2003). Primary and secondary data were sourced. The data were analysed qualitatively via constant comparative analysis where concepts and ideas from the interviews were coded and categorized into like and unlike themes.

Findings and Discussion

This section presents the findings of the study, which borders on the state of open defecation, the factors influencing open defecation practices and the implications of open defecation.

The state of open defecation in the selected communities

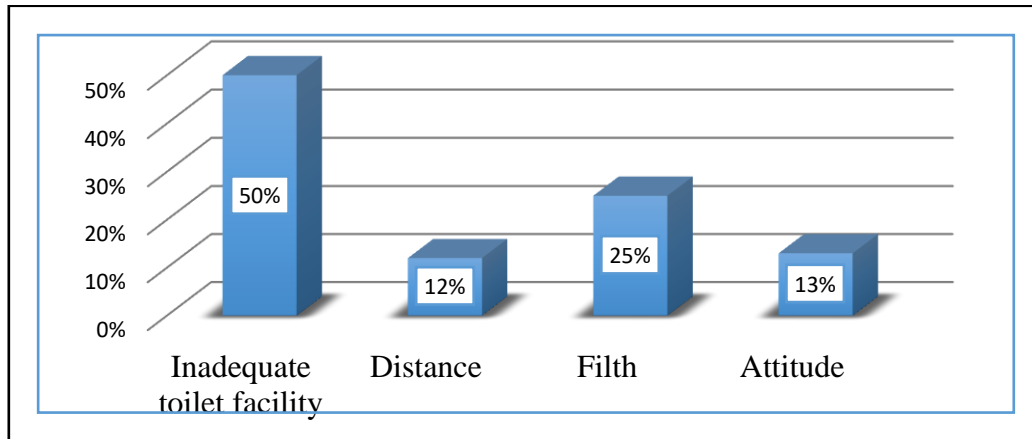
Table 1: households’ toilets in the communities

Number of households with or without toilet facility	Number of households’ toilets in the selected communities	Percentage (%)
The number households with toilet facility	8	15
The number of household heads with toilet under construction	5	10
The number of household heads whose toilet has been destroyed by the rain	6	12
The number of household heads without toilet facility	33	63
Total	52	100

Source: field work, 2016

From table 1, majority (63%) of the respondents have no toilet facility at home, some of the respondents have had their toilet facilities destroyed by a heavy rain, only 15% have an effective toilet facility in use and 10% have their toilet under construction. Therefore, this is a clear indication that majority (85%) of the respondents have no access to toilet facilities and resorted to using the forest as a toilet facility since the communities have a public toilet. This confirms Ghana Statistical Service Report (2014) that majority (77.9%) of the households do not have access to toilet facilities and this impels them to resort to open defecation in the communities thereby fouling the environment. In addition, respondents were interviewed to solicit information about the actual causes of open defecation. Figure 1 details their responses.

Figure 1 Respondents' views on the causes of open defecation



Source: fieldwork, 2016

Figure 1 indicates that majority (50%) of the respondents attributed open defecation to inadequate toilet facilities within the various houses and in the community at large as indicated in this study earlier. Additionally, 25% of the respondents explained that filth at the toilet facilities, especially the public toilet motivate them to defecate openly. In subsequence, 18% of the respondents disclosed that attitudes and distance are the reasons for which they defecate in the bush or field. The study revealed that children and other relatives who use the household toilets and public toilets defecate on the floor of the toilet instead of defecating directly into the toilet holes which makes the toilet unhygienic. An elderly woman expressed the view that:

“It is not advisable using the toilet facility at all, the toilet is too dirty and children defecate all over. There are always heaps of faeces on the floor; you cannot get a place to even stand to defecate, so it is important using the tick forest behind the toilet”
(field interview, 2016).

This statement indicates that respondents wished to use the toilet facility, especially the public toilet, but defecating haphazardly at the toilet facilities makes it unattractive for users. This makes the place very dirty and smelly for which users prefer to resort to the bush to the use of the toilet facilities. This refutes United Nations Report (2013) that majority of the people prefers using the bush as their toilet facility to the using of public toilet because of their attitudes. Per the views stipulated in figure 1, respondents were of the view that inadequate toilet facility and filth, especially in the public toilets are the main causes of open defecation as espoused by Mazeau et al (2014). Furthermore, 13% of the respondents disclosed that open defecation is at its peak due to peoples' attitude of refusing to use toilet facilities either at home or the public. The assemblyman expressed the view that even though, toilet facilities are inadequate the people would fail to use the toilet when new ones are built since they have acclimatised themselves with the free range (open defecation). In addition, few respondents were of the view that, the distance from their houses to the toilet is very far. An elderly in one of the communities remarked that:

“This community has no toilet facility and the nearby community has a toilet, but looking at the distance from my house to the toilet is very far. If want to use the public toilet I might ease on myself. Hence, using my backyard farm or any nearby bush is more convenient than visiting the toilet” (field interview, 2016).

The narration shows that distance makes it difficult for people, especially children, the sick and the aged to utilise the facility which impels them to resort to open defecation thereby escalating the state of sanitation.

Plates indicating the state of public toilet and open defecation site in the communities

Plate1: community toilet



Plate 2: Public toilet surroundings



Plate 3: Inside the public toilet



Plate 4: Household toilet



Plate 5: Open defecation site



Source: Fieldwork, 2016

Plate 1 and 2 indicate the state of the public toilet and its environs while plate 3 shows the inside of the toilet. Plate 4 shows a household latrine in the community. The surroundings of the public toilet in plate 2 lie a refuse dump where community members use as a toilet facility instead of the constructed building. According to the respondents, the public toilet rooms are only four which triggered long queues and hence resort to defecating openly. Plate 5 indicates the open defecation area of the communities. It was observed that the open defecation site is also just behind the toilet facility in the community. The public toilet is flanked with refuse dump and forest as depicted in plate 2 and 5. This influenced them to openly defecate than using the toilet. This indicates that the nature of the toilet precludes people from using the public toilet. It was observed that even though, the CLTS programme is aimed at shaming members from open defecation and encouraging households to build their own toilet facilities, many households have no toilet at home. This influence them to use the forest, backyard farms and refuse dumps as toilet facilities.

Factors influencing open defecation

Socio-cultural factors influencing open defecation

Majority of the respondents, especially the household heads believed that using the filthy, heat and smelly toilet facility is an abomination which demeans their dignity. They expressed the view that the bad odour emanating from the toilet leaves a bad scent on their entire body which makes it difficult to mingle with other individuals. One of the respondents stated that:

'I was at a gathering one day and I had nature's call to attend to, when I returned to the gathering, people were asking about where I was coming from, some even asked me whether I threw myself into the faeces in the toilet when there is free range as an alternative. I was disrespected at the gathering and got very embarrassed; I decided not to use the toilet again' (field interview, 2016).

The expression of the respondent indicates that, the toilet facility, especially the public toilet is very smelly and filthy which disgrace them by leaving a bad odour on their bodies when they visit it and that prevent them from using the toilet thereby resorting to openly defecate. The study revealed that it is culturally impermissible for squatting on someone's faeces. To the respondents, one can incur curses on themselves when squatting on someone's faeces, because, one may not know the person on whose faeces one squats and this gives bad luck. According to the respondents, when a person's faeces fall on top of the other, that person would be unsuccessful in life. In addition, the respondents believed that visiting the toilet, especially the public at night endanger one's life because, evil spirits such as the witches and wizards hide in the toilet, especially the public toilet to harm humans. Laying emphasis on this, a female respondent confirmed that:

'I had a diarrhoea at one night and I hurriedly ran to this public toilet and I saw something very tall like human heading towards my direction from the toilet. Since that day I have vowed not to visit the toilet again, I prefer the bush to the using of the public toilet' (field interview, 2016).

Taking this statement into cognizance, the fellow believed that, it is a witch or wizard that pursued her that night. The study further revealed that respondents believed visiting the toilet, particularly the public in the night endangers one's life, because the sound of the frogs, fireflies and other animals believed to be witchcraft. They believe some spirits disguised themselves into such forms of animals to threatening humans. The respondents' believed that some evil spirits turned themselves into these animals to enable them feed on the faeces. The respondents further asserted that it is not culturally right to share the same toilet facility with your in-laws. The respondents continued that sharing the same toilet facility with a rival jeopardises ones life, especially at home. The explanation by the respondents indicate that the cultural belief of the people influence their behaviour to defecate in the open. This is in consonance with the findings of O'Connell (2014) and Water Aid Report (2014) that, some socio-cultural factors influenced people to resort to open defecation.

Economic influence of open defecation

Understanding why community members are not using household toilets brought about many fantastic responses. The study disclosed that respondents wished to construct latrines destroyed by heavy rains but they are financially handicapped, which impels them to resort to open defecation. They were of the view that, lack of money to construct their own household's toilet compels them to defecate in the bush and into polythene bags for which they later throw them into the bush or the field. Respondents using KVIP or the pit latrine that requires dislodgment disclosed that, they find it difficult in getting the cesspit emptier trucks to empty their toilets due to financial constraints and this impels them to abandon their household toilet facilities thereby resorting to the forest and refuse dumps.

Agricultural influence of open defecation.

Majority of the respondents indicated that defecating in the backyard farm fertilizes their farm products to yield in bountiful. This confirms a statement by a respondent that:

'My children and I use the backyard farm as a toilet facility to serve as fertilizer for good yields of my crops'. Now look at the corn grown at the farm, it has yielded bountifully for which these Chinese fertilizers cannot fertilize the land this way; therefore, it is better not to waste this fertilizer on the toilet facility' (field interview, 2016).

The statement of the respondents indicates that, defecating in the backyard farm helps to boost their crop yields which is even better than the imported compound fertilizers. Hence, there is no need to waste this fertilizer and purchase an exorbitant fertilizer from the market which is unaffordable. Additionally, majority of the respondents expressed the view that defecating in the bush helps the farmers' crops to yield plenteously and for that matter, it is better to always defecate in the forest to fertilize the land. Respondents disclosed that defecating in the bush is another way of feeding the hungry livestock such as pigs and domestic birds. A young man stated this:

'...faeces help the pig farmers reduce the cost of feeding on the pigs because when we are defecating in the forest, you will see these animals standing behind us and making funny noises, waiting for us to finish quickly for them to devour the faeces; to me, the fattest pigs in this community are as a result of the faeces they feed on' (field interview, 2016).

Per this statement, the respondent was of the view that, defecating in the bush and the field is another way of helping pig farmers to feed their hungry pigs and thereby cutting down the cost of feeding the animals.

Health factor influencing the open defecation

Majority of the respondents explained that, the maggots at the toilet facilities, the bad odour and the heaped faeces cause them to feel nausea upon seeing things of such nature. They were emphatic that the filthy toilets cause them body itching. With this, they defecate in the forest and in the backyard farm to avoid these scenes. Others were of the view that, the bad odour and the heat that emanate from the toilet holes are unhealthy. To them, inhaling the unpleasant air, causes people, especially the asthmatic person

to suffer at the toilet. The respondents alluded that it is imperative to visit open defecation areas to eschew these unacceptable scenes. A traditional female elder expressed the view that:

'I don't use the toilet, because there is much heat emanating from the beneath of the toilet and this heat makes me contract candidiasis. So I prefer resorting to open defecation to the using of public toilet for which I have to seek for treatment after its use' (field interview, 2016).

The narration above indicates that the female respondent resorted to defecate in the open for the fear of contracting candidiasis.

Implications of Open Defecation on the people in the Community

Health Implications

Majority of the respondents explained that they often experience diarrhoea as the most common disease in the communities for which it mostly affects their children. The respondents emphasised that their children experienced headaches, frequent urination including urine colour changes, and feeling nausea which makes them drink too much water. The healthcare officer also corroborated the statement of the respondents by expounding that, children mostly contract diarrhoea since they always play and crawl on the ground soiled with faeces and walk barefoot on farm infected lands. The officer reiterated that diarrhoea is among the common cases of diseases in the communities in the district. This affirms Ghana Statistical Service Report (2013) that, diarrhoea is the third most common diseases in the communities due to the continuous practice of open defecation. The study discovered that typhoid and dysentery are among the diseases troubling them in the community which affects the health wellbeing of the people. In addition, female respondents added that at times they ended up exposing their private parts to the male defecator which jeopardises their lives. A female respondent stated this:

'My young daughter was nearly raped by some miscreants' boys in the bush upon seeing the private part of my daughter' (field interview, 2016).

Additionally, the respondents explained that they are always confronted with some wild reptiles such as snakes which at times bite them. Majority of the respondents disclosed that defecation in the bush sprinkles faeces on their bodies especially in the rainy season which causes body itching. Laying emphasis on this, a male respondent stated that:

'I went to the field to ease myself and I saw maggot infested diarrhoea faeces being eaten by a fowl, my whole body itched until I visited the hospital for treatment, but I have no other option than to go to the bush since I have no toilet in my house and the public one is not a conducive place to go' (field interview, 2016).

Implications on the community

The environmental sanitation officer disclosed that the selected communities are among the communities noted to be open defecation areas, this does not auger well for these communities. It was observed that, there are many flies in the community, especially in the morning. When one is going to the open defecation sites, there will be a myriad of flies following the person. Again, the members complain of many mosquitoes for which the environmental sanitation officer disclosed that since some members of the communities have reserved certain areas as defecation areas, they hardly weed the place for which those bushy areas breed mosquitoes to the detriment of their health.

Conclusion and Policy Implications

Good sanitation as essential commodity which brings good health is of low quality in developing countries like Ghana. Consequently, people in these countries have to ease themselves when the need arises which has escalated the sanitation situations causing harm to many individuals. It is therefore not surprising that in 2014 Ghana, Nigeria and other developing countries in Africa recorded the highest cholera and diarrhoea cases in the region, which claimed many lives, particularly children, for which it has been reported that, diarrhoea kills children under five in every 15 seconds and degrading the environment in the region. Therefore, it is very imperative for community health and environmental sanitation officers to ensure good supervision on both household and public toilets for cleanliness. The study revealed among others that open defecation in the communities is as a result of inadequate toilet facilities, both public and household toilets, filth and attitude in the communities. The causes of this canker is attributed to socio-cultural, economic, agricultural and health factors. These factors have bred diseases such as diarrhoea, typhoid, dysentery and reptile bites which at times casualty is recorded. Poverty was identified as one of the variables coercing community members to defecate openly, because those who cannot afford using the public toilet would have wished to construct their own toilet facilities but they are financially handicapped and this propels them to resort to open defecation. Therefore, it is important for the government and other philanthropists to come to the aid of the people in the communities by giving them some incentives to empower them and to enable them improve on their agricultural products in order to earn money for other developmental projects. When this is done, members would be able to get money to dislodge faeces from toilet facilities rather than abandoning them to resort to the bush. Environmental sanitation officers should endeavour to ensure proper supervision for toilets to be emptied.

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