Assessment of Open Defecation Among Staff and Students of College of Health Sciences and Technology, Idah, and Its Effects

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Abstract- This project was to investigate the problem associated with open defecation, its effect and ways in which it can be controlled in college of health science and technology, Idah Kogi state. Simple random sampling was used to sample one hundred respondents for this study. The instruments used for data collection for this project work were questionnaire and personal observation. The data obtained were analyzed using tables and simple percentage. the result reviewed that open defecation is practiced in the study area and its cause by the absence of enough sanitary convenience, absence of water and poor maintenance of few pit latrines in the college. The common disease suffering by staff and students are cholera, dysentery, typhoid etc. which are due to open defecation. The studies recommended that the state government and college authority should provide sanitary conveniences to the college and law should be made on the use and maintenance of those sanitary convenience provided, Portable water supply in the college to maintain those sanitary convenience provided.

Indexed Terms- Open Defecation, Assessment, Staff, Students

I. INTRODUCTION

Open defecation is defined as the practice of defecating in open fields, waterways and open trenches without any proper disposal of human excreta [Bosch –pintoc ,lanata of black RE . maternal and child health. United States; spring; 2009. the practice is rampant in India and the country is the home to the world largest population of people who defecate in the

open and excrete close to 6500 tons of faces into the environment each day kulabako R.N etal [2010] open defecation pose a serious threat to the health of children in India .children weakened by frequent diarrhea episode are more vulnerable to malnutrition ,stunting and opportunistic infection such as pneumonia ;lung inflammation caused by bacteria or viral infection , in which the air sacs fill with pus and may become solid inflammation may affect birth lungs [double pneumonia] or only one [single pneumonia]

practice is common where The sanitation infrastructure and services are not available .Even if toilets are available behaviour change efforts may still be promote the use of toilets. Open defecation free is a term used to describe the communities that have shifted to uses toilets instead of open defecation, this can happen for example after community -led total sanitation programs have been implemented. Open defecation can pollute the environment and cause health problem and disease. High levels of open defecations are linked to high child mortality, poor nutrition, poverty and large disparities between rich and poor. ending open defecation is an indicator being used to measure progress towards the sustainable development goals number 6, extreme poverty and lack of sanitation are statistically linked .therefore, eliminating open defecation is thought to be important part of the effort to eliminate poverty.

In ancient times there were, ore spaces and less population pressure on land, it was believed that defecating in the open causes little harm when done in areas with low population, forest or camping type situation. With development and urbanization, open defecation started becoming a challenge and thereby an important public health issue. With the increase in population in smaller areas, such as cities and towns more attention was given to hygiene and health .as a result there was an increase in global attention towards reducing the practice of open defecation.

Open defecation is a taboo topic, masked in mystery, which is associated with far too many diseases, sufferings, indignity, social and psychological impacts that women have to endure as its outcomes. Many women and girls in Lower-Middle Income Countries are disproportionately affected by the lack of sanitation facilities which is a serious threat to their health and mental well-being, and struggle with managing their bodily function of defecation on daily basis, and are consistently compelled to adopt mitigating strategies. The health and social needs of women and girls remain largely unmet and often sidelined in circumstances where toilets in homes are not available. Further research is critically required to comprehend the generalized effects of open defecation on girls and women.

The main objective of this research work was to evaluate the causes and effects of Open Defecation on the Staff and Students of College of Health Science and Technology, Idah, Kogi state, Nigeria.

The Specific Objectives

- 1. To determine the method of defecation in the study area
- 2. To identify factor responsible for open defecation in the study area
- 3. To identify the common disease affecting the habitants of the study area
- 4. To make recommendation on findings

Research Questions

- 1. What methods of open defecation in the study area be determined?
- 2. What are the factors responsible for open defecation in study area be identified?
- 3. What are those common diseases affecting the study area identified?
- 4. What recommendations can be made on findings?

II. MATERIALS AND METHODS

3.1 Study Area

The school (Kogi State College of Health and Technology, Idah) which is now a college was established by edict 1977. It actually took off in July 1976 on Temporary site located in the town then in development association hall now transformed to Dr. Achema Handball stadium with an initial intake of the one hundred and twenty (120) trainees, Rural Health Assistant. The establishment and location of the school at idah which is now a college was the handwork of late Pharmacist Moses Ogu. This singular act has left an indelible mark in the page of history of the school. In 1979, the school was moved to the second temporary site which is now occupied by the governor's loge, from then the school started expanding as more courses were introduced and in 1980 the training of public Health Assistant commenced. In 1981, the school was moved to the permanent site, now present location, it now trains ten (10) cadres at certificate Technician, National Diploma (ND) Professional Diploma and Higher National Diploma (HND) levels. The cadres are Environmental Health Officers, Technician, Senior and junior cadres of community Health Extension workers, Medical Laboratory Technician, Health Information management, Food Hygiene, Health Education and Promotion, Pharmacy Technician, Dental surgery Technician, Epidemiology, Disease control, and Public Health. It's worthy to note that efforts are being made at various to include more training programs in the institution such as Nutrition and Dietetics, Ophthalmology Technicians, Biomedical Engineering, E.T.C. At the moment, the college has a total population of two thousand (2,230)Students. Historically, the law establishing the college was signed by the then governor Capt. Idris Ichala Wada on 13th March 2014 and the pioneer Governing council was inaugurated on the 5th November 2015 at the Hallowed chamber of Government House Lokoja. The structure put in place in the college in recent times has enable the institution to now complete favorable with others.

3.2 Population of the Case Study Area

The population of the Kogi state college of health science and technology Idah has about two thousand two hundred and thirty (2230) students teaching and non-teaching staff. The institution consists of ten department namely

- 1 Public health department
- 2 Environmental health department
- 3 Community health department
- 4 Medical laboratory department
- 5 Food and hygiene department
- 6 Pharmacy department
- 7 Health education and promotion
- 8 Epidemiology and disease control department
- 9 Dental surgery technician department
- 10 Health information management

3.3 Sample Size and Sampling Technique

For the purpose of this research to have acute finding, simple random sampling techniques was used to select 100 respondents for the work.

3.4 Instrument Design

The methods adopted to generate data for this survey are Questionnaire, Personal observation and Interview

3.5 Method of Validation Instrument

The researcher used the pre-test and test to validate the instrument administered for data collection, the researcher ensure that the information collected were valid and accurate for authenticity. The researcher compared the information gotten from similar case to ascertain the validity of questionnaire used

Pre – Test: The researcher drafted question inform of questionnaire which were given to the supervisor to scrutinized

Test: The researcher distributed 100 copies of questionnaire to staff and student in Kogi state college of health science and technology Idah, test was carried out within the study area through random sampling and personal observation to detect the open defecation in practice in the study area.

3.6 Method of data analysis

The researcher organized the data through the answers provided by the respondents and analyzed using tables, simple percentage. A Self-structured questionnaire was administered. The researcher prepared and provided 100 hundred copies of questionnaire which were distributed to student and staff. The questionnaire consisted of sixteen questions which were in accordance with the specific objective of the study. One hundred questionnaires were distributed and ninety were retrieved. In summary twenty copies were administered to staff and eighty were administered to the students. The researcher organized the data through the answer provided by the respondents are analyzed using simple percentage and table

3.7Limitation of the study

- 1. limited access to information
- 2. time constraint
- 3. scope of discussion
- 4. economics situation
- 5. fear of relevant information
- 6. Lack of relevant literature in the library

III. RESULTS

A total of 100 copies of questionnaires were distributed for the study but 90 were retrieved

This deals with the analysis and presentation data. The researcher used table and simple percentage to carry out analysis was based on each question chosen from the questionnaire as regard to the respondent

HYPOTHESIS 1

The hypothesis will be tested based on response to the question 3 in the questionnaire which stated; Have you ever come across an open defecation in the college?

| TABLE 4.1 | | | | | |
|-----------|-----|-------|-----|---------|--|
| RESPO | STA | STUDE | TOT | PERCENT | |
| NSE | FF | NT | AL | AGE | |
| YES | 5 | 70 | 75 | 83% | |
| NO | 15 | 5 | 15 | 17% | |
| TOTAL | 20 | 75 | 90 | 100% | |

PERCENTAGE OF YES (75 ×1)/(90 ×100) = 83%

PERCENTAGE OF NO (15 ×1)/(90 ×100) = 17% Majority of the respondent to the distributed questionnaire is yes, it shows that truly open defecation is practice in kogi state college of health science and technology idah.

HYPOTHESIS 2

The function will be tested based on the response to question 3 which state, have you ever defecated in the college premise?

| RESPO | STA | STUDE | TOT | PERCENT |
|-------|-----|-------|-----|---------|
| NSE | FF | NT | AL | AGE |
| YES | 0 | 60 | 60 | 67% |
| NO | 20 | 10 | 30 | 33% |
| TOTAL | 20 | 70 | 90 | 100% |

PERCENTAGE OF YES

 $(60 \times 1)/(90 \times 100) = 67\%$

PERCENTAGE OF NO

 $(30 \times 1)/(90 \times 100) = 33\%$

Majority of respondent of the distribution response is yes. This shows truly open defecation is been practiced.

HYPOTHESIS 3

The hypothesis will be tested on the response to question 8 which state; Do you think open defecation affect people in the college?

| RESPO | STA | STUDE | TOT | PERCENT |
|-------|-----|-------|-----|---------|
| NSE | FF | NT | AL | AGE |
| YES | 20 | 65 | 85 | 94% |
| NO | 0 | 5 | 5 | 6% |
| TOTAL | 20 | 70 | 90 | 100% |

PERCENTAGE OF YES

 $(85 \times 1)/(90 \times 100) = 94\%$

PERCENTAGE OF NO $(5 \times 1)/(90 \times 100) = 6\%$

Majority of respondent of the distribution response is yes. It shows that truly open defecation affects people in the college?

HYPOTHESIS 4

This hypothesis is based on the response to question 9 in the questionnaire which states; do you recommend the college provide a good sanitary convenience?

| RESPO | STA | STUDE | TOT | PERCENT |
|-------|-----|-------|-----|---------|
| NSE | FF | NT | AL | AGE |
| YES | 20 | 65 | 85 | 94% |
| NO | 0 | 5 | 5 | 6% |
| TOTAL | 20 | 70 | 90 | 100% |

PERCENTAGE OF YES (85 ×1)/(90 ×100) = 94%

PERCENTAGE OF NO

 $(5 \times 1)/(90 \times 100) = 6\%$

Majority respondent of the distributed questionnaire response is yes this shows that the student, and staff also need adequate sanitary convenience to ensure a properly educational system.

IV. DISCUSSION

The result of the study showed that open defection is practiced in the college according to hypothesis 1,2,3, which proof that open defecation is widely practiced by the number of the college also by the near of the community respectively. The response to question three o question of hypothesis1 on chapter four which the question says; have you ever come across an open defecation in the college, one hundred questionnaire were administered and the total number of ninety were retrieved respondent response were 75 yes and 20 no. The researcher observed the college premises with instrument design for data collection that there is no provision of toilet for both staff and student which makes open defecation unavoidable by them. The mechanism of digestive system will sometimes demand them to release themselves to excreta during the hours of stay in the campus 8am to 4pm very working days. This has prone the member of the college to excrete behind the lecture hall which give bad odor, fly infestation and thereby leading to food contamination consume in the college leading to ill health with effect of absenteeism reduce the aesthetic of the premises and make him/her who practice it unsafe [no privacy] while defecating. The response to question 6 on the questionnaire and hypothesis in chapter four which says; have you ever defecated in the college from ninety questionnaire retrieved. Sixty responded yes, while Thirty responded NO. This is just an indication that open defecation is practiced in the college and it has effect on the member of the college. This clearly shows that the college has no sanitary convenience students tends to defecate around the college which may lead to odor nuisances. The response to question 5 and the hypothesis 3 in chapter four which says do you think open defection affect people in the college? Eighty-five responded yes while Five responded no.

CONCLUSION

After a thorough research work on achieving and sustain open defecation free environment sufficient and reliable information are collected, analysis and employed in identifying some factors that; lead to the practiced of open defecation through interview and journal here are my findings.

- socio- economic and cultural factors promote open defection indiscipline was cited as first socio economic determination of open defecation followed by poverty most the respondent cannot afford to construct improved facilities. Because they are poor. Further it is the government responsibilities providing the good sanitary convenience in every community especially college.
- 2. Hygiene behavior: personal hygiene was described as a basic necessary for everybody to protect themselves and other form of illness, this means washing your hands with soap and water after the use of the toilet
- 3. Education and literacy: is possession or reading and writing skills, the inadequate unable to manage daily living and employment task that require reading skill beyond a basic level is a factor leading to open defection. For a modern toilet which could frustrate him/her and make sure to practice open defecation
- 4. Lack of choice of toilet: some contrasted toilets are not properly constructed and maintain which make the expected user to practice open defecation some the reason are follows: Odour nuisance Unattractive / unsightliness, Filthy environment, Fear of contracting disease, Far distance from premises

5. Enforcement of law: there are available law and regulation existing to curtail open defection but it is not enforced, there is need for employment of environmental health / public health officer powered by government to carry out inspection on all premises and to judicially prescribe achieved and maintenance of the environment from open defecation

RECOMMENDATION

On the basic finding of achieving and sustain open defecation free environment, a case study of college of health science and technology idah, kogi state. The following recommendations are to institutional management, landlords, community leaders and government of Nigeria, to curtail the effect of open defecation in all premises

- 1. Employ environmental health officers: the institution management, landlords' community leaders and government needs to employ a qualified environmental health officer who will inspect the community and every premise to find out those premises that are without toilet.
- 2. It is recommended that the college management should provide adequate hand sanitizers for the student and staff, Provision of portable water ,
- 3. Renovation of existing toilets for the college and hostel
- 4. Provision of sanitary convenience in public places; places like market motor park etc. government needs to construct simple and many toilets with adequate water to ensure easy maintain and long use.
- 5. Health education and awareness when people know the implication of their action it will make them adjust or stop acting in way that will affect their health, the community and ecosystem. It also has to be controlled/ coordinated by Environmental health officers because they are specially train on it. it can be done through radio, television, poster, town cries seminar and workshop make sure you include women , man and children in your discussion, you May need to speak to each group separately about this

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