



The Effects of Environmental Consciousness in Public Healthcare Institutions and Community Awareness in Mokwa Local Government Area, Niger State, Nigeria

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Abstract

The effects of environmental consciousness in public healthcare institutions and the community awareness of the impacts were investigated. Environmental Pollution resulting from healthcare operations are a major problem in Mokwa Local Government Area LGA as the hospital material output goes directly to the environment without check. Similar situation has been reported in developing world. The objective is to find the opportunity for healthcare sector to improve on the overall environmental performance. Collated data was analyzed using simple percentage analysis. Results of the findings shows that the management of the healthcare institutions investigated have not taken into cognizance the environmental implication of the material input and output, lack effective environmental management system and poor environmental condition within and the environs. It is recommended that effective environmental management system be put in place. Also, government dedication, and collective responsibility of relevant stakeholders toward managing the environmental aspects and impacts of the health care institutions in the study area are critical for improvement. These will guarantee cleaner and healthier environment for all.

Keywords: Healthcare, Pollutants, Solid waste, Management, Stakeholders, Environment, Aspects and impacts.



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Contents

1. Introduction.....	2
2. The Study Area.....	2
3. Materials and Methods	3
4. Results and Discussion.....	3
5. Conclusion and Recommendations	4
References.....	4

1. Introduction

Healthcare institutions are meant to provide sound and up-to-date care for patients across the world [1]. However, in achieving this essential mission to care for patients, healthcare facilities in the study area are making significant negative impact on the health and natural environment [1] and National Environmental Standards and Regulations Enforcement Agency [2]. Environmental protection has become a global focus and an important aspect of sustainable development. Proactive measures are being taken by regulatory agencies and relevant stakeholders to address all environmental issues [2]. Healthcare institutions generate considerable environmental health impacts in all its operations from service delivery, through the natural resources and products consumption, as well as through the waste being generated [1].

The numbers of health care facilities continue to grow in this area and most of these facilities lack effective environmental management plans to prevent or reduce possible environmental issues from their operations. This has become an issue of serious concern in the study area. Managing environmental burden resulting from healthcare operations continues to frighten the relevant authorities who seem not to be concerned or lack effective capacity to deal with the negative environmental situation in this regard.

Environmental management in healthcare institutions is very important to ensure service consumers, nearby communities and the natural environments are protected from the resulting negative effects of their operations. However, if the environment is not properly managed it could lead to serious health and environmental problems thereby endangering existence of life. Nowadays the environmental issues in healthcare institutions are too numerous which are the direct consequences of improper evaluation and management of its aspects especially the public healthcare institutions [3].

To ensure proper hygiene and safety of healthcare workers, patients, and the community in the study area, a visible environmental management system in healthcare facilities can be considered. All these informed the need to critically assess the level of environmental consciousness, its impacts on the community and possibly suggest some recommendations for improvement.

Pressures from the communities, regulatory bodies and other relevant stakeholders on the needs for proper healthcare environmental management are becoming high. This calls for proper measurement, evaluation and reporting of their environmental performance. It is however important to know that many organizations lack substantial performance criteria for evaluation. This makes it difficult to evaluate their performance against these standards, and makes it impossible to compare the performance between best practices [1].

2. The Study Area

Mokwa Local Government Area of Niger State is geographically located between Latitude 9°12' and 9.200° north of the Equator and Longitude 5°20 and 5.333° East of the Meridian. Datum, Mokwa is 150ft above sea level. The long southern border of the area is formed by the Niger River from Lake Jebba in the west beyond the confluence of the Kaduna River in the East. Kwara State and Kogi State are across the Niger from the area. It has an area of 4,338km² and a population of 244,937 at the 2006 census.

The land bordering the River is flat and marshy, and it is marked by a series of lakes and flood channels, especially towards the west. Around Bida to the West, there are flat topped hills (mesas) capped by thick layers of ironstone [4]. An important feature of the landscape is the existence of large areas of fadama where the rivers flow off the basement complex and on to the Nupe sandstone [4].

The Kaduna and Niger River flood plains are many kilometers wide at the downstream of Nupe basement boundary, two major streams Yanko ikko, Dumi, Ebigi. All these empty their waters into the Niger River [4].

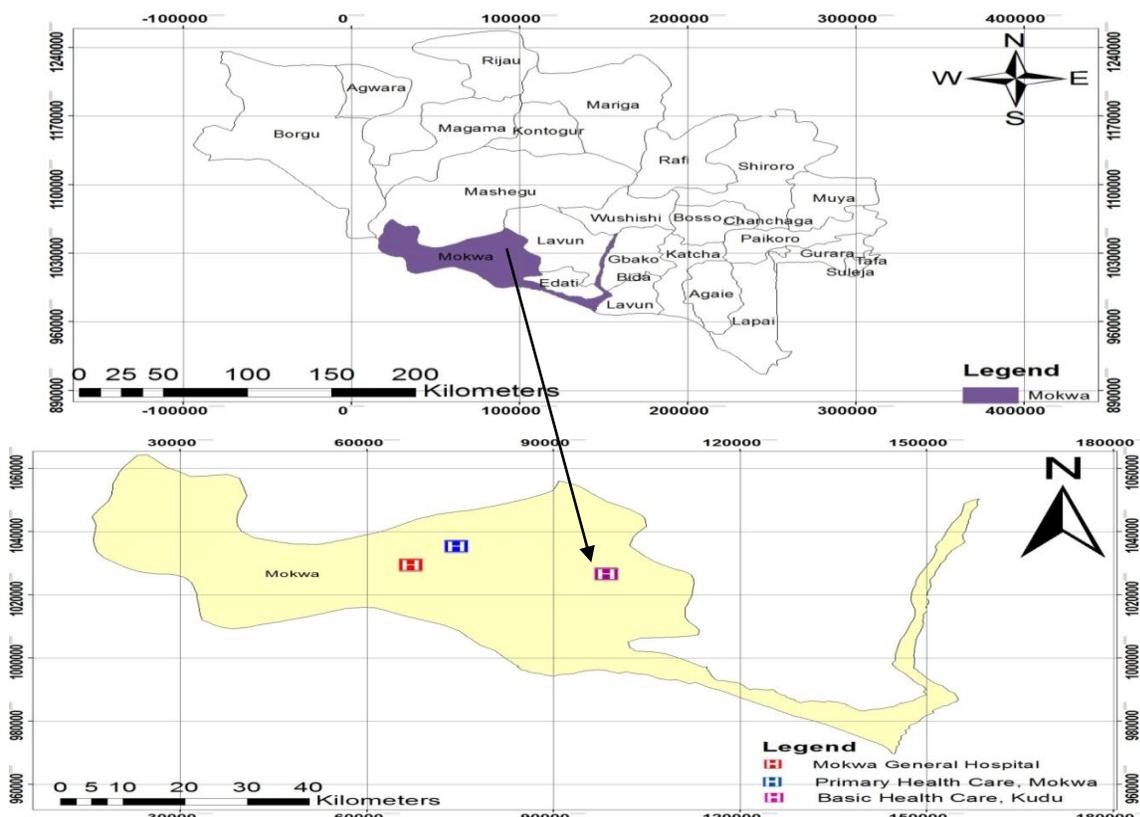


Figure-1. Mokwa Local Government Area (The Study Area)

Source: Author's work, 2013

3. Materials and Methods

(a) Primary data were sourced through field observations, checklist, questionnaire, focus group discussions, direct interview and field photographs. All these are vital in capturing information on environmental aspects and impacts associated with healthcare operations

(b) The secondary data used were research paper document, some specific internet sources related to environmental issues in healthcare, e.g. Healthcare Without Harm, Books on environment e.g. environmental management system, environmental measurement etc., Journal articles about environmental performance evaluation, environmental performance indicators, Guidelines and reports of Government or NGOs, internet and sources reports that related to the research etc.

Furthermore, information was sourced from standardized National and International documents relevant to Environmental Management i.e. ISOs, National Environmental Regulations from NESREA, National Policy on Environment, Official environmental guides used by the facility, base maps, satellite images, relevant documents etc.

(c) Data sampling. A convenience sampling technique was used to locate three healthcare centers in the case study. Checklist was used for identification of environmental aspects. Questionnaire and focus group discussion was used, focusing on the study area, and involved local sanitary inspectors and relevant staff from three (3) public healthcare centers selected. Questionnaire design for capturing information on environmental impacts of healthcare operations were distributed randomly within the immediate communities to these facilities. These provide the opportunity for capturing the required information for the research work.

(d) Collected data were coded and subjected to non-parametric data analysis and simple percentage mathematics [5]. The data from interviews conducted were analyzed manually by making summaries of the views of the respondents and my own field observations of the environmental situations in the study area.

4. Results and Discussion

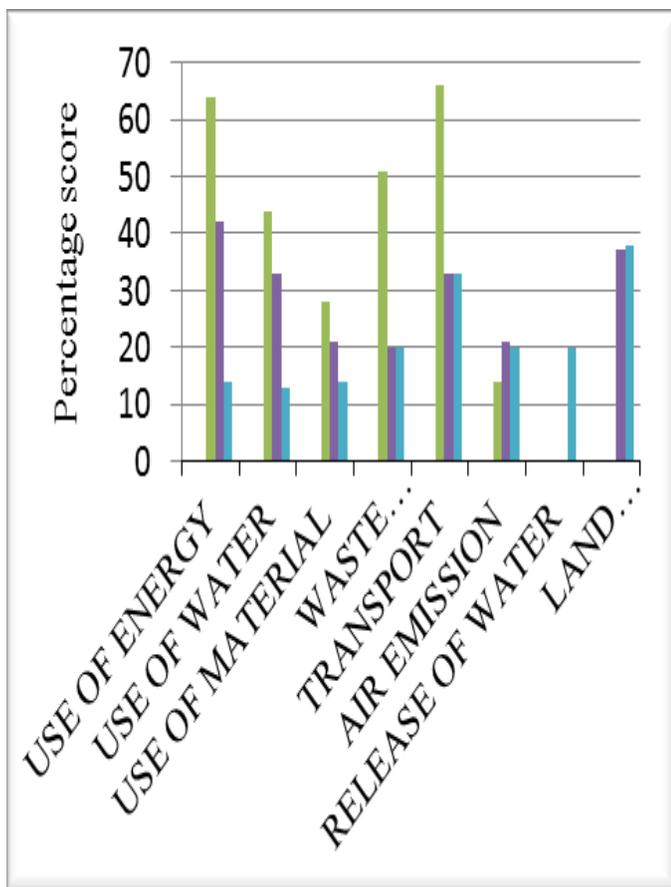


Figure-2. Current Environmental Practices in MGH, PHCM and BHCK.

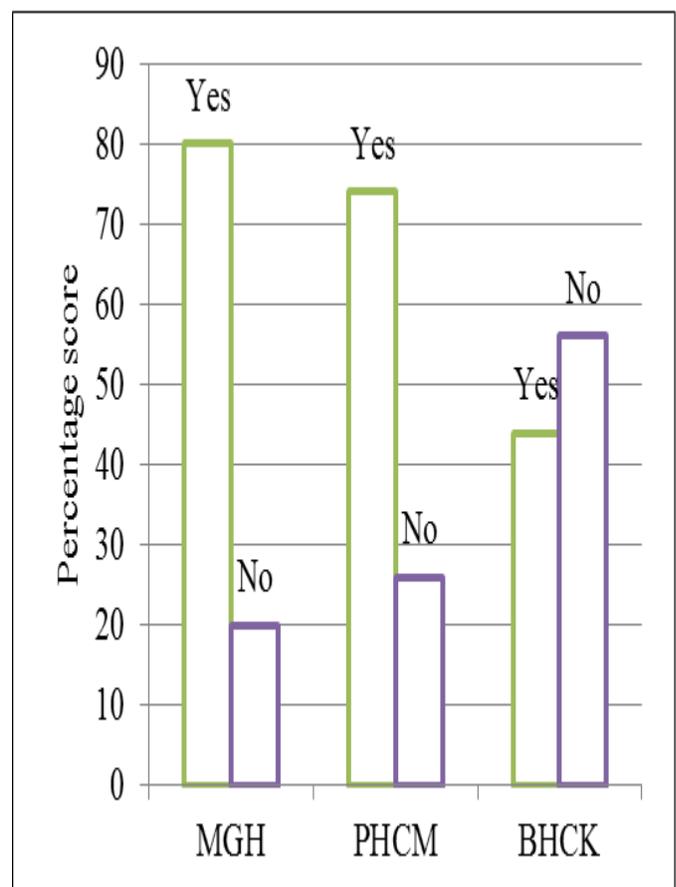


Figure-3. Household Awareness of the Environmental Condition

Key:

MGH = Mokwa General Hospital

PHCM = Primary Health care Mokwa

BHK = Basic Health care Kudu

Figure 2 indicate the current environmental status of the healthcare institutions investigated by percentage score of all the potential environmental indicators [6]. The results revealed that all the facilities investigated have very poor environmental management practices; this confirmed the situation in most developing world [1] and SAICM [7]. The environmental aspects investigated shows that many elements are interacting negatively with the environment. Analysis of the environmental aspects revealed that the facilities have not taken into cognizance a workable environmental management plan. Direct field observations showed very poor environmental condition within and outside these facilities.

Figure 3 demonstrate the percentage score of householders' awareness to environmental problems resulting from healthcare operations in their area. It shows a good percentage of the resident's awareness to environmental pressure being exerted by the healthcare facilities investigated and the state of the environment. Information gathered from the residents on the environmental impact of the hospital operation also confirmed the appalling waste situation in the area. In this area, poor residential communities' appalling environmental conditions is due to the lack of cleansing or

waste removal by the relevant authorities. Much of the waste generated remains uncollected and in most cases openly incinerated a situation which leads to waste accumulation in these areas.

5. Conclusion and Recommendations

Despite the fact that poor environmental management in healthcare institutions poses potential hazards to public health and environment, little or no attention has been given by the relevant authorities for prevention, precaution and mitigations. This study identified weaknesses associated with the current environmental management in these facilities. The weaknesses were primarily from carelessness of the authorities concerned. In conclusion, this research has demonstrated the need for effective environmental management system, government dedication, political wills, and collective responsibility of relevant stakeholders toward managing the environmental aspects and impacts of the health care institutions in the study area.

It is therefore recommended that effective environmental management system be put in place. Also, government dedication, and collective responsibility of relevant stakeholders toward managing the environmental aspects and impacts of the health care institutions in the study area are critical for improvement. These will guarantee cleaner and healthier environment for all.

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