Research
Volume 4:5, 2021

pollution,an open-access journal

ISSN: 2684-4958 Open Access

Assessment of Solid Waste Management Practices among Residents of Buari Ishola Isibo in Ede North Local Government Area, Osun State, Nigeria

Omoge Adeyemi O*, Abraham Frank U, Adekale Temitope A, Adesegun Mobolaji M, Coursin Oluwapelumi O, Odide Clement E

Department of Public Health, Adeleke University, Ede, Nigeria

Abstract

BACKGROUND: Waste management is of crucial concern for public health. Inadequate solid waste management heightens the morbidity and mortality in various ways. In many developing countries, the development of waste management has not kept up with the rapid urbanization and growing consumption and has therefore grown to a big problem. The increasing difficulty in managing wastes in Nigeria has become one of the most intractable environmental issues.

OBJECTIVE: This study seeks to evaluate the solid waste management practices among residents Buari Ishola Isibo in Ede North Local Government Area, Osun State, Nigeria.

METHODOLOGY: A descriptive cross – sectional study was used and multi-stage random sampling method was employ in selecting 60 households of Buari Ishola Isibo in Ede North Local Government Area, Osun State, Nigeria. Questionnaire was used for data collection and data was analyzed using SPSS version 21.

RESULTS: The age of the respondents were between 15 – 60 years and above. 29 (48.3%) were between 31 – 60 years old, 31 (52.0%) were males, 40 (66.7%) were married, 57 (95.0%) were Islam and Yoruba. 29 (48.3%) earned 10,000 – 30,000 monthly, 23 (38.3%) had secondary school education, 39 (65.0%) were traders and 27 (45.0%) have 6 – 10 households respectively. Of the 60 respondents, 28 (46.7%) collect their refuse in an open dustbin, 35 (58.3%) empty their dustbin into river/stream, 24 (40.0%) empty their dustbin twice a week. 47 (78.3%) had no communal refuse depot in their community, 35 (58.3%) uses river/stream as their predominant community refuse depot and 44 (73.3%) make use of open dumping as their main refuse disposal methods.

CONCLUSION: Inadequate solid waste management heightens the morbidity and mortality in various ways. Right solid waste management is prerequisite to aesthetic living conditions in any environment. Maintaining effective solid waste management practices in any community will help curbing the spread of infectious diseases causing organisms, environmental hazards and improve the standard of living.

Keywords: Assessment • Solid • Waste • Management

Introduction

Solid waste management is of crucial concern for public health in developing countries. A poor solid waste management increases the morbidity and mortality in different ways. In many developing countries, adequate waste management has not meet up with the speedy urbanization and rising consumption and has metamorphosed into cumbersome problems. The collection and disposal of solid waste is one of the major problems of sanitation. Solid waste handling must be examined in terms of sound environmental management [1].

Solid waste management has become one of the current challenges facing most environmental agencies in developing countries. Waste generation and disposal is one of the public health issues that have been of great concern to individuals, government at all levels and the world in general. Globalization has affected the way

***Address to Correspondence:** Omoge Adeyemi O, Department of Public Health, Adeleke University, Ede, Nigeria, E-mail: omogeadeyemi@gmail.com

Received: October 02, 2021; **Accepted:** October 16, 2021; **Published:** October 23, 2021

people buy and consume solid material that later effects to accumulations of huge solid waste [2].

According to V. I. Ogu, a major outcome of rapid urbanization is the excessive waste generation which environmental authorities are facing challenges in managing. It is to a large extent assumed that solid waste management is a global problem and is more common in developing countries like Nigeria where it is a predominant issues of public health concern. Waste management is one of the huge problems facing city administrators and environmental agencies.

Ogwueleka, described management of solid one of the biggest challenges environmental bodies in the country confronts. This management challenges has resulted to breakdown of law and order related to waste management. They discovered that urban centres are faced with an increment in environmental deterioration as a result of solid waste being disposed in an indiscriminate manner [3].

In Nigeria, an average resident in their household generate tons of solid waste daily, weekly, monthly and yearly. Over the past few decades, Nigerians have become increasingly bothered about the management and disposal of solid waste as well as the trouble of balancing the benefits of a clean environment saddled with the financial costs of attaining those benefits. Challenges about the type of disposal methods to be used and cost implications outweighs its benefits (or vice versa), and who to accept the economic effects.

Methods

Study area

The study was conducted in Ede North Township. Ede is one of the Local Government Area in Osun State situated in the south – west part of Nigeria and speaks Yoruba language. It is known as one of the ancient towns of the Yoruba people. Ninety percent of the population in Ede are Muslim. Ede is well known as land of hospitality.

Study population

The study population consists of sixty households in Buari Ishola Isibo Community of Ede North Local Government Area, Osun State, Nigeria.

Study design and sampling

This was a cross – sectional descriptive study. A systematic sampling method was utilized in selecting the respondents from Buari Ishola Isibo in Ede North Local Government Area, Osun State, Nigeria [4].

Data collection methods

Questionnaire was used for collecting data from the sampled population comprises of 60 respondents. The questionnaire comprises of two sections namely socio-demographic characteristics of the respondents and assessment of solid waste management practices.

Data analysis

The results were analyzed using Statistical Package for Service Solutions (SPSS) Version 21. The computation was done using tables, charts, means and simple percentage

Ethical consideration

Letter of introduction was sought from the Faculty of Basic Medical Sciences, Adeleke University, Ede. Approval to conduct the research in the community was also sought from Ede North Local Government Authority. Permission was obtained from the respondents before administering the questionnaire and confidentiality of all respondents was ensured [5].

Results

Variables	Observable variables	Frequency (%)
Age group (in years)	15 – 30	19 (31.7%)
	31 – 60	29 (48.3%)
	Above 60	12 (20.0%)
Gender	Male	31 (52.0%)
	Female	29 (48.0%)
Marital status	Single	20 (33.3%)
	Married	40 (66.7%)
Religion	Christianity	3 (5.0%)
	Islam	57 (95.0%)
Ethnicity	Yoruba	57 (95.0%)
	Others	3 (5.0%)
Level of income	<10,000	19 (31.7%)
	11,000 – 30,000	29 (48.3%)
	31,000 – 50,000	9 (15.0%)
	51,000 and above	3 (5.0%)
Educational level	No formal education	17 (28.3%)
	Primary	6 (10.0%)
	Secondary	23 (38.3%)
	Tertiary	10 (16.7%)
	Quranic	4 (6.7%)
Occupation	Trading	39 (65.0%)
	Farmer	4 (6.7%)
	Civil Servant	3 (5.0%)
	Self – Employed	5 (8.3%)
	Unemployed	9 (15.0%)
Household size	0 – 5	24 (40.0%)
	6 – 10	27 (45.0%)
	10 – 15	7 (11.7%)

	Above 15	2 (3.3%)

SECTION A: Socio – Demographic Characteristics of the Respondents (n = 60)

Variables		Frequency (%)
Which of the following is your main refuse collection method?	Open dust bin	28 (46.7%)
	Covered dust bin	3 (5.0%)
	Open litter	6 (10.0%)
	Polythene bags	23 (38.3%)
Where do you empty your dust bin?	Communal open dump site	20 (33.3%)
	River/stream	35 (58.3%)
	Communal storage containers	5 (8.3%)
How often do you empty your household dust bin in a week?	Daily	15 (25.0%)
	Once	7 (11.7%)
	Twice	24 (40.0%)
	Thrice	14 (23.3%)
Does your community have communal refuse depots?	Yes	13 (21.7%)
	No	47 (78.3%)
If yes, what type of refuse disposal depot is predominant in your community?	Communal open depot	20 (33.3%)
	River/Stream	35 (58.3%)
	Communal storage container	5 (8.3%)
In the last six months, how many times has the government removed refuse from the open dump site?	Never	23 (38.3%)
	Once	26 (43.3%)
	Twice	10 (16.7%)
	Thrice	1 (1.7%)
In the last six months, how many times has the government emptied the communal refuse storage container in your community?	Never	8 (13.3%)
	Daily	30 (50.0%)
	Once	8 (13.3%)
	Twice	13 (21.67%)
	Thrice	1 (1.67%)
Which of the following is your main refuse disposal method?	Open dumping	44 (73.3%)
	Burning	16 (26.7%)

SECTION B: ASSESSMENT OF SOLID WASTE MANAGEMENT PRACTICES (n = 60)

Discussion

Socio – Demographic Characteristics of the Respondents

The respondents' ages were between 15 – 60 years and above. 29 (48.3%) were between 31 – 60 years old, 31 (52.0%) were males, 40 (66.7%) were married, 57 (95.0%) were Islam and Yoruba. 29 (48.3%) earned 10,000 – 30,000 monthly, 23 (38.3%) had secondary school education, 39 (65.0%) were traders and 27 (45.0%) have 6 – 10 households respectively.

Solid Waste Management Practices

Of the 60 respondents, 28 (46.7%) collect their refuse in an open dustbin, 35 (58.3%) empty their dustbin into river/stream, 24 (40.0%) empty their dustbin twice a week. 47 (78.3%) had no communal refuse depot in their community, 35 (58.3%) uses river/stream as their predominant community refuse depot and 44 (73.3%) make use of open dumping as their main refuse disposal methods.

Conclusion

Solid waste management practices are major public health issues and as such should be given necessary attention. Proper solid waste management is a panacea towards sustaining the aesthetic environment. Inadequate waste management raises the chances of morbidity and mortality in many ways.

Proper waste disposal management is essential to sustain healthy living conditions in any environment. Maintaining effective solid waste management practices in any community will help in curbing the spread of infectious diseases causing organisms, environmental hazards and improve the standard of living. Issues involving solid waste management practices should be addressed with all sincerity of purpose.

References

1. Adeyemo F O. and Gboyesola, G O. Knowledge Attitude and Practices on Waste Management of People Living in the University Area of Ogbomso, Nigerian. Int J Environ.3(2013):5156.
2. Ayodeji I. Waste Management Awareness, Knowledge and Practices of Secondary School Teachers in Ogun State, Nigeria. J Solid Waste Technol. Manag. 37(2012): 221-234.
3. Enete I. Potential Impacts of Climate Change on Solid Waste Management in Nigerian. J Sustain Dev Africa. 12(2010): 101-103. Leton T,
4. Omotosho O. DndfOO operations in the Niger delta region of Nigeria. Eng Geol. 73(2004): 171-177
5. VI Ogu. Private sector participation and municipal waste management in Benin City, Nigeria. Environ Urban. 12(2000):103-117.

How to cite this article: Adeyemi O Omoge, Frank UAbraham, Temitope AAdekale, Mobolaji M Adesegun, Oluwapelumi O Coursin, Clement E Odide. "Assessment of Solid Waste Management Practices among Residents of Buari Ishola Isibo in Ede North Local Government Area, Osun State, Nigeria ." *pollution*3 (2021) : 964