ORIGINAL ARTICLE

Examining the Nexus Between Media Advocacy and Solid Waste Management in Anambra State

ODIMEGWU FELIX CHINEDU

UNIZIK Business School, Nnamdi Azikiwe University Awka nedu2real@yahoo.com

Abstract

The study is on the nexus between media advocacy and solid waste management in Anambra state. The study was designed to examine the extent to which media has helped to improve on solid waste management in the study area. The survey design was used. The population was all the households in Anambra state. A sample of 420 households was drawn using the multi stage sampling technique from three local government areas across the state. A researcher-made questionnaire was used for data collection which was validated by three experts from Odimuegwu Ojukwu University Anambra State with a test-retest reliability of 0.78. Direct delivery method was used for data collection while the percentage, frequency count and tables were used in analyzing and presenting the results obtained. Results indicated that use of dump site also called land filling and heaping refuses on the roadside are the prevalent method of solid waste management in the study area. Also the media was seen to have affected waste management though not to a great extent. It was suggested among other things that media should be more empowered through adequate funding to properly enlighten the masses about the importance of proper solid waste management in the study area. Also, waste management workers like the ANSEPA should be well remunerated to avoid industrial action. The study therefore holds that the media can be a tool for influencing solid waste management if well harnessed.

Key words: advocacy, hazard , media, public health, waste and waste management

Background to The Study

Every administration strives to ensure that the citizens are well catered for. Every administration does series of activities geared towards the advancement of the society and for the wellbeing of the citizens. One of such activities that administrators embark on to safe guard the interest of the citizens is waste management.

Waste refers to unwanted or unusable material that is produced through the various activities of humans and can have different forms (Velden, 2020). Waste management refers to all the activities that are required to manage waste from the point of collecting the waste to recycling and monitoring. The importance of waste management cannot be overemphasized. Poor waste management can constitute a public health hazard to citizens. That is why every government does not joke with waste management. Citizens are prone to waste due to several economic activities humans engage in. Everyday, wastes are being generated and deposited in the environment from different sources like factories, household, farm work and offices. These categories of wastes need to be properly disposed so that the environment can be safe for living.

According to Zorica, Cristiana, Elena and Cezarina (2015), waste generation per capita has increased and is expected to continue to climb with growing population, wealth, and consumerism throughout the world. This situation calls for proper waste management. Proper waste management is crucial for some reasons. In the views of Veiden (2020) aside being a lucrative venture, it can help reduce unemployment by providing jobs for many idle youths among other benefits. Human activities always generate wastes. This was not a major issue when the human population was relatively small and nomadic, but became a serious problem with urbanisation and the growth of large conurbations (Singh, Singh & Bathri, 2018). Poor management of waste can lead to some health hazards which may include contamination of water, soil and atmosphere and might constitute a serious public health challenge. The characteristics of waste material evolved in line with changes in lifestyle and the number of new chemical substances present in the various waste streams have increased dramatically. The long-term health effects of

exposure to substances present in the waste or produced at waste disposal facilities are more difficult to measure, especially when their concentrations are very small and when there are other exposure pathways (e.g. food, soil) (Giusti, 2009). The problem of waste management has become one of the primary urban environmental issues. Sometimes it is burnt to reduce its volume and to minimize attraction of animals and also to retrieve recyclable items. Despite the degradation of valuable land resources and creation of long-term environmental and human health problems, uncontrolled open dumping is still prevalent in most developing countries which indeed desperately need an immediate action due to the associated harmful impacts (Singh, Singh & Bathri, 2018). That is the reason why every serious government does well to design effective waste management system in order to secure the environment for its citizens.

There abound many ways of managing wastes across the globe. The method adopted depends on some factors which include but not limited to level of technological advancement of the country, population size and the type of wastes in question to be disposed. Basically five types of waste have been distinguished by Bathri (2018) which are solid waste, liquid waste, organic waste, recyclable waste and hazardous wastes. Each of these types of waste needs different approach for its disposal. Waste management practices differ for developed and developing nations, for urban and rural areas, and for residential and industrial producers. In every nation, it is the duty of the government to decide the appropriate waste management technique to be adopted.

In Anambra state as in all other states of the nation, solid wastes are being generated too. As a result, the government has been using the radio and television programmes to sensitize citizens about the importance of proper waste management. This led to the introduction and enforcement of the monthly sanitation exercise that holds in the state every last Saturday of the month between 7.00am and 10am. Furthermore, in a bid to create serious awareness and also enlighten the public about the importance of effective waste management, some forms of media are used by the Anambra state government. The popular media in use are radio and television. A lot of programmes are being floated across radio and television in Anambra state which aim at enlightening the general public about the need to properly dispose household wastes in order to safe guard the environment and maintain healthy lives. It is expected that these media advocacy on waste management will cause an attitudinal change in the citizens and this attitudinal change will invariably influence the manner in which wastes are managed by citizens in the study area. However what is not yet certain is how well the public utilizes the media advocacy and other efforts that have been put in place to ensure that wastes generated from the various households are well disposed; because many wastes are still seen littered on the streets. This is very worrisome due to the health hazard which poor waste management constitutes to the general public (Igwe & Evan, 2020).

The way or manner these wastes are being managed is of utmost importance. Okonkwo and Chidi (2020) averred that waste management in Anambra state is handled by Anambra State Environmental Protection Agency (ANSEPA) though some private contractors are co-opted to help out sometimes. Despite the efforts of the ANSEPA yet some streets of Anambra state are littered with heaps of wastes to the point that it has constitute a serious public health hazard in some areas in the state. The situation is so bad that one is forced to ask does it mean the general public is not well-enlightened by the media, or are there some challenges that hinder effective waste disposal, or is it that the waste management strategy being used by the government of Anambra state to manage the waste is not effective? These questions formed the bases for the present study.

Statement of The Problem

Proper solid waste management and disposal is one of the challenges every government faces especially in urban areas. The great generation of wastes seen lately is a product of urbanization, increased economic and industrial activities in addition to population explosion. To manage solid waste is very

difficult due to the amount of space it occupies unlike liquid and gas wastes. The vast array of space solid waste occupies and the attendant health implications of poor solid waste management make it imperative for its effective management to be paramount. Solid waste management poses great challenges especially to developing nations due to poor town planning, lack of relevant and advanced refuse management technology and the horrible state of some solid wastes being generated (Okonkwo & Chidi 2020). The rapid development of Anambra state and its business-like nature has attracted many persons to live and do business there ; thereby considerably increasing the amount of solid waste generated by households. Efforts directed at managing solid wastes in the study area by the government include the inauguration of ANSEPA, monthly sanitation exercise, the use of private waste contractors, sensitization of the public through radio and television programmes among others. But these measures seem not to have yielded the desired results as solid wastes are still been seen heaped on the streets in some areas in the state. The problem of the study is therefore to interrogate the extent to which media advocacy has affected the management of solid wastes in Anambra state.

Research Questions

The study was guided by the following research questions:

1. What are the prevalent methods of solid waste management in Anambra state?
2. How effective is the solid waste management method in use in Anambra state?
3. To what extent has media advocacy affected solid waste management system in Anambra state?
4. What factors pose threats to effective solid waste management in the study area?
5. How can solid waste management in Anambra state be made more effective?

Objectives of The Study

The study is designed to:

1. Examine the prevalent methods of solid waste management in Anambra state.
2. Find out how effective the solid waste management in use in Anamba State is
3. Determine the extent to which media advocacy has affected the management of solid wastes in the study area.
4. Ascertain factors that pose threats to effective solid waste management in the study area.
5. Suggest how solid waste management in Anambra state could be made more effective.

Significance of The Study

Poor solid waste management is a public health problem in any state. The study will be significant because the following stake holders stand to benefit from it when completed. For example it will educate parents on the best way to dispose their solid wastes instead of littering the streets. In the same way media experts will see the need to intensify their enlightenment campaign on the benefits of proper waste disposal in the state. Also the general public will gain by the healthy lives they will enjoy when all citizens imbibe appropriate solid waste management practices. The state government will gain through the reduction in health hazards that will ensue when the citizens are practicing good waste management system.

LITERATURE REVIEW

Conceptual Review

Concept of Media

Media is the inclusion of different mediums that are used for communicating, transmitting, and broadcasting to the public or masses (Brian, 2011). It uses a wide range of audio-visual materials as well as electronic or electro-magnetic mediums to share news, information, entertainment, ads, etc with the target audiences or general public. Media can be seen as the different forms of technologies which are used to reach out to a large group of people simultaneously through communication (Investopia, 2018). According to Wikipedia (2019) media is simply a platform that disseminates contents to a vast audience concurrently. They represent avenues of communication which help the transfer of information, ideas, messages, contents, files or information from a sender to heterogeneous

audience at the same time irrespective of location. Michael (2021) stated that media transmits information electronically via films, radio, recorded music, or television. Many other mass media outlets have an additional presence on the web, by such means as linking to or running TV ads online, or distributing QR Codes in outdoor or print media to direct mobile users to a website. In this way, they can are easily accessible and possess outreach capabilities the Internet affords. Media helps to spread information throughout many different regions of the world simultaneously and cost-efficiently as distance is never a barrier.

In the views of Bencsch (2014) media can be defined as a systematic means of openly and clearly communicating and interacting with a large audience or public through a mechanical device in a short space of time at a distance. This means that in media distance does not hinder communication. Furthermore, McQuail (2010) notes that mass communication is no longer the only means of society wide and or global communication, there abound other forms. It could be deduced from the preceding paragraphs that the major use of the media is wide audience information circulation at the same time. That means that the basic role of the media is that of informative role. The public relies heavily on the media foe current happenings in the nation. No wonder the media is referred to as the fourth eye.

Role of the Media

The significance of communication for human life cannot be overestimated. Media is an important part of community life. The role of media includes expanding the horizons of thought of the citizens. This is true because beyond the physical requirement of food and shelter, man needs to communicate with his or her fellow human beings. Communication is a primal one and in our contemporary civilization it is a necessity for survival. Without communication no society can exist, much less develop and survive. Communication is a fundamental and vital process for existence, societal organization and survival (Muhammed, 2013).

In line with the current realities in Nigeria, media can improve governance by monitoring the actions of those in power and alerting the public to corruption and abuse of trust. A strong, free, and independent media sector leads to lower corruption levels. Corruption acts as a tax on productive activities in an economy, leading to the flow of resources to unproductive ones. An independent media that monitors those in power and delivers accurate information to citizens has been shown to be an effective check on corruption across multiple studies (Chowdhury & Shyamal, 2004). The media can be a bridge between transitions from traditional society to a modern society. Media helps to decide exactly what information or rubric that will be delivered because the media can influence public mindset and raise people? s aspirations. The mass media as a supporter of social changes serve as a giver of information (Brian, 2020).

Furthermore, the media plays a supporting role which requires decision taking on the attitudes, beliefs and social norms of the masses (Okonkwo & Chdi 2020). Another important role of the media is public enlightenment and education. In this case, the media can increase the level of public knowledge on contemporary issues that can transform social orientation. Through this process, the mass media gradually brings in a community into new cultural patterns and begins to determine the cultural mindset and people? s behaviour. Existence of media in presenting these pieces of information tends to trigger the desired change in a developing nation. Access to information helps citizens hold their governments accountable. By providing easy access to information to users of public services, the media empowers citizens to demand quality and accountability from their governments (Brian, 2020).

Meaning of Waste and Waste Management

Waste means unwanted substances or things one no longer has need of. It is equally referred to as refuse. According to Cambridge English Dictionary waste is an unnecessary or wrong use of money, substances, time, energy or abilities. Waste is the

useless by product of human activities which physically contains the same substance that are available in the useful product (White, 1995). Waste is any product or material which is useless to the producer (Basu, 2009). Dijkema (2000) saw waste as materials that people would want to dispose of even when payments are required for their disposal. Although, waste is an essential product of human activities which could be a result of inefficient production processes whose continuous generation is a loss of vital resources (Cheremisinoff, 2003). In the view of Tools-Hero (2019) waste in waste management refers to unwanted or unusable material that is produced through the activity of humans and can have different forms.

From the fore going, one can define waste as materials which are no longer useful to a person and as such needs to be discarded. One interesting thing is that what a person considers as waste may be useful to another person or others, also a waste product can be recycled and be used. Therefore, a material can only be regarded as a waste when the owner labels it as such (Dijkema, 2000). Using the states of matter as a guide, wastes are classified into three main types namely, solid, liquid and gas. Each type of waste has its disposal method and way of managing the waste. However the interest of the present study is on solid wastes. This leads to the issue of waste management.

Waste management refers to all the activities that are required to manage waste from the point of collecting the waste to recycling and monitoring (Tools-Hero, 2019). Similarly, Ketsri (2021) stated that waste management includes the activities and actions required to manage waste from its inception to its final disposal which includes the collection, transport, treatment and disposal of waste, together with monitoring and regulation of the waste management process. Demirbas (2011) describes waste management as a process by which wastes are gathered, transported and processed before disposal of any remaining residues.

According to Muthmainnah (2017) waste management can mean growing and inspiring participation, awareness and people's behavior in reducing waste and garbage production. It is equally a form of preventive action against various environmental problems such as greenhouse gas emissions (CH4), water pollution (due to landfill) and soil pollution (Wijayanti, 2013). Similarly, Murugesan (2020) averred that waste management consists of a series of steps such as collection of the waste, segregating it on the basis of its nature, transporting carefully and labeling them, undergoing various types of treatment in order to reduce the its hazardous effect and disposing it by burning, burying and recycling methods.

From the foregoing waste management can be described as the systematic and organized actions geared towards effective handling of wastes from the point of generation to its final disposal in a bid to maintain a healthy environment. It is a necessary venture due its ugly implications.

According to Mukhit and Syafrudin (2018) waste management can start from the source of waste by sorting waste, followed by the collection process to the final disposal site. The potential range of waste that is reused and recycled depends on waste generation, waste composition and waste characteristics. To effectively manage waste is a serious matter. Solid wastes seem to be the most difficult to manage due to the large space they occupy. As a result of the ever- increasing quantity of solid wastes being generated daily from different households, there is great need to adopt waste management strategies that are environmentally friendly so that there will not be a distortion of the ecosystem and the environment.

Importance of Proper Waste Management

The natural environment needs to be kept healthy so that humans can continue to live in it and enjoy life. Some human activities and behaviors do negatively affect the lives and welfare of humans and other living things in the environment. These activities tend to reduce the quality of the environment and sometimes make it unsafe for living. The decreasing quality of the environment needs to be improved in order to ensure the welfare and quality of life in the future (Mukhit & Syafrudin , 2018). One of the ways to achieve this is by proper solid waste management. Appropriate waste management is

expected to reduce the amount of greenhouse gases released into the air and can be one of the supporting factors and methods in realizing a community that is aware of health and environmental sustainability through the development of low carbon communities. Proper waste management prevents the spread of pollution, reduces the hazardous effects and keeps the environment clean so, the environment become a good habitat for all living creatures (Murugesan, 2020).

In the submission of Ketseri (2020) waste management has the following advantages which include that:

a. It is highly lucrative
b. Helps keep the environment clean and fresh
c. Saves the Earth and conserves energy
d. Reduces environmental pollution
e. Waste management helps in earning money
f. Creates employment

Methods or Techniques of Waste Management

Different approaches are being used in waste management. However the techniques adopted depends on the type of wastes to be disposed. As earlier stated wastes can take different forms such as liquid, solid or gas. Some waste management techniques are not environmentally viable as they tend to cause more harm to the ecosystem than good. The paragraphs below are devoted to presenting some environmentally friendly waste management strategies that could be effectively used in managing wastes for a healthy living.

Different scholars have posited some strategies that are globally adopted to effectively manage wastes. However, Murugesan (2020) stated that, according to the deposition and type of waste, different techniques are used for waste management. They may vary from person to person, lace to place, time to time and nation to nation. Some of the most popular waste management strategies are:

i. **Recycling:** This method involves **c**ollecting wastes from different places and segregating them based on the nature of products and used for recycling process. Recycling process is usually adopted for managing construction wastes (Wahi, 2016). In the views of Tools-Hero (2019) recycling is a process in which waste is being converted into new products. The aim of recycling is to reduce energy usage, reduce the use of new raw materials and therefore preserve natural resources. Also helps to reduce the use of landfills, water and air pollution, and the emission of different types of harmful gasses into the environment. Recycled the municipal and construction solid waste and used it for manufacturing highly environmentally friendly geopolymer composite as opined by Tang, Tam and Xue,(2020).

ii. **Composting** Composting is a waste management method and is a natural process that speeds up the decay of organic materials such as the remains of kitchen, plants and garden waste. In composting method, organic wastes are separated from the wastes and allow to decompose by microbes for a long period of time in a pit (Murugesan, 2020). Then this becomes nutrient rich compost and used as a manure for the plants. Soil fertility is enriched by these manures. There is also vermi-composting (Kaur, 2020) which is an effective process for sustainable organic agriculture and for also to maintain a balanced ecosystem. According to Batshri (2021) composting results in a rich soil which is useful for agricultural services like growing of crops, plants and trees. Composting is safer and environmentally friendly especially for managing household wastes.

iii. **Land filling** Using dumping sites to collect wastes is called land filling. In this process, waste is being buried in the land and it helps to reduce health risks and other dangers caused by waste laying around on the streets. However as effective as this method is in waste management it has the disadvantage of demanding for a vast array of landmass for use as well as demands skilled manpower for effectiveness (Okonkwo & Chidi, 2020). Using land filling to manage waste has some ugly implications which include

production of harmful gases like methane which can be harmful to the environment; also land filling can lead to air and water pollution, and may affect the health of humans and animals within the environment.

iv. **Incineration** This is another method used in waste management. Incineration is also referred to as combustion. This method entails using high degree flames to burn off wastes which transform the refuses into gases. Adoption of the incineration method reduces the quantity of refuse considerably. This reduction helps to minimize space occupied by the refuses. This is why incineration is popular in areas where there is scarcity of space to use land filling method.

v. **Plasma Gasification** This is another form of waste management. Plasma is an electrically charged gas and with this method, plasma is being used to convert solid or liquid waste into syngas (Tools-Hero, 2019). The waste is being heated, melted and then being transformed into gas. Plasma gasification is mostly used for the disposal of commercial, industrial waste and hazardous waste. Compared to other methods such as landfills, the initial investment costs and operational costs are relatively high. Advantages of this method of waste disposal are, that it creates renewable energy and that it results in less harmful emissions.

Media and Solid Waste Management in Anambra State

Media as tool for communication is very critical to effective waste management. It is clear that large media bodies have a great role to play in the creation of social awareness about any sensitive issue in the nation including waste management. According to Dawam (2018) media is saddled with the responsibility of enlightening the general public and creating awareness on issues of national interest. In Anambra State , Okonkwo and Chidi (2020) noted that the popular media used to create awareness about sanitation and waste matters are the radio and television broadcasts. Mass media in the current world play a major role of bringing people together around the universe. This has enabled people to share some educative information that help them build up their surrounding environments in a suitable manner that fits human life.

Different societies adopt changes as per what they see and hear from the media. These changes are not limited to socio-economic activities, political matters and the world? s environmental issues. The question is, does really have the capacity of changing beliefs, attitudes and behaviors? According to Makali (2003), the media have the power to control and direct people? s beliefs, attitudes and behaviors through direct appeals toward a specific objective via information that circulate daily among the people. It is believed that, with the help from radio programmes and television broadcast, people will change their attitudes and behaviors towards waste management and disposal. Consequently, media are important social institutions which fight against negative attitudes and the process of persuasion, or attitude change, by receiving information or messages from the media can be achieved in series of discrete steps in different individuals. This is however the case where media are regarded effective for they genuinely concern with raising public awareness about the environment problem; its causes, consequences, and possible remedies. Beyond raising awareness, media also advocate and mobilize the people toward environmental sustainability (McGuire, Lindzey, & Aronson ,2015).

According to McLuhan (2014), communication with the help of mass media has made the globe into a small village thus brings different cultures and communities together at a time and as such a lot of persons can be reached or accessed within a space of time. Regarding waste management the media is useful as it provides relevant information to the public about the dangers or consequences of poor waste disposal. In the same vein, the media helps to educate the masses on the environmentally friendly approaches for waste disposal. With these educative programmes citizens are persuaded via the media to change their erroneous beliefs and attitude about waste and their disposal.

Theoretical Framework

The study will be hinged on two theories namely; the diffusion of innovation and social mobilization theory.

Diffusion of Innovation Theory

Diffusion of innovation theory was found by Rodger in 2003. This theory emphasizes that, innovation spread through certain channels over time among the members of social system. According to this emphasis, spreading of new innovations requires communication, time and social system or target audiences that the message should be diffused to. In this regards, citizens of Anambra state receive their waste management education from radio and television programmes floated in the state. Diffusion of Innovations has been approved as a perfect model in spreading innovation as opined by Sherry and Gibson (2002).

Social Mobilization

Social mobilization model is the way of bringing together all the social allies to raise people's awareness regarding one particular development program; it helps in mobilization of resources, community participation for sustainable development Wallack, (1989). Based on the definition given by the UNICEF (1993), social mobilization deals with a comprehensive planning approach concerning political and community action. The use of media like the radio and television in Anambra state to educate citizens about waste management has its interest on making the environment safe for living which is a social national issue. Mobilization entails persuading people in the community to find out the problem and design methods to be adopted in solving the identified problems. The key issue in Social mobilization theory is the empowerment for people to offer solutions to the problems facing them which include waste management.

EMPIRICAL REVIEW

Obasi, Victor, James, Felix and John (2019) studied influence of public relations media public enlightenment campaign and community participation strategies on waste management.

The study specifically investigated whether public relations media enlightenment campaign has any significant influence on waste management and also studied whether public relations community participation has any significant influence on waste management. The findings revealed that public relations media public enlightenment campaign strategy has a significant influence on waste management. Similarly, it was revealed that public relations community participation strategy has a significant influence on waste management. The authors recommended that there is need to improve on media public enlightenment campaign strategy towards educating and encouraging waste management behavior among residents through an adequate traditional and social media awareness campaign. Also, residents should be encouraged to participate actively and meaningfully in environmental waste management issues in Enugu metropolis.

Okonkwo and Chidi (2020) studied solid waste management practices in Anambra state highlighting the various indigenous techniques employed by inhabitants, private and public sector in the management of solid waste to mitigate environmental consequences. The research shows the nature of solid waste generated, the sources of solid waste, types of solid waste generated, management practices employed in the generated solid waste, Recycling and the Informal waste collection sector and triggering factors of Improper solid waste management practices which include Increase in Population size, Non-enforcement of environmental policies and management strategies, Inadequate Infrastructure facilities, Standard of living amongst others. With the view to sustainable environmental quality, it was recommended that the ANSEPA management and Proper planning, The Recycling Act, Education and Awareness amongst others. Also all environmental activists were also appraised to highlight the contributions they can make towards an effective and sound waste management practice in the area.

Methodology

The study covered the entire Anambra state. Cross sectional survey design was adopted by the author for the study. The population for the study is all the households in Anambra State. Based on the current data of Anambra state as at May 2022, there are an estimated 5,527,809 persons living in Anambra state. Hence the population for the study is 5527809. Multistage sampling technique was used to select the sample. In using the multistage sampling method, the entire Anambra state was divided into three senatorial zones. One local government area was randomly selected from each of the three senatorial zones and thereafter one town was also randomly selected from each local government area. In essence, three towns drawn from three different local government areas (which represented the entire state) were used for the study. A sample of 420 households was selected based on the adoption of Taro Yamane (1967) method of calculating sample size for known population. A total of one hundred and forty (140) households were selected from each town to give a total of 420 households used for the study.

Data were elicited from the respondents via a researcher-made structured questionnaire. Questionnaire was considered most appropriate due its effectiveness and ease in collecting data from a large audience within a small time frame. The questionnaire was tagged Media Advocacy and Solid Waste Management Questionnaire (MEADVOSOWAMQ). Three experts drawn from Odimegwu Ojukwu University in Anambra state validated the questionnaire while a pilot study report on its test-retest reliability stood at 0.78 which is ideal for a research instrument. Direct delivery method was used in collecting data from the respondents while the percentage was used for data analysis as well as tables and frequency counts. The bench mark for the result was 50%.

RESULTS

Research Question One: What is the prevalent method of solid waste management in Anambra state?

Table 1: Prevalent Method of Solid Waste Management in Anambra State

S/NO	Statement	Agreed		Disagreed	
		Freq	%	Freq	%
1.	Use of dump sites	373	88.7	47	11.3
2.	Adoption of the services of ANSEPA	302	72.0	118	28.0
3.	Use of private waste contractors	288	68.5	132	31.5
4.	Burying underground	228	54.3	192	45.7
5.	Burning of wastes/ incineration	313	74.6	107	35.4
6.	Heaping on the roadside	379	90.3	41	8.7

Result in Table 1 show that heaping on road sides (90.3%) and use of dump sites (88.7%) are the most popular solid waste management system used in Anambra state. From Table 1 it is equally seen that burying underground is the least adopted waste management method as only 228 out of 420 respondents representing 54.3% agreed to it.

Research Question Two: How effective is the solid waste management method in use in Anambra state?

Evidences in Table 2 reveals that 91.5% of the respondents are of the view that waste vans are not in good shape to work, 88.4% opined that solid waste disposal is not well coordinated at all in my area and only 44.6% agreed that every family has a waste bin. From these results, it could be deduced that solid waste management in the study area is not very effective.

Table 2: Effectiveness of Solid Waste Management in Anambra State

S/NO	Statement	Agreed		Disagreed	
		Freq	%	Freq	%
1.	Every family has a waste bin	196	46.6	224	53.4
2.	Officials of ANSEPA always come around to collect wastes from each home	268	63.7	152	36.3
3.	Private waste contractors always visit homes to collect refuses regularly	223	53.2	197	46.8
4.	We hardly see ANSEPA officials in our area	358	85.3	62	14.7
5.	Sometimes the waste vans are not in good shape to work	384	91.5	36	8.5
6.	Solid waste disposal is not well coordinated at all in my area.	371	88.4	49	11.6

Table 3: Media Advocacy and Solid Waste Management

S/NO	Statement	Agreed		Disagreed	
		Freq	%	Freq	%
1.	Many people do listen to radio and television progammes on solid waste management	237	56.4	183	43.6
2.	A lot of people now use dust bins in their homes to pack refuses	274	65.3	146	34.7
3.	The littering of streets with heaps of dirt has reduced since the inception of waste disposal programmes	295	70.3	125	29.7
4.	The media has helped sensitize a lot of people about proper waste disposal	316	75.2	104	24.8
5.	Many citizens are complying with officials of ANSEPA for waste disposal	271	64.5	149	35.5
6.	There is little or no improvement in waste disposal despite the radio and television programmes.	236	56.3	184	43.7

Research Question Three: To what extent has media advocacy affected solid waste management in Anambra state?

Going by data in Table 3, it could be deduced that the media has made positive considerable impact on waste management in the study area. This is typified by the fact that all the items posited each has an affirmative response above the 50% bench mark which means that majority of the respondents agreed to them.

Research Question Four: What factors pose threats to effective solid waste management in the study area?

Among the challenges to effective solid waste management in the study area include but not limited to poor or nonpayment of waste management workers and contractors (91.5%) and inadequate number of and ill-functional waste disposal equipment (89.6%) as well as poor awareness of the public about the dangers of poor waste management (89.1%).

Research Question Five: How can solid waste management in Anambra state be more effective?

Table 4: Factors that Hinder Effective Solid Waste Management in Anambra State

S/NO	Statement	Agreed		Disagreed	
		Freq	%	Freq	%
1.	Poor awareness of the public about the dangers of poor waste management	374	89.1	46	10.9
2.	Improper monitoring and supervision of ANSEPA work	354	84.3	66	15.7
3.	Poor or non-payment of waste management workers and contractors	384	91.5	36	8.5
4.	Inadequate number of and ill-functional waste disposal equipment	376	89.6	44	10.4
5.	Poor attitude of citizens towards effective waste disposal	370	88.2	50	11.8
6.	Lack of cooperation from the general public.	337	80.3	83	19.7

Table 5: Ways of Making Solid Waste Management More Effective in Anambra State

S/NO	Statement	Agreed		Disagreed	
		Freq	%	Freq	%
1.	There is need for sensitization of the public about the dangers of poor waste management	368	87.6	52	12.4
2.	The government should adopt environmentally friendly waste disposal system	344	81.8	76	18.2
3.	Waste managers should be adequately remunerated	379	90.2	41	9.8
4.	Adequate number of and well functioning waste disposal trucks should be provided by the government	367	87.4	53	12.6
5.	Media should be more empowered and proactive in sensitizing the general public about importance of proper waste disposal.	408	97.1	12	2.9
6.	Defaulters of proper waste disposal rules should be prosecuted to serve as a deterrent.	374	89.0	46	11.0

In order to improve on solid waste management in the state, the respondents agreed among others that media should be more empowered and proactive in sensitizing the general public about importance of proper waste disposal (97.1%), waste managers should be adequately remunerated (90.2%) and that defaulters of proper waste disposal rules should be prosecuted to serve as a deterrent (89.0%).

Discussion

The study sought to examine the nexus between media advocacy and solid waste management in Anambra state. This study became necessary due to the poor state of waste management in the study area which has constituted a source of worry to well meaning and environmentally friendly Nigerians. From the study it was gathered that use of dumping site and heaping on the roadside are the prevalent waste disposal method in the state. This finding is in tandem with Igwe and Evan (2020) who found that many streets in Aguata in Anambra state are seen with heaps of solid refuses while some places are designated as dumpsites where people and waste workers go to throw away dirt.

In the same manner, it was gathered that solid waste management in the study area is not very effective. This is because the prevalent methods adopted are not environmentally friendly. In the views of Okonkwo and Chidi (2020) and Igwe and Evans (2020) some waste management methods like

incineration and landfill (use of dump sites) constitute pollution to the environment and can lead to serious public health problem in no distant time if not controlled. For waste management to be more effective, modern means of waste management like Plasma Gasification and recycling as suggested by Tools-Hero (2019) should be adopted as these methods do not cause environmental pollution and is safe to humans.

In similar manner, media was found to be very helpful in sensitizing the public about waste management trough various advocacies and provision of information, enlightenment and environmental education of the masses. This finding corroborates Makali (2003) who averred that the media have the power to control and direct people? s beliefs, attitudes and behaviors through direct appeals toward a specific objective via information that circulate daily among the people. Thus the media is seen as being able to influence the masses towards proper waste disposal via enlightenment. Among the factors that hinder effective solid waste disposal in the state are poor remuneration of waste management workers and mal functional equipment. Waste disposal or management needs equipment like trucks, decomposer, recycler, shovels, among others. However, some of such equipment are very expensive to procure and to service (Tools-Hero, 2019). In some cases the available number of the equipment is not adequate for the teaming population. It becomes more worrisome when the equipment are not in good condition, hence cannot serve the intended purpose. In the same line of discourse, sometimes waste management workers are not being paid (Okonkwo & Chidi, 2020) and they are forced to embark on industrial action which hinder effective waste disposal. For effectiveness in solid waste management, it was suggested that the media needs more empowerment from the government to educate the populace the more about proper waste disposal and management methods. This is because according to UNICEF (1993), social mobilization deals with a comprehensive planning approach concerning political and community action whereby members of a society or community are persuaded via the media to take on a particular line of action considered beneficial to the corporate existence of the entire community.

Conclusion

The study was conducted to examine how well the media has facilitated the solid waste management in the study area. The study was based on the premise that the media has the propensity to influence the public to modify their attitude towards a thing and to effect desired changes. Also the rate at which heaps of refuses are seen on roadside in the study area prompted the study. Based on the findings it was seen that use of dumpsite and heaping on road side are prevalent. Also the solid waste management is rather not effective though the media has been very helpful in advocating for proper waste disposal in the study area. The study gathered that poor remuneration of waste management workers and poor equipment are lead factors hindering effective solid waste management in the study area. Finally it was suggested that media be empowered and for the waste management workers to be adequately remunerated if solid waste management in Anambra state will be made effective.

Recommendations

Sequel to the findings from the study the followings are suggested:

1. The media should be given more adequate funding to educate the public more about proper waste management in the state.
2. The government of Anambra state should put her resources together to purchase adequate number of waste management equipment to enable proper solid waste management in the state.
3. For effective waste disposal, waste management workers should be promptly paid to guard against going on industrial actions.
4. The government should adopt modern waste management techniques that are environmentally-friendly to reduce public health hazards that might emanate from adopting traditional waste management method.

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