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Sanitary Practices and Waste Management among Beggars in Ilorin Metropolis

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ABSTRACT

Background: Good sanitation and hygiene are prerequisites for economic development and health. Sanitary practices among beggars within Ilorin is becoming a challenge and is being explored. This study was quantitative and qualitative regarding the employed approach for the case study as a research design.
Methods: 200 beggars across the three local government areas that made up the metropolis were randomly selected for the interview. The data were analyzed using statistical tools and results were measured against key sanitary metrics.
Results: 200 beggars were enrolled, comprising 133 (66.5%) males. 71 respondents (35.5%) had no access to toilet facilities. The remaining 129 (64.5 %) had a shared one toilet seat for households between 15-20 people. 106 (53%) of the respondents resort to urinating or defecating in the open drains. The women use a can or polythene for urine or feces before disposing to open drains, resulting in foul-smelling environments. Contributing to unsanitary practices were attitude, ignorance, and poor educational background, 135 (67.5%) never attended school.
Conclusion: The need for intensive public education, providing basic sanitary facilities, and strengthening and enforcement of the existing environmental sanitation bye-laws to make every individual responsible for good environmental sanitation in the metropolis were recommended.

1. Introduction

Globally, over 600 million urban dwellers lack basic sanitation and 2.2 billion urban residents do not use safely managed sanitation services, and 40% of the world's population lacks access to improved sanitation [1,2]. Sanitation is defined as the state of cleanliness of a place, community, or people with interventions to reduce people's exposure to diseases and with measures to break the cycle of disease [3,4]. The sanitation system is also described as comprising the users of the system, the infrastructure, the collection, transportation, treatment, and management of end products [5]. This usually includes hygienic management of human and animal excreta, refuse, and wastewater, the control of disease vectors, and the provision of washing facilities for personal and domestic hygiene. Therefore, sanitation is a concept explaining activities to ensure the safe disposal of excreta, solid waste, and other liquid waste and the prevention of disease vectors to ensure a hygienic environment. Environmental sanitation refers to activities aimed at improving or maintaining the standard of basic environmental conditions affecting the well-being of people. These conditions include a clean and safe water supply; clean and safe ambient air; efficient and safe animal, human, and industrial waste disposal; protection of food from biological and chemical contaminants; and adequate housing in clean

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and safe surroundings. Thus, environmental sanitation involves controlling the aspects of waste that may lead to the transmission of diseases. According to the International Water and Sanitation Centre, the term "environmental sanitation" is used to cover the wide concept of controlling all the factors in the physical environment which may impact human health and well-being [6]. Wherever humans gather, wastes are generated and accumulated. Progress in sanitation and improved hygiene has dramatically improved health, but many people still have no adequate means of appropriately disposing of their waste. This is a growing nuisance for heavily populated areas, carrying the risk of infectious disease, particularly to vulnerable groups such as the very young, the elderly, and people suffering from diseases that lower their resistance. Poorly controlled waste also means daily exposure to an unpleasant environment. Waste management is at the lowest levels in most towns and communities in developing countries. Integrated waste management in a sustainable approach was proposed as a panacea [7]. Most parts of the city centers do not benefit from public waste disposal services; therefore, must bury or burn their waste or dispose of it haphazardly [8]. In most cities and peri-urban centers, refuse heaps are left unattended, and where the Local Government Authorities collect, it is often irregular and sporadic. The recycling of wastes in developing countries is negligible, while methods of storage, collection, transportation, compaction, and final disposal are very unsatisfactory [9]. One social problem that has been an age-long issue and a serious concern to the well-being of Nigerians is street begging. The problem of begging is widespread in Nigeria and is a global problem and also observed as an antisocial behavior in almost all nations of the world, especially in developing nations [10]. It involves asking for what the beggar does not have or a favor. Street begging is a national disease that eats the fabric of the social, economic, religious, political, and educational structures. In other words, it is an indictment of the quality of governance in many societies [11,12,13,14]. Begging was reported as a structured profession in Karachi, Pakistan with beggars owing houses and properties [15]. It is fundamental to understand that street beggars are one of the most vulnerable groups of persons. Their inability to access basic social amenities puts them at great risk of contracting various communicable and non-communicable diseases [16,14]. Against this backdrop, this study seeks to explore the sanitary practices of beggars within Ilorin metropolis, examine the sanitation conditions of the beggars in Ilorin, identify the mitigating factors against healthy sanitary practices, and propose appropriate interventions for improved sanitation in the metropolis. This study would serve as a major input to the government, departments, and agencies concerned with managing environmental sanitation in Ilorin and designing interventions, programs, or activities for the metropolis. The study provides information that serves as a basis for further research into issues of managing local environmental sanitation to improve health and reduce urban poverty.

2. Materials and Methods

2.1 Study Area

This study was carried out in Ilorin, the capital city of Kwara State, north central Nigeria. It has a population of 1,256,705 (2022 projection), making it the 7th largest city by population in Nigeria. The city has continued to experience massive growth and changes in terms of economy and infrastructure leading to a continuous influx of beggars from other parts of the country, as they could be seen along main roads, junctions, shopping centers, markets, bank premises, etc.

2.2 Research Approach/Design

A case study design was adopted for this study. It is an empirical inquiry that allowed the researcher to investigate and understand the sanitation pattern of beggars in Ilorin metropolis. This approach was preferred because it provides a systematic way of looking at events, collecting data, analyzing information, and reporting results. It is used to narrow down a very broad field of research into one easily researchable topic, referred to as research that investigates a few cases in considerable depth which implies the collection and analysis of data [17]. Case study research allows for an in-depth review of the new or unclear subject matter whilst retaining real-life events' holistic and meaningful characteristics [17,18]. The study employed various methods and strategies to obtain relevant information to provide answers to questions posed and assisted in drawing suitable conclusions after data analysis. A combination of qualitative and quantitative data was gathered. Those aspects that relate to human behavior and are not easily measurable were investigated using qualitative methods. Qualitative research seeks a better understanding of complex situations. It is used to answer questions about a subject matter to describe and understand the subject matter from the respondents' point of view [19,20].

2.3 FIELD PROCESS

2.3.1 Data Collection

Baseline data was generated using the Rapid Appraisal Survey (Observation), which is suitable for situations that do not require detailed statistical data to establish the nature of an event or situation before deciding on personal interviews [21]. Considering the self-evident nature of the sanitation pattern of the beggars in Ilorin metropolis, we visited religious and public places to gain an in-depth understanding of the situation. Environmental sanitation issues are social and engineering issues such as the Rapid Appraisal survey is used in urban renewal cases where visits to sites provide vivid and picturesque on-the-scene data on which to assess the issues [21].

2.3.2 Interviews

Interviews were conducted to obtain information from the beggars about the subject matter. Personal interview questionnaires, which involve the interviewer asking questions and recording the answers in the questionnaires, were used to obtain information from 200 respondents. This method was adopted considering the literacy level of some of the respondents and for the interviewer to create a rapport to make the respondents confident [19,22]. Considering the low literacy levels among some of the respondents, especially, in the traditional and some tenement housing sectors, the researchers of the present study limited self-administered questionnaires to some extent. The checklist approach is preferred to self-administered questionnaires when the literacy levels are not so high among the respondents [23]. The questionnaires were designed so that key questions concerning waste management and disposal and knowledge about environmental sanitation regulations were easy to understand and. Variables such as availability of waste bins, closeness to waste bins, responsibility for cleaning the immediate surroundings, type of available sanitary facilities (toilets and urinals), their conditions and closeness, personal measures to prevent filth and promote hygiene in the immediate surroundings among others were investigated. Figure 1 shows a cross section of beggars at Ilorin south.

2.4.1 SAMPLING SIZE AND TECHNIQUE

Ilorin is a metropolis with a population of 1,256,705 (2022 projection). It encompasses three Local Government Areas: Ilorin South, Ilorin West, and Ilorin East. A blend of sampling techniques was used to select the units of the population of beggars for the study to extend the knowledge gained about the selected unit to the whole population.

2.4.2 Sampling Method

An introspective reconnaissance survey was carried out in two areas, each from the three Local Government Areas of the study, to identify the peculiar sanitation practice of beggars in the Local Government Areas. Both probability and non-probability sampling methods in selecting the samples for the study were used. Simple random sampling was used to determine two areas from each local government to ensure a good spread for the study. SPSS version 17 was used to analyze the data obtained.

3. Results and Discussion

3.1 Sex and Age Distribution

Of the 200 respondents selected for the study, age range was between 15 years to 62 years as shown in table 1. 133(66.5%) were male, while the remaining 67(33.5%) were female. This indicates that men outnumber women in begging; hence they generate more waste and lack waste management skills, unlike the role women play in sanitation management [14]. Findings through similar research revealed more pronounced begging among males, married, illiterate, and the aged [12,10]. At Oja-Oba, Gambari, and Zango areas of the metropolis, where much detail was required for garbage disposal, males indicated that they knew little and thus either failed to respond to some of the questions or asked females to give answers.

Table1: Age of Respondents

Age group (years)	Frequency	Percentage (%)
15-30	57	28.5
31-46	124	62.0
47-61	18	9.0
62 and above	1	0.5
Total	200.0	100.0

Figure 1: A cross section of beggars at Ilorin south

3.2 Educational Level of Respondents

The educational level of respondents determined to a large extent, the nature of their responses and their understanding of the issues at stake. From the survey, 4 (2.0%) of the respondents had attended high school before, and 61 (30.5 %) attended primary school. The study showed that 135 (67.5%) respondents had never been to school before or attended any non-formal class as shown in figure 2. The high illiteracy reported in this study is also similar to the findings by other researchers [14,24,16,12]. This is a negative indicator for environmental sanitation education and enforcement of sanitary regulations components as most beggars cannot comprehend any effort to promote a hygienic urban environment through public education and enforcement of sanitation laws.

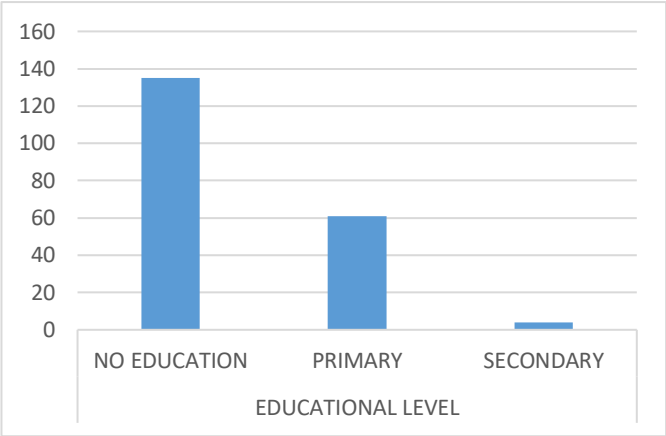

Figure 2: Educational level of respondents

3.3 Access to Urinals and Toilet Facilities

71 respondents (35.5%) did not have toilet facilities in the building as shown in table 2 and had to resort to public toilets, which they sometimes must queue to access it. The remaining 129 (64.5 %) had a shared toilet of one seat for all the households (a household consisting of 15-20 people). 106 (53%) respondents resort to urinating or defecating in the open drains or the case of women, in a can and pouring the urine into the open drain. This causes streets always to smell the stench of urine. Respondents attributed this to the unavailability of urinals and the long-distance one must walk to access one. This tends to breed disease vectors and can easily promote disease transmission if it continues [16]. The remaining 94 (47%) gave a negative response.

Table2: Toilet facilities

Toilet facility	Frequency	Percentage (%)
Yes	129	64.5
No	71	35.5
Total	200	100.0

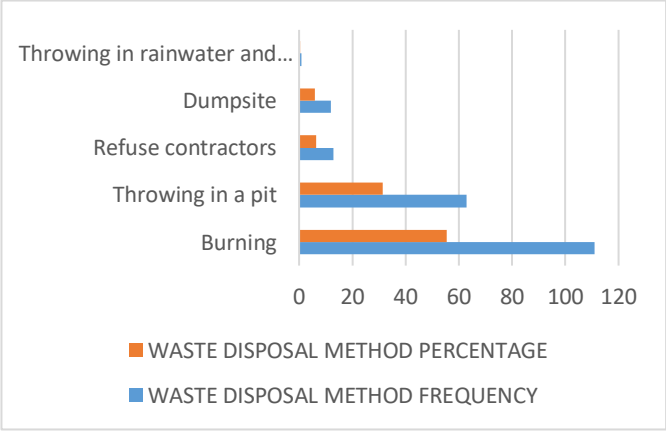

Figure 3: Waste Disposal Methods

Out of 200 respondents, only 13 of them (6.5%) had subscribed to refuse contractor, and 63 (31.5%) subscribed to throwing in a pit. The survey revealed that 111 (55.5%) beggars burn the waste they generate. However, 12 (6.0%) of the respondents threw their garbage in the dumpsite, while 1 (0.5%) throw their waste in rainwater and stream as shown in Figure 3. Household solid waste management methods are statistically linked to diseases [25].

3.4 Community Environmental Sanitation

The respondents were allowed to give a general assessment of their immediate environment. The study revealed differences in behavior among the various beggars regarding environmental sanitation, as 45 (22.5%) of the respondents described the environmental sanitation condition in their area as "good", while 26(13.0%) described the sanitation condition in their area as "bad". However, 129(64.5%) of the respondents described the sanitation condition in their area as "fair" as shown in figure 4. This indicates poor sanitation conditions where the beggars reside.

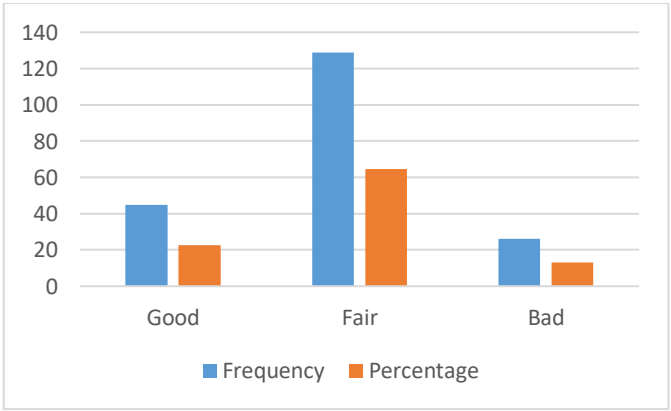

Figure 4: View on sanitation

3.5 Attitudinal Behavior of Beggars Towards Sanitation

The study revealed that one major problem is the poor attitude of beggars toward sanitation. The beggars seem not to bother living with litter all around them. They believe if they litter the streets, drainages, or public places, it would be swept in the evening by the waste contractors. Therefore, they do not effort to put litter in a waste bin even when the bins are close by, but instead dump it wherever they stand [26,16,14,27]. This makes the city always dirty because, a few hours after streets have been swept, people start throwing litter around (Figure 5). In places such as Oja-Oba, the situation is an eyesore as the beggars who often stay there start throwing litter even when sanitation workers are still sweeping. Sometimes when it rains in the afternoon, all the litter is washed away into sewers which clog drainages and sometimes cause flooding [28]. The following response from the beggars gives an insight into their attitude towards environmental sanitation.

"We have other pressing needs than thinking about the cleanliness of the city. We don't get our money to support our families from clean streets. Let those who are paid by the government to clean the city do so. I will never carry a bin with me." (Respondent A, field data, 2022).
"Honestly, you can't expect a disabled person like me to clean the litter that is caused by my clients. Neither do you expect me to provide a bin to my clients. The government should see what it can do to keep this street clean. It's not my worry whether it's clean or not. I do not see the benefits of the street being clean accruing to me." (Respondent B, field data, 2022).

Figure 5: Infrastructural Deficiency

At Ile afoju in Zango, some of the resident beggars lack access to concrete drains. The survey revealed that almost all of them did not have access to concrete drains from their homes. They resort to carrying grey water from home to an open drain or letting it drain on the ground. This leaves algae and stagnant water, which breeds mosquitoes and flies. Inadequate drains pose serious environmental threats as wastewater cannot flow freely and causes disease vectors and stench, which are detrimental to the health of inhabitants [29].

4. Conclusion

It can be concluded from the study that respondents have a passive and withdrawn attitude toward sanitary issues. Access to safe and efficient sanitary facilities would prove key in redirecting this present disposition to a positive one. Community-based sanitary education for this set of citizenries would prove quite strategic in reaching them. The agency in charge of sanitary and environmental monitoring within the metropolis must enforce stipulated sanitary laws and punish apprehended offenders accordingly. Beyond this, the state government must also actively participate in sanitary matters, from providing the needed sanitary facilities to the training of sanitary officers and proper financing of sanitary projects.

Authors' Contributions

Olubunmi Ajike Mokuolu: Conceptualization; Protocol development; designed the data tools; analyzed the data; Manuscript development; Editing and production of the final manuscript; Study and approval of the final article. Abdsamad Ishola Ibrahim: Conceptualization; Protocol development; designed the data tools; Manuscript development; Study and approval of the final article.

Conflicts of Interest

The Authors declare that there is no conflict of interest.

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