

# Assessment of Availability of Female-friendly Public Toilets in Markets and Motor Parks in Jos Metropolis, Plateau State, Nigeria

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**Abstract:** The purpose of the study was to assess the availability of female-friendly public toilets in markets and motor parks in Jos Metropolis, Plateau State, Nigeria. Three objectives were formulated with three corresponding research questions. A Cross-sectional research design was used for the study. The study was conducted in Jos Metropolis. The population of the study consisted of all female buyers, sellers and travelers. Purposive sampling procedure was used to draw up the sample size population of 150 females for the study. The instrument used for data collection was structured questionnaire. The data were collected through four research assistants. The data were analyzed using descriptive statistic of frequency counts and percentages and were presented in Tables. The findings of the study revealed that pit latrines, VIP Latrines, pour flush were the types of public toilets available in markets and motor parks, all the identified items were confirmed as the qualities of female-friendly public toilets; the identified items were confirmed as barriers to accessibility of Females to Public Toilets in Markets and Motor Parks in Jos Metropolis. The study recommended among others that attention be given to the key components essential for toilets that girls and women can safely and comfortably use.

**Keywords:** assessment, availability, female-friendly public toilets, markets, motor parks

## I. INTRODUCTION

Assessment is the process of gathering and discussing information from multiple and diverse sources in order to develop a deep understanding of what students know, understand, and can do with their knowledge as a result of their educational experiences; the process culminates when assessment results are used to improve subsequent learning (Huba & Freed 2000). Erwin (1991) explained assessment as the systematic basis for making inferences about the learning and development of students. He further stated that it is the process of defining, selecting, designing, collecting, analyzing, interpreting and using information to increase students' learning and development. Assessment is the systematic collection, review, and use of information about educational programs undertaken for the purpose of improving student learning and development (Palomba & Banta, 1999). In this study it is the gathering of information about the availability of female-friendly public toilets in markets and motor parks, in Jos Metropolis.

Availability of female-friendly public toilets are that they are there to provide safety and privacy with separate entrance and a shared wall between the female and male toilets, accessible to all female users, affordable and available for the users at all time, have options for washing reusable menstrual products, be kept clean and functional at all time and have a clean and safe place for parents or caregivers to clean and change baby diapers (Margaret et al, 2018)

Female-friendly public toilet is a room or small building with toilets (or urinals) and sinks that does not belong to a particular household rather than for use by the general public, customers, travelers, employees of a business, school pupils, prisoners, markets and motor parks (Schmitt et al, 2017). Margaret et al (2018) postulated that female-friendly toilets possess the following qualities: safe, privacy, accessible, affordable and well managed, cater for menstrual hygiene management and meet the needs of caregivers for changing children's clothes in the market.

A market is any place where sellers of particular goods or services meet with buyers of those goods and services which creates the potential for a transaction to take place. The buyers must have something they can offer in exchange for the product to create a successful transaction and Motor parks is the most common 'first contact' for people travelling from one destination to another within (Caruso et al, 2017).

From time immemorial, humans have used the resources of the earth to support life and dispose of wastes. In those days, the disposal of human wastes did not pose any problem as the population was small and the area of land available for the assimilation of such waste was unlimited (Alfred et al, 2015). They further opined that today rapid population growth and uncontrolled industrial development are seriously degrading the urban and semi urban environment in many of the world's developing countries, placing enormous strain on natural resources and obstructing efficient and sustainable development. Environmental sanitation practices refer to provision, utilization, and maintenance of environmental sanitation facilities and services and adherence to environmental legislation (Daramola, 2015).

Schmitt et al (2017) opined that inadequate access to a private, comfortable, and well-located toilet remains a critical

challenge for many girls and women around the world. They further stated that this issue is especially acute for girls and women living in densely populated urban slums, displacement camps, and informal settlements, often resulting in anxiety, embarrassment, discomfort, and gender-based violence. Caruso et al (2017) explained that the unique sanitation needs of girls and women are rarely accounted for during the design and construction of toilet facilities, including needs related to their physiology, reproductive health processes, prevalent social norms, and their heightened vulnerability to violence. Sommer et al (2017) stated that it is critical that a new norm be developed regarding the design of female-friendly toilets which better enables girls and women to feel confident, safe, and dignified while managing their daily sanitation needs. They further opined that this includes adopting specific design measures which account for their menstrual hygiene, personal safety, and dignity-related needs.

Adequate sanitation, together with good hygiene and safe drinking water are essential for good health, social and economic development (Mara et al, 2014). Basic sanitation is described as having access to facilities for the safe disposal of human waste (feces and urine), as well as having the ability to maintain hygienic conditions, through services such as garbage collection, industrial/hazardous waste management, wastewater treatment and disposal. Globally, 2.3 billion human beings still do not have access to basic sanitation facilities such as toilets or latrines. Of these, 892 million still defecate in the open field, for example in street gutters, bushes and open bodies of water. Inadequate sanitation is estimated to cause 280 000 diarrhoeal deaths annually and is a major factor for causing numerous neglected tropical diseases such as Intestinal Worms, Cholera, Poliomyelitis, Typhoid Fever and Schistosomiasis (WHO, Factsheet: Sanitation, 2017). Sanitation is the use of toilets to contain or dispose human excreta and to protect human health. The 2015 United Nation's (UN) Sustainable Development Goal (SDG) 6 for 2030 aims to achieve equitable access to safely managed water and adequate sanitation for all and end open defecation. Achieving universal and equitable sanitation for all require access to information and data on pathogens and sanitation technologies and a network of community members, professionals, and experts who reside all over the world like the Global Water Pathogens Project

Globally, 946 million people still defecate in the open. 9 out of 10 live in rural areas, 2.4 billion people lack access to basic sanitation, 7 out of 10 live in rural areas, 663 million lack access to basic water sources, and diarrhea is the second leading cause of death in children under five (WHO/UNICEF JMP, 2015; WHO, 2017). Sanitation is one of the most important aspects of community well-being because it promotes human health, extends life spans, and is documented to provide benefits to the economy. WHO has introduced Global Strategy 2015-2020 which includes Water, Sanitation and Hygiene (WASH) for prevention and care of all the neglected tropical diseases (NTDs) scheduled for intensified

control or elimination by 2020. A global strategy 2015-2020 (2017) provision of safe drinking water, sanitation and hygiene are key interventions within the globe.

Sanitation is recognized as a human right and is included in the Sustainable Development Goals, aiming to achieve universal access to sanitation, while paying special attention to the needs of women and girls and those in vulnerable situations. However, public toilets are inadequate in numbers and are not being planned, designed or managed in a way that ensures they are female-friendly and accessible to all female users

The word female comes from the Latin word femella, the diminutive form of femina, meaning "woman" (Charles, 2019). Charlton (2019) defined a female as the sex of an organism, or part of an organism, that produces non-mobile ova (egg cells). Female is an individual of the sex that bears young or that produces ova or egg (William, 2018).

Female-friendly public toilets have become an important feature in markets and motor parks including Jos Metropolis. Without which they will defecate in the "bush or beach", which will aggravate environmental health hazards in a country which will lead to spread of diseases such as diarrhea, dysentery, cholera and bilharzia (Hutton, 2007). Hygienic excreta disposal is a fundamental part of urban sanitation and a basic necessity in disease prevention. The importance of good sanitation is indisputable because it is a crucial stepping stone to better human health. It offers the opportunity to save the lives of more than 1.5 million children a year who would otherwise yield to diarrheal diseases and to protect the health of many more according to WHO/UNICEF, (2012). In line with this, there have been numerous determinations by the Federal Government of Nigeria and State Government especially in the urban areas like Jos Metropolis where population growth continues to increase to improve sanitation.

The delivery of sanitation services has not been the best in developing countries including Nigeria, Plateau State and Jos Metropolis. Because of these unfriendly conditions there is a lot of sanitation and hygiene related diseases. Human excreta are major hazard to female public health and the environment. Most females in markets and motor parks do not have access to female-friendly public toilets which lead to indiscriminate defaecation and urination; in turn lead to spread of human excreta-transmitted diseases like diarrheal diseases, cholera, typhoid fever, hepatitis A, and worms that predominantly affect children and the poor (Thrift, 2009). The situation in Jos Metropolis is not different.

However, data on the availability, management and hygiene practices of female-friendly public toilets in markets and motor parks in Jos Metropolis have not been well reported and documented. This study aims at providing valuable data on the availability, management and hygiene practices of female-friendly public toilets in markets and motor parks in Jos Metropolis which will serve as input for policy formulation for female-friendly public toilets provision guidelines. Knight

and Bichard (2011) opined that public toilet provision has remained inadequate in most communities in developing countries such as Ghana, China, India and Nigeria which lack even rudimentary toilet access. They further mentioned the types of toilets to be used in markets and motor parks to include pit latrines, VIP Latrines, Wall Hanging Toilets, No-touch Flush Toilets, Single-Flush Toilets and Double-Flush Toilets. Against the background of these identified types of public toilets this study became interested in assessing the availability of female-friendly public toilets in used in markets and motor parks in Jos North and Jos South Local Government Areas of Plateau State, Nigeria.

### 1.1 Statement of the Problem

Markets and motor parks are amongst the fastest growing public places in Jos Metropolis. With a steady rise in population, it has recorded an increasing growth due to some socio-economic developments. Commercial activities have grown and brought with it greater demands for more basic facilities and services like potable water supply, basic sanitation and hygiene for the benefits of sellers, buyers and commuters.

Observation of markets and motor parks environment revealed inadequate public toilets facilities resulting in open defecation, indiscriminate urination, foul smell and alarming grubbiness as there are no sufficient public toilets, let alone a female-friendly public toilets for sellers, buyers and commuters to use. In most cases where public toilets are provided they are poorly maintained and lack privacy when using the toilets. Most often women expressed feelings vulnerable when having to use the toilets. Failing to manage public toilets to ensure they are female-friendly and accessible to all users restricts movement of women and girls which is pathetic.

The above scenario is worrisome and unacceptable to the markets and motor parks community members and the general public which creates a gap that justifies the need for the present study to fill and come up with workable solutions for the provision of female-friendly public toilets in markets and motor parks in Jos Metropolis of Plateau State to promote hygiene practices as well as promoting the health of women in the study area.

### 1.2 Purpose of the Study

The purpose of the study was to assess the availability of female-friendly public toilets in Markets and motor Parks in Jos Metropolis, Plateau State, Nigeria.

### 1.3 Objectives

- 1) To determine the types of public toilets available in markets and motor parks in Jos Metropolis
- 2) To assess the qualities of Female-friendly public toilets available in markets and motor parks in Jos Metropolis

- 3) To determine the barriers which hinder females from utilization of the public toilet in Jos Metropolis

### 1.4 Research questions

- 1) What are the types of public toilets available in markets and motor parks in Jos Metropolis?
- 2) What are the qualities of Female-friendly public toilets available in markets and motor parks in Jos Metropolis?
- 3) What are the barriers that hinder females from utilization of the public toilets in markets and motor parks in Jos Metropolis?

### 1.5 Significant of the Study

The study findings are going to be beneficiary to the female traders, customers', travelers as they will ease and defaecate without embracement, or assault from the public.

The data generated will be of benefit to the government and none- governmental agencies in planning for the provision of female-friendly public toilets in public places.

The results of the study will serve as a reference material for other researchers to research further in other markets and motor parks sanitation in the State.

### 1.6 Scope of the Study

This study covers assessment of availability of Female-friendly public toilets in markets and motor parks in Jos Metropolis of Plateau State, Nigeria.

## II. METHODS

**2.1 Research Design.** The study employed Cross-sectional survey research design.

**2.2 Research Setting.** The study was conducted in markets and motor parks in Jos Metropolis of Plateau State, Nigeria.

**2.3 Population of the Study.** The population of the study consisted of all females' sellers, buyers and travelers in the markets and motor parks in Jos Metropolis, Plateau State, Nigeria.

**2.4 Sample and Sampling Procedure for the Study.** The sample size population for the study consisted of 150 respondents gotten through purposive sampling procedure.

### 2.5 The Instrument used for Data collection

The instrument used for data collection for the study was researchers' developed structured questionnaire after thorough reviewed of literature covering the research questions.

### 2.6 Method of Data collection

Three research assistants were used who went round the sampled markets and motor parks with the copies of the structured questionnaire and collected the information from female traders and travelers after explaining the purpose of the study to them and obtaining their oral consent.

2.7 Method of Data Analysis

The data collected were analyzed using descriptive statistic of frequency counts and percentages and presented in Tables. Only 147 out of 150 questionnaires were properly filled, analyzed and presented.

III. RESULTS

Table 1: Characteristics of the Respondents (n=147)

| s/n | Variable               | Group                | f  | %     |
|-----|------------------------|----------------------|----|-------|
| 1   | Age                    | 10-30                | 43 | 29.30 |
|     |                        | 31-40                | 54 | 36.70 |
|     |                        | 41-50                | 38 | 25.80 |
|     |                        | 51 and above         | 12 | 8.20  |
| 2   | Marital status         | Single               | 28 | 19.04 |
|     |                        | Married              | 85 | 57.82 |
|     |                        | Divorce              | 14 | 9.50  |
|     |                        | Separated            | 8  | 5.44  |
|     |                        | Widow                | 12 | 8.20  |
| 3   | Educational attainment | Non-formal education | 33 | 22.45 |
|     |                        | Primary education    | 52 | 35.37 |
|     |                        | Secondary education  | 36 | 24.49 |
|     |                        | Tertiary education   | 26 | 17.69 |
| 4   | Religious affiliation  | Christian            | 83 | 56.46 |
|     |                        | Islam                | 45 | 30.61 |
|     |                        | Traditional          | 17 | 11.57 |
|     |                        | Others               | 2  | 1.36  |
| 5   | Occupation             | Housewife            | 16 | 10.88 |
|     |                        | Farming              | 41 | 27.90 |
|     |                        | Civil servant        | 30 | 20.41 |
|     |                        | Trading              | 50 | 34.01 |
|     |                        | Students             | 10 | 6.80  |

Table 1 revealed the characteristics of the participants who participated in the study thus: age brackets 10-30 43 participated representing 29.30 per cent, 31-40 54 participated representing 36.70 per cent, 41-50 38 participated representing 25.80 per cent and 51 and above 12 participated representing 8.20 per cent. Marital status, those who were single 28 participated representing 19.04, married were 85 representing 57.82 per cent, divorce were 14 representing 9.50 per cent, separated were 8 representing 5.44 per cent and widow were 12 representing 8.20 per cent. On educational attainment, those with non-formal education were 33 representing 22.45 per cent, primary education were 52 representing 35.37 per cent, secondary education were 36 representing 24.49 per cent and tertiary education were 26 representing 17.69 per cent. On religious affiliation, Christians were 83 representing 56.46 per cent, Islam were 45 representing 30.61 per cent, traditional were 17 representing 11.57 per cent and others were 2 representing 1.36 per cent; and on occupation, housewives were 16 representing 10.88 per cent, farming were 41 representing 27.90 per cent, civil servants were 30 representing 20.41, trading were 50 representing 34.01 per cent and students were 10 representing 6.80 per cent.

3.1 Research question one

What are the types of public toilets available in markets and motor parks in Jos Metropolis? Data answering this research question is contained in Table 2 below.

Table 2: Types of public toilets available in markets and motor parks in Jos Metropolis (n=147)

| s/n | Items                            | yes | %     | no  | %     |
|-----|----------------------------------|-----|-------|-----|-------|
| 1   | Traditional Pit Latrine.         | 110 | 74.83 | 37  | 25.17 |
| 2   | Ventilated Improved Pit Latrine. | 88  | 59.86 | 59  | 40.14 |
| 3   | Wall-Hanging Toilet.             | 46  | 31.30 | 101 | 68.7  |
| 4   | No-Touch Flush Toilet.           | 38  | 25.85 | 109 | 74.15 |
| 5   | Single-Flush Toilet              | 74  | 50.34 | 73  | 49.66 |
| 6   | Double-Flush Toilet              | 35  | 23.80 | 112 | 76.2  |

Table 2 above showed the frequency counts and percentages of individual item as follows: responses on item 1 were 110 respondents representing 74.83% said that traditional pit latrines were available in markets and motor parks while 37 respondents representing 25.17 % said that traditional pit latrines were not available; responses on item 2 were 88 respondents representing 59.86% responded that there were Ventilated Improved Pit Latrine available in markets and motor parks while 59 respondents representing 40.14% said there were no Ventilated Improved Pit Latrines in the markets and motor parks; on item 3, 46 respondents representing 31.30% answered yes that there were Wall-Hanging Toilets available in markets and motor parks while 101 respondents responded that there were no Wall-Hanging Toilets available for the utilization of traders and passengers; the responses on item 4, 38 respondents representing 25.85% responded that there were No-Touch Flush Toilet in the markets and motor parks while 109 respondents said that there were no No-Touch Flush Toilet in the markets and motor parks; responses on item 5 revealed 74 respondents representing 50.34% who responded yes that single-flush toilets were available while 73 respondents representing 49.66% said that they were not available and responses on item 6 showed 35 respondents representing 23.80% said that Double-Flush Toilet were available while 112 respondents representing 76.2% said they were not available.

3.2 Research question two

What are the qualities of Female-friendly public toilets available in markets and motor parks in Jos Metropolis? Data answering this research question is contained in Table 3 below

Table 3: Qualities of Female-friendly Public Toilets Available in Markets and Motor Parks in Jos Metropolis (n=147)

| s/n | Items   | Yes | %     | No | %     |
|-----|---|-----|-------|----|-------|
| 1   | Be in a safe location for women to avoid harassment | 122 | 82.99 | 25 | 17.01 |

|    |  |     |       |    |       |
|----|--|-----|-------|----|-------|
| 2  | Have a clearly marked female toilet section on the door  | 113 | 76.87 | 34 | 23.13 |
| 3  | Have a separate entrance with good lighting to avoid sexual violence   | 109 | 74.15 | 38 | 25.85 |
| 4  | Cater for menstrual and other hygiene requirements by providing water and soap for washing and means for disposal of menstrual products. | 100 | 68.03 | 47 | 31.97 |
| 5  | Be at a reasonable distance from markets or motor parks and reachable via an accessible path   | 117 | 79.59 | 30 | 20.41 |
| 6  | Have enough cubicles for the women to avoid long queues  | 112 | 76.19 | 35 | 23.81 |
| 7  | Have adequate management arrangements for cleaning and maintenance of liquid and solid waste.  | 122 | 82.99 | 25 | 17.01 |
| 8  | Meet the requirements of caregivers and parents for baby clothes changing  | 132 | 89.79 | 15 | 10.21 |
| 9  | Be affordable and available when needed by women   | 127 | 86.39 | 20 | .61   |
| 10 | Female-friendly public toilets promote socio-economic activities of the women leading to their empowerment                               | 132 | 89.79 | 15 | 10.21 |

Table 3 above revealed that majority of the respondents responded yes to all the items as the qualities of female-friendly public toilets available in the markets and motor parks. The Table further shows the frequency counts and percentages of the individual item as follows: responses on item 1 has 122 respondents representing 82.99% which is quality of female-friendly public toilets; item 2 has 113 respondents representing 76.87% which is quality of female-friendly public toilets; item 3 has 109 respondents representing 74.15% which is quality of female-friendly

public toilets; item 4 has 100 respondents representing 68.03% which is quality of female-friendly public toilets; item 5 has 117 respondents representing 79.59% which is quality of female-friendly public toilets; item 6 has 112 respondents representing 76.19% which is quality of female-friendly public toilets; item 7 has 122 respondents representing 82.99% which is quality of female-friendly public toilets; item 8 has 132 respondents representing 89.79% which is quality of female-friendly public toilets; item 9 has 127 representing 86.39% which is quality of female-friendly public toilets and item 10 has 132 representing 89.79% which is quality of female-friendly public toilets.

### 3.3 Research question three

What are the barriers hindering accessibility of females to public toilets in markets and motor parks in Jos Metropolis? Data answering this research question is contained in Table 4.

Table 4: Barriers Hindering Accessibility of Females to Public Toilets in Markets and Motor Parks

| s/n | Items  | Yes | %     | No | %     |
|-----|--|-----|-------|----|-------|
| 1   | Most markets and motor parks lacked WASH facilities and were not properly managed that made them inaccessible  | 133 | 90.48 | 14 | 9.52  |
| 2   | None formal arrangements for the management and maintenance of the facilities (toilets) that made them inaccessible  | 122 | 82.99 | 25 | 17.01 |
| 3   | National Union of Road Transport Workers (NURTW) and Market Officials (SarkinKasuwa, Sarki Power, Chairmen, etc.) willing to enforce the usage of toilets in the markets and motor parks once enough facilities are provided | 117 | 79.59 | 30 | 20.41 |
| 4   | The LGA doesn't provide land to interested investors to build public toilets for females usage that made them inaccessible   | 112 | 76.19 | 35 | 23.81 |
| 5   | Most females prefer pour flush latrine with available water  | 117 | 79.59 | 30 | 20.41 |
| 6   | There are no public toilets in most of the Markets and Motor Parks in Jos Metropolis for females usage that made them inaccessible   | 107 | 72.80 | 40 | 27.20 |
| 7   | WASH facilities in the few markets and motor parks built by businessmen, users are charged fees to use the facilities that made them inaccessible  | 124 | 84.35 | 23 | 15.65 |
| 8   | The fees ranged from N10.00 (urination), N30.00 (excreta) and N50.00 (bath) that made them inaccessible.   | 107 | 72.80 | 40 | 27.2  |
| 9   | The motor parks and markets environments are not tidy due to open defecation making it inaccessible.   | 127 | 86.39 | 20 | 13.61 |
| 10  | No gender considerations: no separate toilets compartment/building for males and females that made them inaccessible   | 112 | 76.19 | 35 | 23.81 |

Table 4 above revealed that majority of the respondents responded yes to all the items as barriers to accessibility of female to public toilets in the markets and motor parks. The Table also shows the frequency counts and percentages of the individual item as follows: item 1 has 133 respondents representing 90.48% which means barrier to accessibility of female to public toilets in the markets and motor parks; item 2 has 122 respondents representing 82.99% which means barrier to accessibility of female to public toilets in the markets and motor parks; item 3 has 117 respondents representing 79.59% which means barrier to accessibility of female to public toilets in the markets and motor parks; item 4 has 112 respondents representing 76.19% which means barrier to accessibility of female to public toilets in the markets and motor parks; item 5 has 117 respondents representing 79.59% which means barrier to accessibility of female to public toilets in the markets and motor parks; item 6 has 107 respondents representing 72.80% which means barrier to accessibility of female to public toilets in the markets and motor parks; item 7 has 124 respondents representing 84.35% which means barrier to accessibility of female to public toilets in the markets and motor parks; item 8 has 107 respondents representing 72.80% which means barrier to accessibility of female to public toilets in the markets and motor parks; item 9 has 127 respondents representing 86.39% which means barrier to accessibility of female to public toilets in the markets and motor parks and item 10 has 112 respondents representing 76.19% which means barrier to accessibility of female to public toilets in the markets and motor parks.

#### IV. DISCUSSION

The findings of the study are hereby discussed under the following sub-heading:

1. Types of public toilets available in markets and motor parks
2. Qualities of Female-friendly public toilets available in markets and motor parks
3. Barriers hindering accessibility of females to public toilets in markets and motor parks

##### *Types of Public Toilets Available in Markets and Motor Parks*

Results in Table 2 above revealed that there were public toilets available in markets and motor parks. The Table further showed the frequency counts and percentages for individual item as follow: responses on item 1 were 110 respondents representing 74.83% said that traditional pit latrines were available in markets and motor parks while 37 respondents representing 25.17 % said that traditional pit latrines were not available; responses on item 2 were 88 respondents representing 59.86% responded that there were Ventilated Improved Pit Latrine available in markets and motor parks while 59 respondents representing 40.14% said there were no Ventilated Improved Pit Latrines in the markets and motor parks; on item 3, 46 respondents representing 31.30% answered yes that there were Wall-Hanging Toilets available in markets and motor parks while 101 respondents responded

that there were no Wall-Hanging Toilets available for the utilization of traders and passengers; the responses on item 4, 38 respondents representing 25.85% responded that there were No-Touch Flush Toilet in the markets and motor parks while 109 respondents said that there were no No-Touch Flush Toilet in the markets and motor parks; responses on item 5 revealed 74 respondents representing 50.34% who responded yes that single-flush toilets were available while 73 respondents representing 49.66% said that they were not available and responses on item 6 showed 35 respondents representing 23.80% said that Double-Flush Toilet were available while 112 respondents representing 76.2% said they were not available. These findings agreed with the findings of Yasemin (2015) on Public toilets: an exploratory study on the demands, needs, and expectations in Turkey which revealed the different types of public toilets in use. The findings of the study was also in line with the findings of Dorothy et al (2015) on Public toilets and their customers in low-income Accra, Ghana revealed Pit latrine with slab, Ventilated Improved Pit (VIP) latrine, Pour flush toilet among others were in used

##### *Qualities of Female-friendly Public Toilets Available in Markets and Motor Parks*

The results in Table 3 revealed that identified items were the qualities of female-friendly public toilets available in markets and motor parks. The Table also shows the frequency counts and percentages of the individual item as follows: responses on item 1 has 122 respondents representing 82.99% which is quality of female-friendly public toilets; item 2 has 113 respondents representing 76.87% which is quality of female-friendly public toilets; item 3 has 109 respondents representing 74.15% which is quality of female-friendly public toilets; item 4 has 100 respondents representing 68.03% which is quality of female-friendly public toilets; item 5 has 117 respondents representing 79.59% which is quality of female-friendly public toilets; item 6 has 112 respondents representing 76.19% which is quality of female-friendly public toilets; item 7 has 122 respondents representing 82.99% which is quality of female-friendly public toilets; item 8 has 132 respondents representing 89.79% which is quality of female-friendly public toilets; item 9 has 127 representing 86.39% which is quality of female-friendly public toilets and item 10 has 132 representing 89.79% which is quality of female-friendly public toilets. These findings agreed with the findings of Issaka and Enoch (2013) on where do I answer nature's call? An assessment of accessibility and utilization of toilet facilities in Wa, Ghana which revealed inadequacies in the spatial distribution of public toilets, distance travelled and poor condition of public toilets. The findings of the study was also in line with the findings of Reeves et al (2012) on school toilets facilitating hand hygiene which revealed that warm water, liquid soap, wash hand basin and hand drying facilities were provided for use.

### *Barriers Hindering Accessibility of Females to Public Toilets in Markets and Motor Parks*

Table 4 results revealed that majority of the respondents responded yes to all the identified items as barriers hindering accessibility of female to public toilets in the markets and motor parks. The Table further shows the frequency counts and percentages of the individual item as follows: item 1 has 133 respondents representing 90.48% which means barrier to accessibility of female to public toilets in the markets and motor parks; item 2 has 122 respondents representing 82.99% which means barrier to accessibility of female to public toilets in the markets and motor parks; item 3 has 117 respondents representing 79.59% which means barrier to accessibility of female to public toilets in the markets and motor parks; item 4 has 112 respondents representing 76.19% which means barrier to accessibility of female to public toilets in the markets and motor parks; item 5 has 117 respondents representing 79.59% which means barrier to accessibility of female to public toilets in the markets and motor parks; item 6 has 107 respondents representing 72.80% which means barrier to accessibility of female to public toilets in the markets and motor parks; item 7 has 124 respondents representing 84.35% which means barrier to accessibility of female to public toilets in the markets and motor parks; item 8 has 107 respondents representing 72.80% which means barrier to accessibility of female to public toilets in the markets and motor parks; item 9 has 127 respondents representing 86.39% which means barrier to accessibility of female to public toilets in the markets and motor parks and item 10 has 112 respondents representing 76.19% which means barrier to accessibility of female to public toilets in the markets and motor parks. These findings agreed with the findings of Eke et al (2016) on Patronage and Physical Planning Implication of Public Toilets in Agege, Lagos, Nigeria which showed that, the condition of most of the public toilets were bad, no signposts, dirty environment, offensive odour, flies and inadequate privacy. The findings of the study was also in line with the findings of Williams et al (2015) on assessing sanitation conditions and its impacts on the health status of urban dwellers in Abuakwa, Ghana which revealed lack of comfort ability and privacy, expensiveness of using public toilet facilities, poor management, dirtiness and smelliness of the toilet facilities were the reasons for people's refusal to access public toilet facilities. These findings were also in agreement with findings of Amadi et al (2018) which revealed that the public toilets were grossly inadequate, deplorable and unhygienic conditions to be used.

### V. CONCLUSION

This paper concludes with emphases on the provision of female-friendly public toilets in markets and motor parks; the lack of which is representative of ongoing societal gender discrimination and violation of human right which have significant implications for not meeting the Sustainable Development Goals (SDGs) regarding health, education, sanitation, economic empowerment, and gender.

### VI. RECOMMENDATIONS

Based on the study findings and conclusion the following recommendations are made:

1. Attention be given to the key components essential for public toilets that girls and women can safely and comfortably use
2. Incorporate core components of female-friendly public toilets developed by key water, sanitation, and hygiene (WASH) actors, governments, international agencies (e.g., United Nations Children's Fund (UNICEF),
3. Gender friendly infrastructure design of public toilets and better lighting, supported by police community relations and better guardianship would improve access to services for women and improve well-being.
4. Use of technology, especially the use of mobile phones, to increase sense of security among women while using the public toilets be encouraged.

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