



SOCIAL DETERMINANTS OF HEALTH-SEEKING BEHAVIOUR AMONG STREET CHILDREN IN YENAGOA CITY, BAYELSA STATE

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ABSTRACT: *One of the goals of the National Health System is to provide access to health services for vulnerable groups such as street children, as they have a higher probability of experiencing health-related problems. Whereas studies on street children vary, very few studies address social factors associated with the health-seeking behaviour of street children. This study, therefore, examined the social determinants and implications of health-seeking behaviour among street children in Yenagoa Bayelsa State. The Health Belief Model and Andersen Healthcare Utilisation Model were the framework, while a mixed research design was employed. Yenagoa City was purposely selected for the study because it is the state capital, hence it is home to a great number of street children. 384 respondents were selected using Abrahamson and Gahlinger's sample size determination formula. Accidental sampling technique was used to administer a structured questionnaire to respondents. Five Key Informant Interviews were conducted with staff from the Ministry of Women Affairs and Synergy-Care Development Initiative (SDI). Quantitative data were analysed using descriptive statistics and correlation at $p \leq 0.05$, while the qualitative data were content-analysed. The average age of the respondents was 14 years. Findings revealed that headaches, malaria, fever/common colds, cough/chest pain, chicken pox, head worms/lice, and STDs are the main diseases commonly associated with street children. Most street children preferred traditional medicine and self-medication as their treatment pathways. The study concluded that age, area of residence, relationship status, father's current occupation and level of education all significantly influenced street children's health-seeking behaviours. Tailored intervention programs and financial support were some of the recommendations made.*

KEYWORDS: Street Children, Health Seeking Behaviour, Social Determinants, Health Belief Model, Treatment Pathways.



INTRODUCTION

Over the last century, there have been a growing number of children who live on the streets. However, very little is still known about them as they are often regarded in a negative light. It is the firm view that if people are more informed about the lifestyle of these children, they may be more sensitive to their needs (Bajari & Kuswarno, 2020). Street children may be interpreted in different ways. "Street" can have different meanings, be it physical, social, cultural, or symbolic. In line with the definition of "children" and the conceptualization of the term "childhood", the term "street children" can be defined as those who live and survive on the streets of the world's major cities to meet their daily needs (Deb et al., 2020).

The number of children who are at risk of living a street lifestyle is estimated to be around one hundred million globally (Deb et al., 2020). In fact, the United Nations Children's Fund (UNICEF) reported a global estimate of 218 million cases of street children in low- and medium-income countries, particularly in Africa (Obimakinde & Shabir, 2023; Taiwo et al., 2021). Also, Abate et al. (2022) noted that in Ethiopia, more than four million children are anticipated to live under particularly difficult circumstances with factors such as the inability to find work and disagreements with their parents mainly responsible for children living in the street. These kids, without exception, are sufferers of abuse of all forms, violence, exploitation, and inhuman treatment, while their antisocial behaviour and criminality maintains their susceptibility and helplessness to similar forms of victimisation (Deb et al., 2020).

The United Nations Children's Fund (UNICEF) noted that children in difficult circumstances, who are a minority population, have been under-represented in health research for far too long (Cumber & Tsoka-Gwegweni, 2015). The street child population has also been divided into two overlapping groups: "of-the-street" children, who have no contact with family and rarely return home, and "on-the-street" children, who often sleep at home but spend the day on the street (Cumber & Tsoka-Gwegweni, 2015). Street children are one of the new categories of social actors resulting from the rapid urbanisation of cities in developing countries. Among the numerous troubles they have to face daily, there are also obstacles related to disease and access to healthcare (UNICEF, 2022). Their lives revolve around survival. They tackle health problems by finding strategies to overcome or cope with them. Often, street children neglect or treat illnesses on their own for as long as they can, without complete knowledge of the outcome of their behaviour which might aggravate their health problems (Cumber & Tsoka-Gwegweni, 2015).

Being a street child involves vulnerability to multiple grounds of disadvantageous positions, mainly as far as health and well-being are concerned (Chowdhury, 2017; Tahmina, 2018; Said & Aldewachi, 2020; Abate et al., 2022; Zewude et al., 2023). They are vulnerable because they move frequently and do not enjoy stable housing, formal education, or accessible healthcare services (Lewis et al., 2021). A review of the literature on the health conditions of street children in selected African countries (Cumber & Tsoka-Gwegweni, 2015), revealed that street children most likely suffer from poor health conditions, including violence, injuries, and HIV/AIDS, mainly because of factors such as homelessness, risky sexual behaviour, and substance abuse. According to Ali and de Muynck (2005), street children are highly susceptible to adverse health outcomes such as physical injuries and respiratory as well as skin infections. They are also victims of ferocity and are forced to live on the streets, scavenging, begging, hawking in slums, and living in polluted environments. Street children are subjected to violence; denying them the right to live in a safe environment (Bhukuth & de Oliveira, 2015).



Besides the susceptibility of street children to various ill-health conditions, their health-seeking behaviour must be understood due to its policy implications for healthcare development and the reintegration of such marginalised social groups (Afolabi et al., 2013). It is on this note that this study has been designed to examine the social determinants of health-seeking behaviour among street children in Yenagoa city, Bayelsa state, Nigeria.

Objectives of the Study

The general aims and objectives of this study are to examine the social determinants and health-seeking behaviour among street children in Yenagoa city, Bayelsa state.

The specific objectives of the study are to:

1. identify major health challenges associated with street children in Yenagoa City;
2. determine the treatment pathways adopted by street children in Yenagoa city;
3. examine the social network support available for street children with regards to their health in Yenagoa city;
4. identify the social factors associated with health seeking behaviour among street children in Yenagoa city; and to
5. explore the role of government and non-governmental organisations in providing health services for street children in Yenagoa city.

THEORETICAL FRAMEWORK

The role of theory in research cannot be overemphasised. Theories serve as mirrors from which the reflection of society and social phenomena can be analysed and explained. Hence, theories serve as a guide in research. It directs the researcher's line of action. In this study, the **Health Belief Model** provided the theoretical framework for this study.

The Health Belief Model (HBM) is a psychological framework that aims to explain and predict health behaviours by focusing on the attitudes and beliefs of individuals. Developed in the 1950s by social psychologists Hochbaum, Rosenstock, and Kegels, the model was originally created in response to the failure of a free tuberculosis (TB) health screening program. The developers sought to understand why people did not take advantage of preventive services that could improve their health (Champion & Skinner, 2008).

The basic tenets of the HBM consist of several key components. First, "perceived susceptibility" refers to an individual's assessment of their risk of developing a health problem. People are more likely to engage in preventive behaviours if they believe they are susceptible to a condition. Second, "perceived severity" involves an individual's belief about the seriousness of contracting an illness or leaving it untreated. If a person views the potential consequences as severe, they are more likely to take action. Third, "perceived benefits" involve the individual's assessment of the positive aspects of a health action. This includes the belief that the suggested action will reduce the risk or severity of the health issue. Fourth, "perceived barriers" refer to the individual's evaluation of the obstacles to behaviour change, such as



financial costs, side effects, or inconvenience, which can hinder the willingness to adopt preventive behaviours. Additionally, "cues to action" are external or internal triggers that prompt individuals to adopt health behaviours. These cues can include media campaigns, advice from others, or personal experiences of symptoms. Lastly, "self-efficacy," a later addition to the model, refers to confidence in one's ability to take action and persist in action (Rosenstock, 1974).

The proponents of the HBM argue that this model provides a useful framework for understanding why individuals do or do not engage in health-promoting behaviours. It highlights the importance of beliefs and perceptions in health decision-making and can be used to design more effective health interventions by addressing these beliefs directly. For example, in promoting vaccination, health campaigns can be tailored to enhance perceived susceptibility and severity of the disease, clarify the benefits of vaccination, minimise perceived barriers, provide clear cues to action, and enhance self-efficacy regarding the ability to get vaccinated (Janz & Becker, 1984).

Overall, the HBM remains a widely used theoretical model in public health for designing, implementing, and evaluating health education and promotion programs. Its focus on individual beliefs and perceptions offers valuable insights into how to motivate health behaviour change effectively.

The Health Belief Model (HBM) can provide a useful framework for understanding the health-seeking behaviour of street children in Yenagoa City, Bayelsa State. The model is composed of several key constructs that can be used to analyse how these children perceive health risks and their motivation to seek healthcare. Here's how the HBM can be applied to this study:

Perceived Susceptibility: This construct addresses the street children's beliefs about their risk of contracting illnesses or injuries. In the context of street children in Yenagoa City, researchers can investigate: (i) How aware are the children of their vulnerability to health issues such as infections, malnutrition, and injuries? (ii) Do they recognize the signs and symptoms of common diseases prevalent in their environment?

Perceived Severity: This involves the children's beliefs about the seriousness of contracting an illness or injury. Researchers can explore: (i) What are the children's perceptions of the severity of health problems they might face? (ii) How do they view the impact of these health issues on their daily lives and prospects?

Perceived Benefits: This construct looks at the children's beliefs about the effectiveness of seeking medical help or adopting healthy behaviours. Researchers can examine: (i) Do the children believe that seeking medical care will improve their health outcomes? (ii) What are their perceptions of the benefits of engaging in preventive measures or early treatment?

Perceived Barriers: This focuses on the children's beliefs about the obstacles to seeking healthcare. It's crucial to identify: (i) What practical barriers (e.g., cost, distance, lack of transportation) do the children face in accessing healthcare services? (ii) Are there psychological or social barriers, such as fear of discrimination, mistrust of healthcare providers, or stigma associated with seeking help?



Cues to Action: This construct involves the external factors that trigger the decision to seek healthcare. Researchers can investigate: (i) What events or experiences prompt the children to seek medical care (e.g., worsening symptoms, advice from peers or social workers)? (ii) How do media, community outreach programs, or interventions influence their health-seeking behaviour?

Self-Efficacy: This addresses the children's confidence in their ability to seek and obtain healthcare. Researchers should consider: (i) How confident are the children in navigating the healthcare system? (ii) Do they have the necessary knowledge and skills to seek out and adhere to medical treatments?

MATERIALS AND METHODS

Study Design and Settings

For the purpose of this study, the cross-sectional design was employed using a mixed-method approach. This design, using both approaches simultaneously validated and corroborated each other and still allowed for elaboration and clarification for the purpose of drawing complete and comprehensive insights into the phenomenon of the level of health-seeking behaviour among street children. Similarly, the two approaches are more advantageous to the researcher to uncover social factors influencing health-seeking behaviour in the city as well as the social support for street children in Yenagoa.

The study was conducted in Yenagoa City, Bayelsa State. Yenagoa was selected for this investigation because it is the state capital of Bayelsa and has a higher number of children of the streets compared to other communities or areas in the State. Following the history of the city, Yenagoa was made the capital city at the creation of Bayelsa State in 1996. Yenagoa city is bounded by Mbiama communities of Rivers State on the North and East, Kolokuma/Opokuma LGA on the north-west, Ogbia LGA on the south, Southern Ijaw on the west, Ogbia LGA on the South East and Southern-Ijaw on the south-west.

Study Population, Sample and Sampling Techniques

The population of the study consisted of the total number of street children in Yenagoa city. The age bracket comprises children on the street who are between 10 and 17 years. These children must have also been on the street for at least a year. The following form the inclusion criteria for the study:

- Only street children aged 10-17 years were included in the study.
- Only street children who have been in the street for at least one year were recruited as part of the study.

The sample size for the study was determined based on the two approaches adopted – quantitative and qualitative approach. Due to the fact that there are no accurate statistics for street children, Abrahamson and Gahlinger's (1999) sample size determination formula was adopted to determine the sample size for the study. Thus, the sample size for this study is computed below;



$$\text{Sample size (n)} = \frac{P(1-P)Z^2}{d^2}$$

Where n = Sample size

P = Proportion of street children (10-17 years) at risk of health challenges (50%)

Z = 1.96

d = 5% (level of significance)

Calculating the sample size thus,

$$n = \frac{0.50(1-0.50)1.96^2}{0.05^2}$$

$$n = \frac{0.50(0.50)3.8416}{0.0025}$$

$$n = \frac{0.9604}{0.0025}$$

$$n = 384.16$$

Sample size = 384

While 384 respondents were sampled for the quantitative aspect of the study, 5 participants were sampled for the qualitative aspect of the research. Five key informant interviews were conducted, with staff of the Ministry of Women Affairs and Synergy-Care Development Initiative. The details of the distribution are presented in Table 1. To address the shortcomings of one approach over the other and to complement numerical and non-numerical data, it is essential to collect both quantitative and qualitative data for the study.

Table 1: Distribution of Sample Size by Quantitative and Qualitative Methods

S/N	Locations of Street Children	Quantitative	KII
		Structured Questionnaire	
1	Swali market axis	71	5
2	Tombia junction axis	71	
3	Akenfa	64	
4	Kpansia	60	
5	Ekeki	60	
6	Agudama axis	58	
**	Total	384	5

KII=Key Informant Interview

For this study, a multi-stage sampling technique was adopted. The stages involved in the sampling procedures are stated as follows:

Stage One: Yenagoa was chosen through purposeful sampling as the majority of street children reside in urban areas and there is a paucity of information on the social determinants of health-seeking behaviour in this area.



Stage Two: Cluster sampling was used to select six areas in the city where street children were commonly found. These areas include Swali market axis, Tombia junction axis, Agudama, Kpansia, Ekeki and Akenfa axis.

Stage Three: In the third stage, an accidental sampling technique was employed to sample only street children who were available as at the time when the study was being conducted to administer the structured questionnaire designed for the quantitative aspect of the study. Also at this stage, the purposive sampling technique was used to sample participants for the qualitative aspect of the study.

Data Collection

This study adopted a mixed-methods approach. This implies that both quantitative and qualitative approaches are employed to gather data suitable for numerical and non-numerical analysis. While a structured questionnaire was used to generate quantitative data, Key Informant Interviews (KII) guides were used to collect data from the respondents and participants respectively. The structured questionnaire was used to gather quantifiable responses from the respondents to describe the relationship and patterns of responses among variables. As stated in the sample size distribution, 384 copies of structured questionnaire reflecting the socio-demographic characteristics, health challenges associated with, treatment pathways adopted by, social network support available for, social factors associated with health-seeking behaviour, and the roles of government and non-governmental organisations in providing health services for street children in the city. Doing these enabled the researcher to assess the proportions of street children with certain health conditions, treatment pathways, etc. and their associated factors.

A total of five participants were purposely selected based on their positions and roles in street children care. The participants for the KIIs included the Welfare Officers in the Ministry of Women Affairs (Bayelsa State), and Synergy-Care Development Initiative (SDI), a non-governmental agency. These individuals were purposely selected to participate in the study based on the fact that they are key in providing relevant information on street children in their respective jurisdictions and role of responsibilities.

Validity and Reliability of Research Instruments

The face validity type was used to authenticate all instruments that were used for the study. The assistance of specialists in the field of medical sociology and the supervisor of the research was sought to develop the instruments. Thereafter, the instruments were subjected to pre-test at different locations for necessary adjustments before the actual administration of the instruments. This is important in order to ensure that indicators in each of the objectives are captured and measured accordingly.

The reliability of the structured questionnaire was determined using Cronbach's Alpha correlation coefficient. Thus, the overall reliability coefficient for this instrument was subjected to at least $\alpha = 0.50$, which has been considered as the minimum acceptable level of internal consistency. However, the computation of the reliability coefficient yielded a value of 0.7, which means the instrument is highly reliable.



Data Analysis

The two approaches – quantitative and qualitative – that were adopted for the collection of data formed the basis for the data analysis. The quantitative data was analysed using descriptive and bivariate statistics. While the descriptive statistics was primarily concerned with describing the socio-demographics of respondents and other relevant variables, bivariate (Chi-square test) level of analysis was used to analyse the influence of independent variables on health-seeking behaviour including the treatment pathways of street children at p-value less than 0.05 (95% level of significance). Thus, these analyses were aided with the use of Statistical Package for Social Sciences (SPSS) Version 26.0.

The qualitative data generated from the Key Informant Interviews on the other hand, was thematically analysed with the aid of Atlas.ti version 9.1. In that, all the themes that were generated from the interviews were analysed and interpreted thematically. Some of the themes and sub-themes include but not limited to health challenges (malaria, pneumonia, disabilities, etc.); treatment pathways (traditional, modern, spiritual or both); social network support (emotional, instrumental, etc.); social factors associated with health-seeking behaviour (family background, education, location, religious factor, etc.); and roles of organisations in providing health services (government and non-governmental organisations).

Ethical Considerations

In line with the ethical standard of conducting research of this nature, ethical clearance was sought from the **Bayelsa State Ministry of Women, Children Affairs & Social Development** since it is within the purview of their responsibility to cater for street children. Also, informal permission was sought from parents/guardians of street children (both on and off-street children) where they are available. In the situation where they are not available, especially for on-street children, the letter obtained from the Ministry of Women Affairs served as the approval needed to go ahead with the study. This was done before the administration of the instruments of data collection, while other ethical guidelines such as anonymity, confidentiality, non-maleficence and justice were strictly applied. According to Helinski's principles, informed consent of all respondents and participants must be sought in research that concerns human subjects. In this study, since the target population of the study is primarily focused on minors, seeking parental or guardian consent before the administration of research instruments was prioritised.

Additionally, the names or anything that would show the identities of the respondents/participants was not included in the study. For the purpose of identification, however, pseudonyms were used to differentiate respondents/participants from one another in the course of the analysis of the study. More so, the researcher assured all the participants or respondents of their confidentiality as it relates to the information that was provided as data for the study. Finally, the respondents/participants were assured of no harm or even any risk in participating in the research. There was fairness in the distribution of research instruments to all subjects with special considerations for gender and location.



RESULTS

Socio-Demographic Characteristics and Profile of the Respondents

This section of the data analysis shows the result of the socio-demographic characteristics and profile of the respondents. Table 2 shows the outcomes of respondent's profile characterised by name of area, age, gender, relationship status, level of education, engagement on the streets, number of years engaged on the streets, ethnic group, religion, type of settlement lived in, average income, father's educational level, mother's educational level, father's current occupation, mother's current occupation and type of family.

Table 2: Socio-Demographic Characteristics and Profile of the Respondents

Variables	Frequency (n = 384)	Percentage (% = 100)
Mean Age: 13.72 Std. Age: 2.622		
Name of Area		
Agudama	28	7.3%
Akenfa	27	7.0%
Ekeki	98	25.5%
PDP Road	43	11.2%
Swali	104	27.1%
Tombia	44	21.9%
Age		
10-12	145	37.8%
13-15	85	22.1%
16-17	154	40.1%
Gender		
Male	199	51.8%
Female	185	48.2%
Relationship Status		
Cohabiting	85	22.1%
Single	299	77.9%
Level of Education		
No formal education	65	16.9%
Primary	107	27.9%
Incomplete Secondary	119	31.0%
Completed Secondary	71	18.5%
Incomplete Tertiary	22	5.7%
Engagement on the Streets		
Hawking	148	38.5%
Waste picking	110	28.6%
Daily job search	120	31.3%
Others	6	1.6%
Number of years engaged on the streets		
1yr-2yrs	79	20.6%
3yrs-4yrs	204	53.1%
5yrs-7yrs	101	26.3%



Ethnic Group		
Igbo	33	8.6%
Hausa/Fulani	97	25.3%
Ijo (Ogbia,Nembe,Epie-Attisa, Ijaw)	174	45.3%
Delta	74	19.3%
Others	6	1.6%
Religion		
Islam	27	7.0%
Christianity	357	93.0%
Type of settlement lived in		
Slum settlement	332	86.5%
Semi-urban	52	13.5%
Average Income		
2,000-5,000	157	40.9%
6,000-9,000	104	27.1%
10,000-13,000	91	23.7%
14,000-17,000	16	4.2%
18,000-20,000	16	4.2%
Father's Educational Level		
No formal education	38	9.9%
Primary	143	37.2%
Secondary	203	52.9%
Mother's Educational Level		
Primary	207	53.9%
Secondary	177	46.1%
Father's Current Occupation		
Late	129	33.6%
Unemployed	91	23.7%
Work in informal private sector	63	16.4%
Work in formal private sector	6	1.6%
Work in public sector	26	6.8%
Retiree	29	18.0%
Mother's Current Occupation		
Late	111	28.9%
Unemployed	178	46.4%
Work in informal private sector	21	5.5%
Work in public sector	74	19.3%
Family Type		
Monogamy	239	62.2%
Polygamy	145	37.8%

Table 1 shows that the majority of respondents live in Swali (27.1%) and Ekeki (25.5%), with smaller representations from Agudama (7.3%), Akenfa (7.0%), PDP Road (11.2%), and Tombia (21.9%). Most respondents (37.8%) are aged 10-12, 22.1% are 13-15, and 40.1% are 16-17. Gender distribution is nearly even, with males slightly outnumbering females at 51.8% to 48.2%. The majority of the respondents are single (77.9%), with a smaller proportion cohabiting (22.1%). Education levels vary, with the largest group having incomplete secondary



education (31.0%), followed by primary education (27.9%) and no formal education (16.9%). A small number have completed secondary (18.5%) and the least (5.7%) have incomplete tertiary education.

Regarding street engagement, a significant number are involved in hawking (38.5%), waste picking (28.6%), and daily job searches (31.3%). Engagement duration on the streets shows that, 53.1% have spent 3-4 years, 26.3% for 5-7 years, and 20.6% have spent 1-2 years engaged on the streets. Additionally, majority of the respondents identify as Ijo (45.3%), followed by Hausa/Fulani (25.3%), Delta (19.3%), Igbo (8.6%), and only 1.6% identify with other ethnic groups. Christianity is the predominant religion (93.0%), with Islam practiced by a minority (7.0%). A significant majority live in slum settlements (86.5%), while a small percentage live in semi-urban areas (13.5%). Average monthly income is generally low, with most earning between 2,000-5,000 (40.9%) and 6,000-9,000 (27.1%). Smaller groups earn 10,000-13,000 (23.7%) or 14,000-20,000 (8.4%).

Furthermore, on the educational level of parents, the table reveals that most fathers have secondary education (52.9%) or primary education (37.2%), while the majority of mothers have primary education (53.9%). Regarding occupations, a notable portion of fathers are late (33.6%) or unemployed (23.7%), with others working in informal (16.4%) or formal private sectors (1.6%), public sector (6.8%) and 18.0% are retirees. Similarly, a significant portion of mothers are either late (28.9%) or unemployed (46.4%), with fewer working in informal private (5.5%) or public sectors (19.3%). Lastly, family structure shows that a majority of respondents come from monogamous families (62.2%), with the remaining from polygamous families (37.8%).

The Major Health Challenges Associated with Street Children

This section identifies the major health challenges associated with street children using bar charts and pie charts. Figure 1 shows the main illnesses suffered by street children engaged on the streets of Yenagoa, Bayelsa. All the respondents (100%) affirmed that they have suffered headaches in the last 12 months, 87.5% noted that they have had malaria, 80.7% stated that they had suffered from a fever and common colds, 55.2% have had cough and chest pain, 51.6% have had eye problems, 43.2% have had chicken pox, 34.9% have had sore throats, 14.6% have had head worms and lice, 8.3% noted that they have suffered from ear problems and only 2.1% acknowledged that they have suffered sexually transmitted diseases and foot and mouth diseases in the last 12 months.

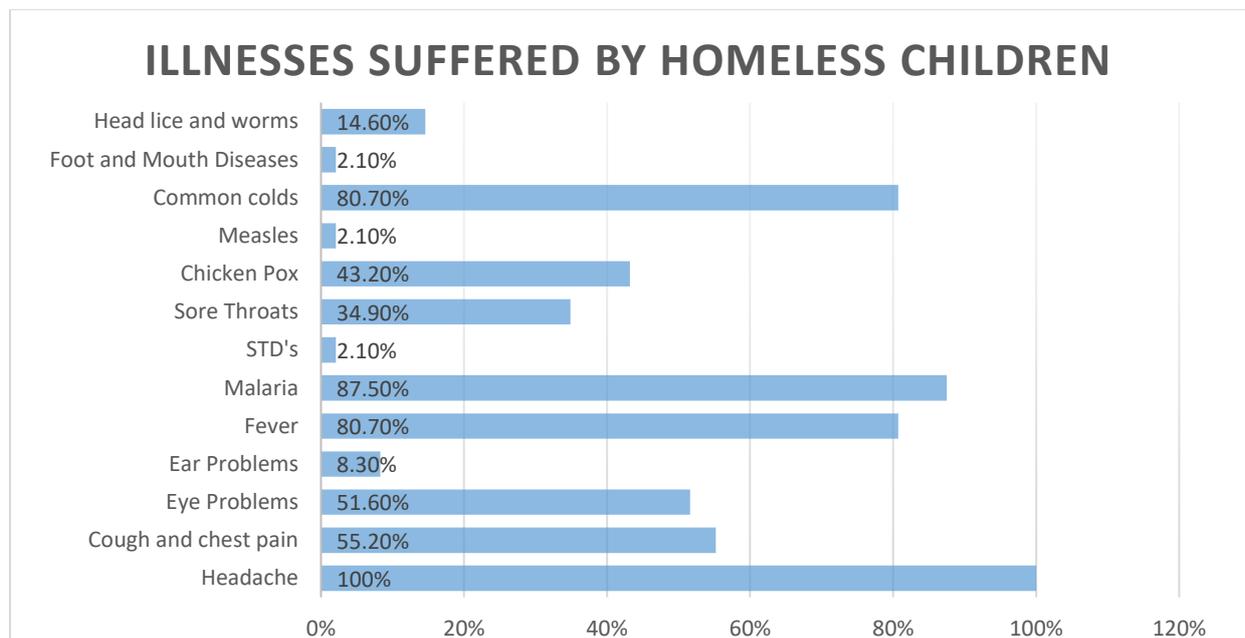


Figure 1: Illnesses suffered by street children

Figure 2 illustrates how often street children fall ill. Most respondents (49%) noted that they fall ill once in a year, 25% fall ill once in a month, 12% fall ill once in a quarter, 10% fall ill once in half a year and the least (4%) fall ill once in a week.

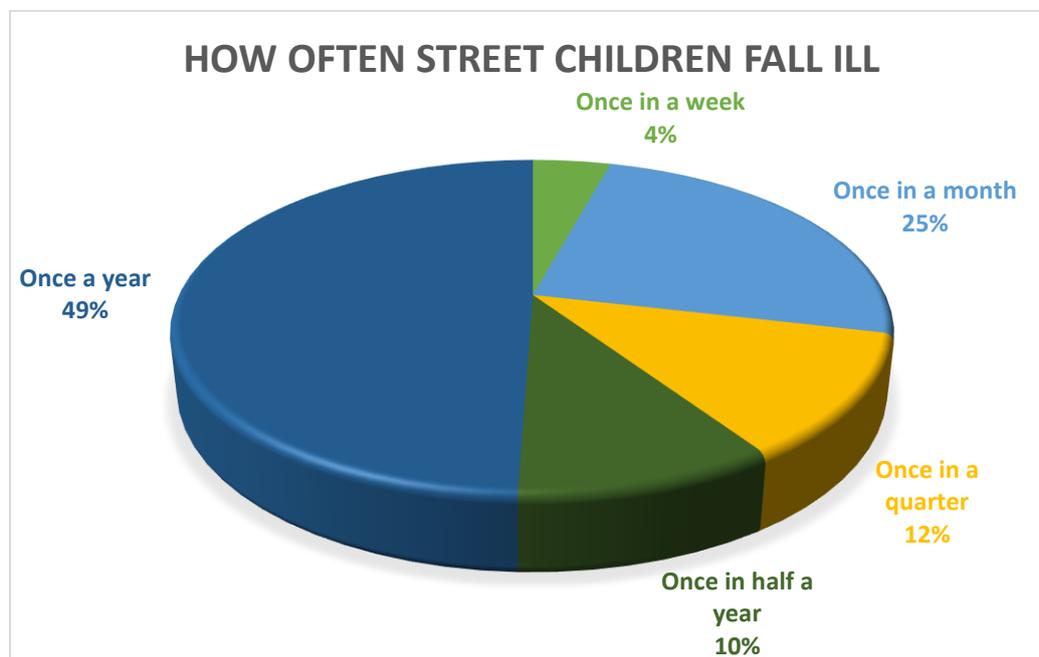


Figure 2: Number of times street children fall ill

The results imply that all the respondents have been sick in the last 12 months, the main illnesses they have suffered in the last 12 months include headaches, malaria, fever and common colds, cough and chest pain, eye problems, chicken pox, sore throats, head worms and lice, ear problems, sexually transmitted diseases and foot and mouth diseases. The data also shows that respondents rarely fall sick, as most respondents note that they fall ill just once in a



year and once in a month. Similarly, results from the qualitative studies mirror these findings. The stand of our participants is captured below:

Some common health challenges associated with street children that I am aware of are measles, chicken pox, head lice, malaria, headaches (due to heavy loads for those that hawk or do menial jobs that require them to carry things on their head. There are a lot of health challenges that these street children suffer from daily, but these are the few that I can remember.

(KII/Child Protection Officer/Male/Ministry of Women Affairs)

Street children suffer from a wide range of health challenges due to the hazards they are exposed to. Common sicknesses like measles, malaria, colds, body aches, STD's etc are all but a few health challenges associated with street children.

(KII/Executive Director/Male/Synergy Care Development Initiative)

As highlighted by the qualitative findings, headaches, malaria, fever and common colds, cough and chest pain, chicken pox, head worms and lice, and sexually transmitted diseases are the main diseases commonly associated with street children.

Treatment Pathways Adopted by Street Children

This section addresses issues related to the treatment pathways adopted by street children using a simple percentage table. Table 3 examines the medical help-seeking behaviour of homeless children. A significant majority, 60.9%, do not seek medical help from just one place before getting treated, while 39.1% do. Among those who seek medical help from one place, self-medication is the most common method (21.9%), followed by government clinics/hospitals (16.1%), traditional centres (12.5%), private clinics/hospitals (8.3%), and church/spiritual help (2.1%). For those who do not limit themselves to one place, the first place of contact is predominantly self-medication (23.4%), followed by traditional centres (11.5%) and government clinics/hospitals (4.2%).

As for the second place of contact, traditional centres (16.1%) and self-medication (12.0%) are more commonly sought than government clinics/hospitals (7.8%) and church/spiritual help (3.1%). The third place of contact shifts significantly, with church/spiritual help (19.8%) being the most frequently mentioned, followed by government clinics/hospitals (12.0%), traditional centres (5.7%), and self-medication (1.6%).

Table 3: Simple Percentage Table of the Treatment Pathways Adopted by Street Children

Variables	Frequency (n = 384)	Percentage (% = 100)
Do you seek medical help just in one place before you get treated?		
Yes	150	39.1%
No	234	60.9%
If Yes (to Que. 301), where do you usually seek medical help?		
Self-medication		
Church/spiritual help	84	21.9%
Traditional centre	4	2.1%



Private clinics/hospitals	48	12.5%
Government clinics/hospitals	32	8.3%
	62	16.1%
If No (to Que. 301), where is your first place of contact for medical help?		
Self-medication	90	23.4%
Traditional centre	44	11.5%
Government clinics/hospitals	16	4.2%
If No (to Que. 301), where is your second place of contact for medical help?		
Self-medication	46	12.0%
Church/spiritual help	12	3.1%
Traditional centre	62	16.1%
Government clinics/hospitals	30	7.8%
If No (to Que. 301), where is your third place of contact for medical help?		
Self-medication	6	1.6%
Church/spiritual help	76	19.8%
Traditional centre	22	5.7%
Government clinics/hospitals	46	12.0%
If No (to Que. 301), where is your fourth place of contact for medical help?		
Church/spiritual help	46	12.0%
Traditional centre	16	4.2%
Private clinics/hospitals	36	9.4%
Government clinics/hospitals	44	11.5%
If No (to Que. 301), where is your fifth place of contact for medical help?		
Church/spiritual help	8	2.1%
Traditional centre	14	3.6%
Private clinics/hospitals	106	27.6%
Government clinics/hospitals	14	3.6%
If No (to Que. 301), where is your sixth place of contact for medical help?		
Self-medication	6	1.6%
Church/spiritual help	76	19.8%
Traditional centre	22	5.7%
Government clinics/hospitals	46	12.0%
Any other place? Please, state it.		
Pharmacy	76	19.8%
None	308	80.2%

For the fourth place of contact, church/spiritual help remains prominent (12.0%), closely followed by government clinics/hospitals (11.5%), private clinics/hospitals (9.4%), and traditional centres (4.2%). By the fifth place of contact, private clinics/hospitals (27.6%) become the most sought-after, with lower percentages for church/spiritual help (2.1%),



traditional centres (3.6%), and government clinics/hospitals (3.6%). Data from the sixth place of contact mirrors some previous patterns, with church/spiritual help again being common (19.8%), followed by government clinics/hospitals (12.0%), traditional centres (5.7%), and self-medication (1.6%). Lastly, pharmacies are noted as another place for seeking medical help by 19.8% of the respondents.

Findings from the qualitative study also correlate with the quantitative findings. This is observed in the participants statements below;

Many street children I have met self-medicate, that is, when they fall ill, they take drugs or herbs themselves without professional guidance. If the sickness persists, they may explore other options like going to the pharmacy for treatment, seeking traditional medical care like massages, herbs etc, or praying about it. Street children in most cases do not have the luxury of going to the hospital for health issues, their guardians may only take them there in very serious cases.

(Executive Director/Male/Synergy Care Development Initiative)

Another participant averred thus;

To the best of my knowledge, I know that many street children self-medicate at first when they are sick. They either use modern medicine or traditional medicine due to the fact that most of them do not have guardians or have guardians who are mostly absent. The second, third and fourth treatment pathways they could explore are traditional medicine, spiritual help or going to pharmacies for injections and the like when it gets severe. However, I know that going to the hospital is one of, if not the last option for sick street children, because they cannot afford it. **(Social welfare officer/Male/Ministry of Women Affairs)**

These findings strongly support our quantitative findings as self medication, use of traditional medicine and spiritual help are listed as the dominant treatment pathways utilised by street children to combat health challenges.

The Social Factors Associated with Health Seeking Behaviour among Street Children

This section addresses issues related to the social factors associated with health seeking behaviour among street children using crosstabs and charts. As shown on Table 4 area of residence significantly influences health care preference ($X^2 = 29.336$, $p < 0.001$), this is observed as children from Swali predominantly prefer traditional healthcare, while those from Ekeki largely prefer modern healthcare. Age also shows a significant relationship with healthcare preference ($X^2 = 13.968$, $p < 0.001$). Younger children (10-12 years) prefer traditional methods more than modern, whereas older children (16-17 years) show a higher preference for modern healthcare. Moreover, although results suggests that, gender does not significantly affect healthcare preference ($X^2 = 1.398$, $p = .497$), relationship status is highly significant ($X^2 = 31.930$, $p < 0.001$) as cohabiting children prefer modern healthcare more than traditional or both, while single homeless children show a higher inclination towards traditional healthcare.



Table 4: Cross-Tab of Socio-Demographics and Health Care Preferred amongst Street Children in Bayelsa

Variables	What is the main health care you prefer when seeking medical help?			Total	X ²	P-value
	Traditional	Moder	Bot			
Name of Area						
Agudama	18	7	3	28	29.336	.001**
Akenfa	10	8	9	27		
Ekeki	35	47	16	98		
PDP Road	15	14	14	43		
Swali	39	37	28	104		
Tombia	23	25	36	84		
Age						
10-12	68	38	39	145	13.968	.007**
13-15	28	36	21	85		
16-17	44	64	46	154		
Gender						
Male	69	70	60	199	1.398	.497
Female	71	68	46	185		
Relationship Status						
Cohabiting	9	45	31	85	31.930	.000***
Single	131	93	75	299		
Level of Education						
No formal education	22	24	19	65	15.684	.047
Primary	38	37	32	107		
Incomplete Secondary	54	42	23	119		
Completed Secondary	15	30	26	71		
Incomplete Tertiary	11	5	6	22		
Engagement on the Streets						
Hawking	45	54	49	148	18.762	.005**
Waste picking	33	49	28	110		
Daily job search	59	35	26	120		
Others	3	0	3	6		
Number of years engaged on the streets						
1yr-2yrs	24	27	28	79	4.781	.311
3yrs-4yrs	73	78	53	204		
5yrs-7yrs	43	33	25	101		
Ethnic Group						
Igbo	8	19	6	33	25.262	.005**
Hausa/Fulani	26	46	25	97		
Ijo (Ogbia,Nembe,Epie, Ijaw)	79	46	49	174		
Delta	27	24	23	74		
Others	0	3	3	6		



Religion						
Islam	11	12	4	27	2.452	.293
Christianity	129	126	102	357		
Type of settlement lived in						
Slum settlement	115	131	86	332	13.250	.001**
Semi-urban	25	7	20	52		
Average Income						
2,000-5,000	54	54	49	157		
6,000-9,000	34	36	34	104		
10,000-13,000	33	37	21	91	17.014	.030*
14,000-17,000	8	8	0	16		
18,000-20,000	11	3	2	16		
Father's Educational Level						
No formal education	5	16	17	38		
Primary	63	46	34	143	13.891	.008**
Secondary	72	76	55	203		
Mother's Educational Level						
Primary	74	69	64	207	2.696	.260
Secondary	66	69	42	177		
Father's Current Occupation						
Late	43	42	44	129		
Unemployed	39	20	32	91		
Work in informal private sector	30	20	13	63	64.036	.000***
Work in formal private sector	6	0	0	6		
Work in public sector	2	24	0	26		
Retiree	20	32	17	69		
Mother's Current Occupation						
Late	37	48	26	111		
Unemployed	64	56	58	178	18.935	.004**
Work in informal private sector	15	6	0	21		
Work in public sector	24	28	22	74		
Family Type						
Monogamy	88	95	56	239	6.545	.037*
Polygamy	52	43	50	145		

A slightly significant relationship is also revealed between educational level and health care preferences ($X^2 = 15.684$, $p < 0.01$). Children with incomplete secondary education prefer traditional healthcare, while those with completed secondary education have a higher preference for both. Engagement on the streets also significantly affects health care preferences ($X^2 = 18.762$, $p < 0.001$). Children involved in daily job searches primarily prefer traditional healthcare, while those engaged in hawking have a significant preference for modern healthcare.

The number of years on the streets does not significantly impact healthcare preference ($X^2 = 4.781$, $p = .311$), however, ethnicity is another significant factor ($X^2 = 25.262$, $p < 0.001$). Respondents from Ijo show a higher preference for traditional healthcare, in contrast, the Delta

group has a higher preference for modern healthcare. Religion does not show a significant influence on healthcare preference ($X^2 = 2.452$, $p = .293$), however, the table reveals that type of settlement significantly impacts healthcare choice ($X^2 = 13.250$, $p = <0.001$). Children in slum settlements show a balanced preference for both types of health care, whereas those in semi-urban areas predominantly prefer traditional healthcare. Income level also shows a significant relationship with healthcare preference ($X^2 = 17.014$, $p = <0.01$). Higher incomes (14,000-17,000) tend to prefer modern healthcare in comparison to those who earn lower.

Father's educational level also significantly influences healthcare preferences ($X^2 = 13.891$, $p = <0.01$). Children whose fathers have secondary education tend to prefer modern healthcare, whereas those with no formal education lean towards traditional healthcare. Mother's educational level does not show a significant influence on healthcare preference ($X^2 = 2.696$, $p = .260$). Father's occupation has a highly significant influence on healthcare preference of homeless children ($X^2 = 64.036$, $p = <0.001$). Children whose fathers are late prefer both types of healthcare, whereas those with fathers in the informal private sector prefer traditional. Mother's occupation also significantly affects healthcare preference ($X^2 = 18.935$, $p = <0.001$). Children with deceased mothers prefer traditional healthcare, while those with unemployed mothers show a preference for modern healthcare. Lastly, family type is also a significant factor ($X^2 = 6.545$, $p = <0.01$). Children from monogamous families show a balanced preference of both healthcare types, whereas those from polygamous families lean towards traditional healthcare.

Figure 3 illustrates the main factors influencing the choice of medical help among street children. The chart reveals family (84.4%) as the dominant factor influencing choice of medical help of street children. Religion (12%) and friends (3.6%) are also factors highlighted to influence choice of medical help among street children.

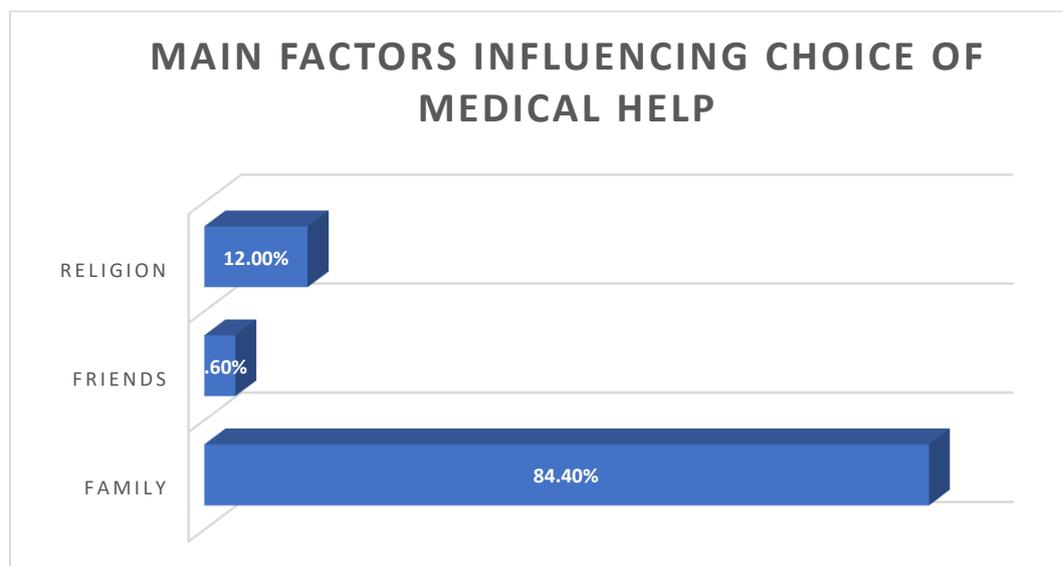


Figure 3: Main factors influencing choice of medical help

Figure 4 reveals that other factors that influence choice of medical help among street children are income (70%) and location (30%).

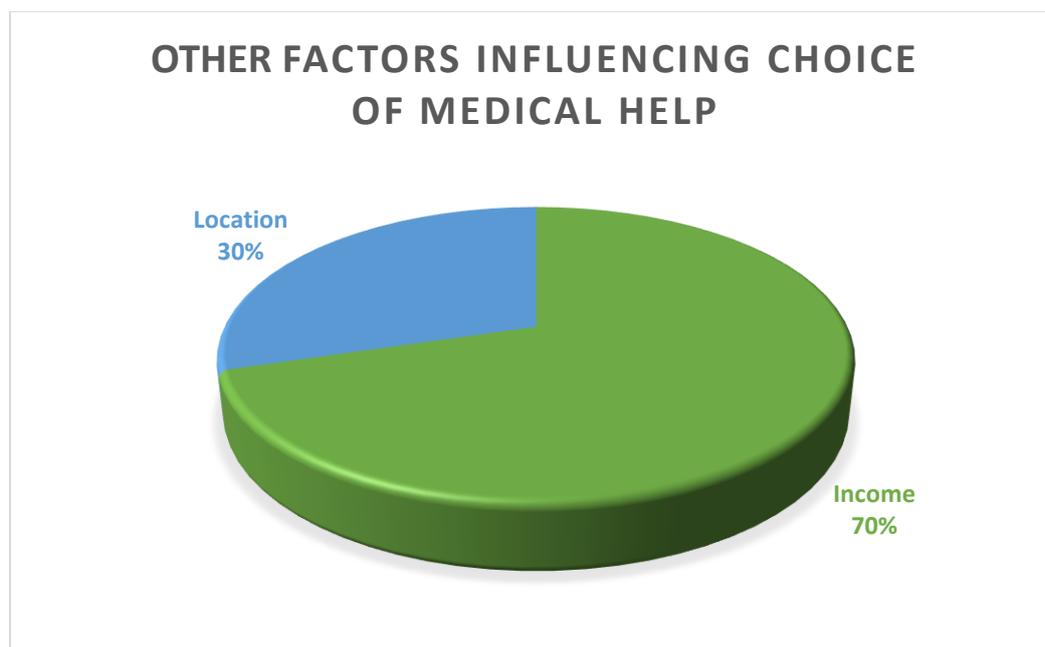


Figure 4: Other factors influencing choice of medical help

Results from our qualitative study mirror these findings, the stand of the participants are captured in the comments below;

The main social factors I believe are associated with health seeking behaviour among street children are their friends and family. It is what the child's caregivers give him/her that they will take. Cultural beliefs also play a major role, this influences the decision of some street children to take "agbo" instead of going to the hospital. The socioeconomic status of a child's family is also a major influence because the family will always go for healthcare that they can afford.

(Child Protection Officer/Male/Ministry of Women Affairs)

The qualitative results draw attention to peer pressure, family, cultural beliefs and family socio-economic status as social factors influencing or associated with health seeking behaviour among street children.

The Role of Government and Non-Governmental Organisations in Providing Health Services for Street Children

This section addresses issues related to the role of government and non-governmental organisations in providing health services for street children using bar charts and pie charts. Figure 5 shows that the majority of the respondents (83%) have not received help from government institutions regarding their health and only 17% noted that they have received help from government institutions regarding their health.

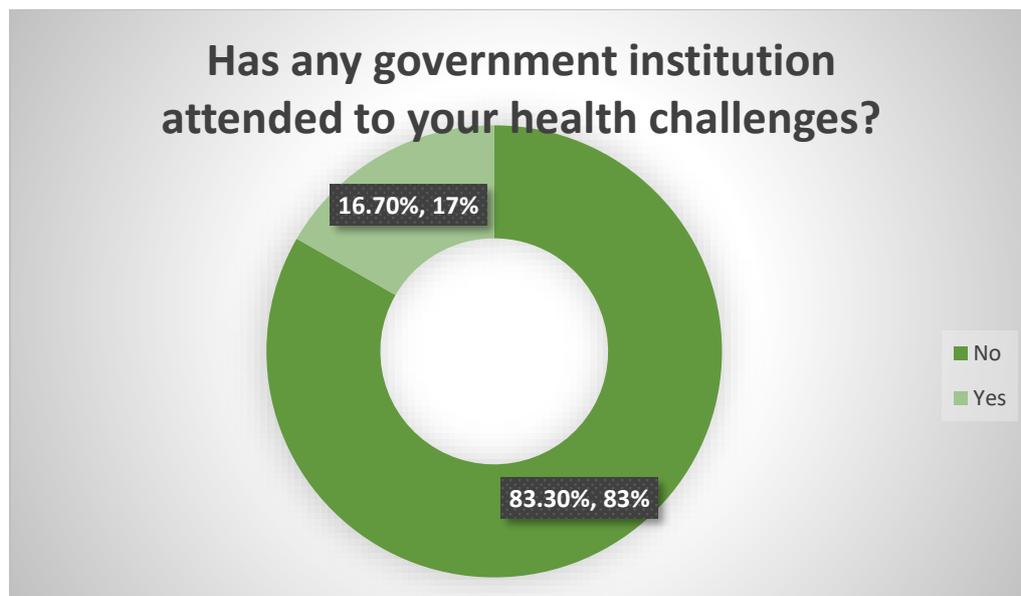


Figure 5: Governmental role in street children’s healthcare

Figure 6 reveals the government agencies that provide healthcare for street children in Yenagoa, Bayelsa State. The chart shows that 10.9% of the 17% of respondents who stated they received healthcare from the government were attended to by the Bayelsa state ministry of health and 5.7% of that population stated that they received health care from the Bayelsa state primary healthcare.

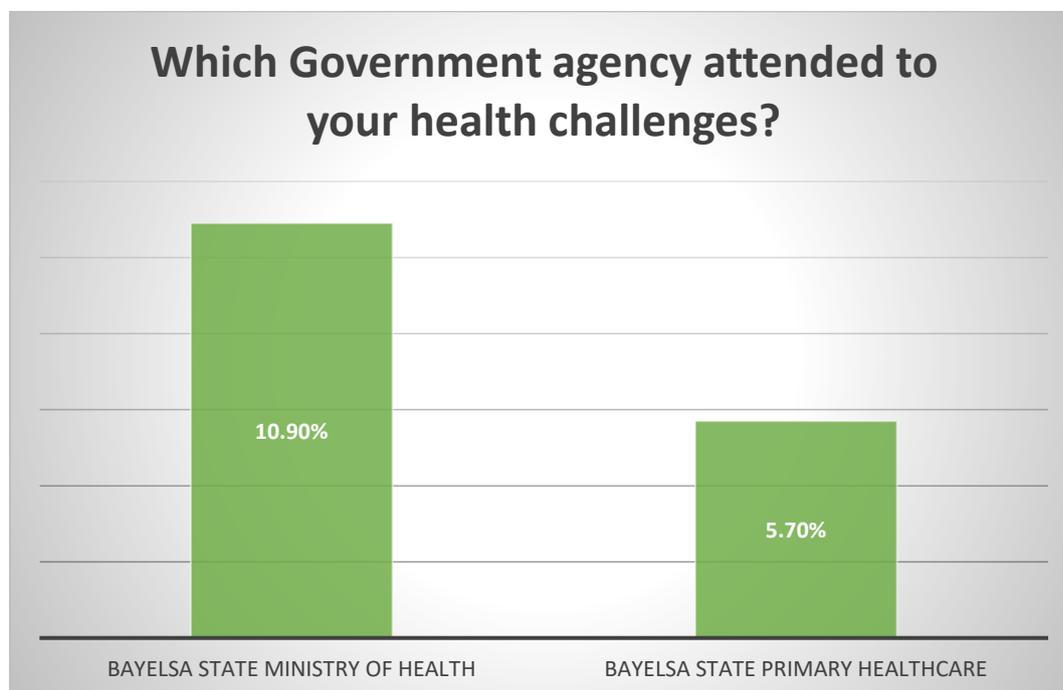


Figure 6: Governmental agencies that provide healthcare for street children

Figure 7 reveals the non-governmental efforts in providing healthcare for street children. Majority (79.7%) of the respondents stated that they have not received medical help from NGOs while 20.30% assert that they have received health care from NGOs.

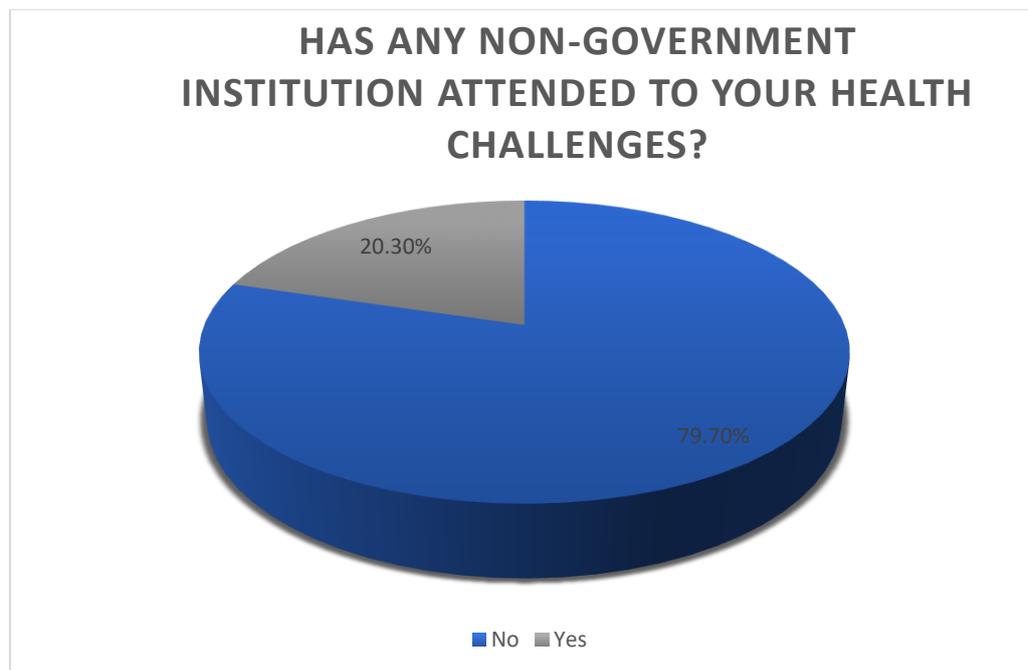


Figure 7: Role of non-governmental agencies in street children’s healthcare

Figure 8 shows the NGOs that have provided healthcare for street children. Out of the 20.3% that stated that they have received healthcare from NGOs, 12.5% noted that they received such help from World Health Organisation (WHO) and 7.8% stated that they received medical help from UNICEF.

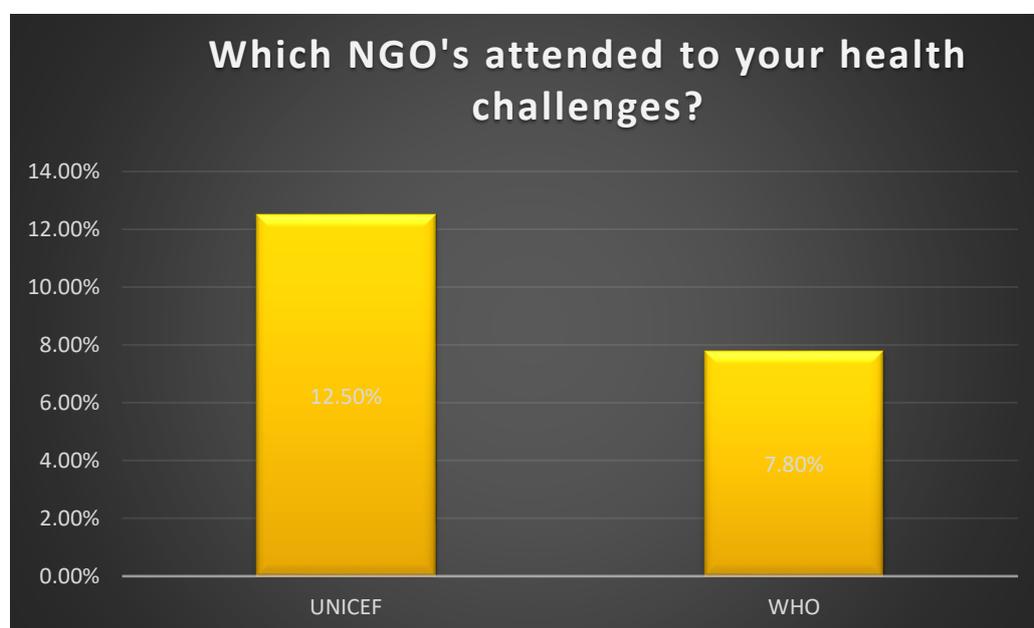


Figure 8: Non-governmental agencies that provide healthcare for street children

A similar trend has been observed in the responses from the qualitative research with key informants. Their stand is captured in the comments below;

We organise family support programs for street children. Also, the government takes care of children picked from the streets. There was a case of a mad woman with children that our



attention was drawn to. We stepped in immediately, took the children off the streets and they are now being taken care of by the government.

(Social Welfare Officer/Male/Ministry of Women Affairs)

We provide emergency health support and also distribute nutritional supplements to street children. Recently, we were also able to get the Bayelsa State Health Insurance Scheme (BHIS) for street children.

(Executive Director/Male/Synergy Care Development Initiative)

According to the responses provided above, family support programs, emergency health support, distribution of nutritional supplements, care of street children and acquisition of health insurance for street children are the main roles played by the government and NGOs in Bayelsa in providing health services for street children.

DISCUSSION OF FINDINGS

The health challenges experienced by street children in Yenagoa, Bayelsa, as revealed in the provided study, align with findings from other regions and studies. For instance, the high prevalence of illnesses such as headaches, malaria, fever, and common colds is consistent with research conducted in other urban areas in Nigeria and globally. A study in Kenya found that street children commonly suffer from respiratory infections, malaria, and gastrointestinal issues (Ayaya & Esamai, 2001). Similarly, research in Egypt identified respiratory diseases, skin infections, and parasitic infections as common health problems among street children (Nada & Suliman, 2010).

However, the prevalence of specific diseases such as chickenpox, head worms, and lice noted in Yenagoa contrasts slightly with findings from other studies. For example, a study in India reported higher incidences of skin diseases and scabies rather than chickenpox and lice (Ali, de Muynck, & Shahab, 2004). This variation can be attributed to differences in local environmental conditions and healthcare access.

The study from Yenagoa indicates that street children rarely fall ill frequently, with most respondents reporting illness once a year or once a month. This finding contrasts with some studies that show street children often experience more frequent health issues due to their harsh living conditions. For example, research in Brazil highlighted that street children frequently fall ill due to poor hygiene, malnutrition, and lack of access to clean water (Campos et al., 1994).

The predominant reliance on self-medication and traditional centres for medical treatment among street children in Yenagoa is similar to findings in other studies. A study in Ethiopia found that street children often rely on self-medication and traditional healers due to mistrust of formal healthcare systems and lack of resources (Abadi et al., 2014). However, the significant role of church/spiritual help in the later stages of seeking treatment, as observed in Yenagoa, is less commonly reported in other studies. This highlights a unique cultural element in the healthcare-seeking behaviour of street children in Bayelsa.



The types of social support available to street children in Yenagoa, including instrumental, informational, emotional, and appraisal support, are consistent with findings from other regions. Research in Brazil also identifies these types of social support as crucial for street children's wellbeing (Raffaelli et al., 2001). However, the high percentage of instrumental support (47.4%) reported in Yenagoa is notably higher compared to studies in other regions, indicating possibly better community or organisational involvement in providing tangible aid.

The study highlights significant social factors influencing healthcare preferences, such as area of residence, age, relationship status, educational level, and income. These findings are consistent with other research showing that social determinants significantly impact healthcare choices among vulnerable populations. For example, a study in South Africa found that socioeconomic status, education, and living conditions heavily influence healthcare-seeking behaviour among street children (Richter et al., 2004). The emphasis on traditional healthcare among younger children and those from lower-income backgrounds mirrors findings in many developing countries, where traditional medicine is more accessible and culturally accepted (WHO, 2002).

The limited involvement of government institutions (17%) and NGOs (20.3%) in providing healthcare for street children in Yenagoa reflects a common issue seen in other studies. In many developing countries, the support from government and NGOs is often insufficient to meet the healthcare needs of street children. A study in Nigeria found similar gaps, with many street children lacking access to essential health services (Olufemi, 2000). The specific involvement of WHO and UNICEF, as mentioned in the study, underscores the critical role international organisations play in supplementing local efforts.

CONCLUSION

The study comprehensively identifies the major health challenges faced by street children, their treatment pathways, the social network support available, and the social factors influencing their healthcare-seeking behaviour, alongside the role of government and non-governmental organisations in providing health services.

The data reveals that street children in Yenagoa, Bayelsa, are significantly vulnerable to a myriad of health issues. Every respondent reported falling sick in the past 12 months, with common ailments including headaches, malaria, fevers, common colds, and various other conditions like coughs, chest pain, eye problems, chickenpox, sore throats, head lice, ear problems, sexually transmitted diseases, and foot and mouth diseases. The frequent occurrence of these illnesses, coupled with the precarious living conditions of street children, underscores the critical need for improved health interventions targeting this demographic.

The study highlights the diverse medical help-seeking behaviours of street children. A significant portion relies on self-medication, with many seeking traditional and spiritual help before considering formal medical institutions. Government clinics and hospitals, along with private medical facilities, are often not the first point of contact due to accessibility and affordability issues. The reliance on non-professional treatment pathways, such as self-medication and traditional medicine, indicates a gap in the formal healthcare system's reach to these vulnerable children.



Social network support for street children predominantly includes instrumental, informational, emotional, and appraisal support. Organisations and government agencies provide various forms of support, including health education, counselling, and tangible aid. This support plays a crucial role in mitigating the health risks faced by street children, although the coverage and consistency of such support are areas needing enhancement.

Several social factors significantly influence the healthcare preferences of street children. Area of residence, age, relationship status, educational level, type of street engagement, ethnicity, type of settlement, income level, and parents' educational and occupational status are all critical determinants. Younger children and those from traditional backgrounds or lower socioeconomic statuses often prefer traditional healthcare methods, while older children and those from more educated or economically stable backgrounds lean towards modern healthcare. These findings suggest that tailored health interventions considering these social determinants could be more effective in addressing the health needs of street children.

The involvement of government and non-governmental organisations in providing healthcare to street children is limited but vital. A significant majority of street children have not received help from government institutions, highlighting a substantial gap in governmental health service provision. On the other hand, non-governmental organisations, including WHO and UNICEF, have a more noticeable presence, albeit still limited. The findings indicate an urgent need for increased and coordinated efforts by both government and NGOs to expand healthcare access and support for street children.

RECOMMENDATIONS

Based on these findings, the following recommendations are proposed:

1. **Enhanced Healthcare Access:** Improve accessibility to formal healthcare services for street children through mobile clinics, free health camps, and partnerships between government and NGOs.

Action Parties: Government Agencies (fund and coordinate mobile clinics and health camps), Non-Governmental Organisations (implement and operate mobile clinics and health camps, provide on-ground support), Healthcare Providers (doctors, nurses, and other medical staff to deliver healthcare services), and Local Communities (assist in identifying and reaching out to street children in need).

2. **Health Education and Awareness:** Implement extensive health education programs to inform street children about the importance of professional medical care and the risks of self-medication and traditional treatments.

Action Parties: Educational Institutions (develop educational materials and curricula for health education programs), NGOs (execute health education campaigns and workshops targeting street children), Healthcare Professionals (provide expertise and accurate information during health education sessions), and Media Outlets (disseminate information through various media channels to raise awareness).



3. **Strengthening Social Support Networks:** Bolster the support provided by social networks, ensuring consistent and comprehensive emotional, informational, and instrumental aid.

Action Parties: Social Workers (provide emotional and informational support to street children, Community Organizations (offer local support and create a network for street children), NGOs (facilitate programs that offer instrumental aid such as food, clothing, and shelter), and Peer Support Groups (encourage formation and participation in support groups among street children).

4. **Tailored Health Interventions:** Develop targeted health interventions that consider the social determinants influencing healthcare preferences among street children.

Action Parties: Public Health Researchers (research to understand the social determinants affecting street children's healthcare preferences), Government and NGOs (develop and implement health interventions based on research findings), Healthcare Providers (adapt medical care practices to be sensitive to the needs and backgrounds of street children), and Policy Makers (formulate policies that address the specific health needs of street children).

5. **Government and NGO Collaboration:** Foster stronger collaborations between government agencies and NGOs to create a more robust and unified approach to addressing the health needs of street children.

Action Parties: Government Agencies (provide funding, policy support, and regulatory oversight), NGOs (bring on-ground experience, execute programs, and provide direct services), Intergovernmental Organizations (facilitate collaboration and provide additional resources), and Community Leaders (advocate for and participate in collaborative efforts to ensure they meet the needs of street children).

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