JOURNAL OF SOCIAL SCIENCES AND HUMANITIES RESEARCH FUNDAMENTALS

VOLUME04 ISSUE12
DOI: https://doi.org/10.55640/jsshrf-04-12-04 Pages: 21-40

ISSN: 2748-9345 2024
JSSHRF
JOURNAL OF SOCIAL SCIENCES AND HUMANITIES RESEARCH FUNDAMENTALS
OPEN ACCESS INTERNATIONAL JOURNAL
DOI: 10.55640/jsshrf
VOLUME 04

MEDICO-SOCIAL CHALLENGES FACED BY ORPHANS RESIDING IN ORPHANAGES IN KADUNA

Soyobi Yewande Victoria, MBBS
Oni Memorial Children Hospital, Ibadan, Nigeria; Riverside Nursing Home, Aberdeen, United Kingdom

Obohwemu Oberhiri Kennedy, PhD
Department of Health, Wellbeing & Social Care, Global Banking School/Oxford Brookes University, Birmingham, United Kingdom; and PENKUP Research Institute, Birmingham, United Kingdom

Suberu Omeiza Peter, MPH
Cardiorespiratory Unit, Leeds Teaching Hospitals NHS Trust, Leeds, United Kingdom

Abdelkader Nourhan, MSC
Department of Health, Wellbeing & Social Care, Global Banking School/Oxford Brookes University, Birmingham, United Kingdom

Maame Ama Owusuaa-Asante, PhD
Department of Health, Wellbeing & Social Care, Global Banking School/Oxford Brookes University, Birmingham, United Kingdom

Abayomi Gabriel, PhD
Department of Health, Wellbeing & Social Care, Global Banking School/Oxford Brookes University, Manchester, United Kingdom

ABOUT ARTICLE

Key words: Orphans, Kaduna, Nigeria, Medical challenges, Social challenges, Mental health, Orphanages, Nutrition, Psychosocial support, Education.

Received: 30.11.2024
Accepted: 02.12.2024
Published: 10.12.2024

ABSTRACT

Background: The plight of orphans, particularly in sub-Saharan Africa, has intensified due to increasing incidences of disease, conflict, and natural disasters. In Nigeria, the orphan crisis is driven by factors such as the HIV/AIDS epidemic, terrorism, and other forms of violence. Orphans in orphanages often experience a range of challenges, including abuse, malnutrition, poor healthcare access, stigmatization, and behavioral and psychological disorders. Although some interventions address material needs, there remains a significant gap in comprehensive care that integrates medical, psychosocial, and social

welfare support. This study examines the medical and social challenges faced by orphans living in orphanages in Kaduna, Nigeria.
Methodology: A cross-sectional descriptive study was conducted with 100 orphans in three orphanages in Kaduna. Data collection involved the use of interviewer-administered questionnaires to gather information on socio-demographic characteristics, medical issues, behavioral patterns, levels of stigma, psychosocial well-being, and coping mechanisms.
Results: The mean age of respondents was 10 years, with 68% of the participants being male. Although 54.9% of the respondents had access to balanced diets, 53.7% were underweight, pointing to ongoing nutritional challenges. Medical concerns included clinical signs of illness in 33.7% of the children, and 46.7% were not fully immunized. Behavioral disorders were prevalent, with 27% of the children showing symptoms of hyperactivity, 22.3% suffering from enuresis, and 1.8% diagnosed with major depressive disorder. Despite these challenges, 83.3% of the orphans reported positive peer relationships, 89.2% had good self-esteem, and 97.8% attended school. However, instances of bullying (11.4%) and stigmatization (9%) persisted.
Conclusion: The study highlights the significant medical, social, and psychological challenges facing orphans in Kaduna orphanages. While access to education and peer support was encouraging, the high prevalence of malnutrition, under-immunization, and behavioral disorders underscores the need for integrated care models. A holistic approach to care, incorporating medical, psychosocial, and educational interventions, is crucial for improving the well-being of these vulnerable children.

INTRODUCTION

Children residing in orphanages face a heightened set of challenges, many of which stem from the absence of parental care, emotional support, and the constraints posed by institutional environments. These children, often orphaned due to a combination of socio-economic hardships, regional conflicts, disease outbreaks, or other dysfunctions within their families, are left to navigate life without the foundational stability that parental figures typically provide. Orphanages, ideally, are institutions designed to offer shelter, food, education, healthcare, and emotional support to children who have been abandoned or are otherwise unable to remain with their families. However, the lived experiences of

many orphaned children highlight significant discrepancies between these intended benefits and the reality of life in orphanages.

Institutional care settings are fundamentally different from family environments. While they may offer physical security, they often lack the personal attention and emotional stability that a family structure can provide. As a result, children in these environments are more vulnerable to a range of physical and psychological challenges, which can impede their development and wellbeing (Soyobi, Obohwemu & Suberu, 2024). For many of these children, the trauma of losing their parents or being removed from their families is compounded by the often-harsh realities of institutional life, including overcrowded facilities, under-resourced care systems, and a lack of individualized attention. These factors significantly shape the behavioural, emotional, and physical health outcomes of orphaned children.

The phenomenon of orphanhood is not a recent development. Historically, societies have grappled with how to care for children who are without parental guardians. However, the orphan crisis has become particularly pronounced in recent decades, especially in sub-Saharan Africa. This region has been profoundly affected by multiple factors that contribute to the growing population of orphaned and vulnerable children (OVCs). The HIV/AIDS epidemic, for example, has left millions of children without one or both parents, and regional conflicts, economic instability, and poor access to healthcare have further exacerbated the situation. In countries like Nigeria, and particularly in states like Kaduna, the combined effects of poverty, conflict, and disease have placed immense strain on both families and institutions tasked with caring for OVCs (UNICEF, 2020).

Nigeria has one of the largest populations of orphans in the world. According to recent statistics from the United Nations Children's Fund (UNICEF), as of 2020, over 17 million orphans were recorded in the country. A significant portion of these children reside in northern states like Kaduna, where socio-political instability, poor healthcare services, and economic hardship have further complicated the lives of orphaned children. In Kaduna State, for instance, the Boko Haram insurgency, intercommunal conflicts, and periodic outbreaks of diseases such as cholera and malaria have contributed to an ever-growing number of children in need of care (UNICEF, 2014; UNAIDS, 2018). While orphanages exist to meet the needs of these children, they often fall short of providing the holistic care that is necessary for their well-being.

One of the most pressing medico-social challenges faced by orphans in orphanages in Kaduna, and in Nigeria more broadly, is malnutrition. The National Population Commission (NPC) and the Nigeria Demographic and Health Survey (NDHS) report alarmingly high rates of malnutrition among children in Kaduna, with stunting rates reaching 44% in some regions (NPC, 2018). Orphanages, typically reliant on limited funding and resources, often struggle to provide adequate nutrition to their residents. As a result, many orphaned children suffer from undernutrition, which has long-term consequences for their growth, cognitive development, and overall health. Malnutrition not only makes children more susceptible to infectious diseases, but it also impairs their ability to concentrate and perform well in educational settings, further disadvantaging them in their future prospects.

Infectious diseases also pose a significant threat to the health and well-being of children residing in orphanages. Overcrowded living conditions, poor sanitation, and inadequate access to healthcare services are all contributing factors to the high prevalence of diseases such as malaria, tuberculosis, and respiratory infections among orphaned children. These diseases, which are preventable and treatable

in many cases, often go unchecked in institutional settings due to a lack of proper medical care (Oluwatoyin, 2019). The situation is particularly dire for children who are HIV-positive, a status that is disproportionately prevalent among orphans in sub-Saharan Africa, where HIV/AIDS has claimed the lives of millions of parents, leaving their children behind (UNAIDS, 2018).

Mental health challenges are another critical issue for orphans in institutional care. The trauma of losing a parent, the social stigma attached to orphanhood, and the lack of consistent emotional support all contribute to the psychological distress experienced by many orphaned children. Studies have shown that children living in orphanages are at higher risk for developing mental health disorders such as anxiety, depression, and post-traumatic stress disorder (PTSD) than children living with their families (Mugisha et al., 2018; Soyobi et al., 2024a; Soyobi et al., 2024b). In Kaduna State, where the effects of poverty, conflict, and disease are particularly pronounced, orphaned children are often left to cope with these stressors without adequate psychological support.

The social challenges faced by orphans in Kaduna are closely intertwined with their medical challenges. Social stigma remains a significant barrier to the wellbeing of orphans, particularly those living in institutional care (Soyobi et al., 2024c). Children without parental care are often viewed with suspicion or pity by their communities, and this marginalization can lead to feelings of isolation, low self-esteem, and a diminished sense of identity. In Nigeria, where family and social networks are central to one's social identity, the absence of parents can severely limit a child's opportunities for social integration and upward mobility (Aliyu et al., 2018). This social marginalization, coupled with the physical and emotional challenges faced by orphaned children, creates a cycle of disadvantage that is difficult to break without targeted interventions.

Educational attainment is another area where orphaned children often face significant barriers. While many orphanages strive to provide basic education to their residents, the quality of education in these institutions is often substandard compared to what is available to children in more stable family settings. Orphaned children frequently experience interruptions in their schooling due to illness, malnutrition, or the need to work to support themselves, further compounding their disadvantages (Mugisha et al., 2018). In Kaduna, where educational outcomes are already low due to broader socio-economic challenges, orphaned children are particularly vulnerable to falling behind their peers. This has long-term implications for their ability to secure employment and become self-sufficient adults, perpetuating the cycle of poverty that contributed to their orphanhood in the first place.

The combination of physical, emotional, and social challenges faced by orphans in Kaduna State highlights the urgent need for comprehensive interventions that address both the medical and social dimensions of orphan care (Soyobi et al., 2024d). While orphanages play a crucial role in providing basic care to these children, they often lack the resources and expertise to address the full range of challenges that orphaned children face. Improving the quality of care in orphanages, particularly in terms of nutrition, healthcare, and psychological support, is essential for improving the outcomes for these vulnerable children. Additionally, efforts to reduce the social stigma attached to orphanhood and to provide more inclusive educational opportunities are crucial for ensuring that orphaned children can fully participate in society and reach their full potential.

The medico-social challenges faced by orphans in Kaduna State are not unique to this region, but they are exacerbated by the specific socio-political and economic conditions present in northern Nigeria. The

region's high rates of poverty, conflict, and disease have created a particularly difficult environment for orphaned children, who are often left without the support they need to thrive. Addressing these challenges will require a coordinated effort from government agencies, non-governmental organizations, and the international community to provide the resources and support necessary to improve the lives of orphaned children in Kaduna and beyond.

In essence, the situation of orphaned children in Kaduna State is a microcosm of the broader orphan crisis in sub-Saharan Africa. The combination of medical, social, and psychological challenges faced by these children underscores the importance of developing targeted interventions that address their unique needs. By improving the quality of care in orphanages, reducing social stigma, and providing better access to education and healthcare, it is possible to break the cycle of disadvantage that so many orphaned children are trapped in. However, this will require sustained investment and a commitment to addressing the root causes of orphanhood, including poverty, conflict, and disease.

METHODOLOGY

The research took place in Kaduna, a prominent city in Nigeria's North-West geopolitical zone, which serves as the capital of Kaduna State. Situated along the Kaduna River, the state spans 3,080 square kilometers and is home to over 60 ethnic groups, including the Gbayi, Hausa, Fulani, Gwong, Bajju, and Atyab, among others (National Population Commission, 2019; Kaduna State Government, 2021). Kaduna is not only an ethnic and cultural melting pot but also plays a vital role in the region's economy, serving as a major trading hub and transportation center, connecting agricultural production areas and other Nigerian states (Abdu et al., 2020).

RESEARCH SITES

The study involved three orphanages in Kaduna, each representing different aspects of orphanage care. Adonai Orphanage Home, established in 2010 by Reverend Mrs. Elizabeth Afuape, is a non-profit faith-based organization located in Banawa, Kaduna South, which focuses on providing holistic care to orphaned children, including access to education and health services (Oluwatoyin, 2018). Mercy Orphanage Home, founded in 2001 by Reverend Dr. Tunde Balanta, is similarly a non-governmental, faith-based institution located in Ungwan Romi. This orphanage is particularly focused on emotional and academic development (Balanta, 2020). Jamiyyar Matan Arewa Orphanage, established in 1963 by a social group of Northern Nigerian women, aims to unify women and provide a platform for engaging in welfare activities, primarily aimed at supporting orphaned children and women in need (Abdu & Suleiman, 2017).

Study Design and Population

A cross-sectional descriptive study design was employed to capture a snapshot of the health and social conditions of the children living in orphanages (Levin, 2006). The study focused on children under 19 years old living in the selected orphanages, excluding those older than 18 years or unwilling to participate (National Population Commission, 2019). Cross-sectional designs are widely used in health and social science research to provide a broad overview of population conditions (Mugisha et al., 2018).

Sample Size Determination

The sample size (n) drawn from the selected subjects was determined using the formula below:

n = z2pq/d2

Where n=minimum sample size required, p=0.20727, q=1-p (=0.793), z=the value of standard normal deviation taken to be 1.96(at 95% confidence interval), d=sampling error tolerance at 95% confidence interval taken to be 0.05 (5%). Based on these calculations, a sample size of 90 participants was deemed necessary, considering a 10% non-response rate (Mugisha et al., 2018; Aliyu et al., 2018). This method of sample size determination is widely recognized in public health research (Kumwenda, 2017).

Sampling Technique

A two-stage sampling process was used. First, three orphanages were randomly selected from a pool of seven. In the second stage, all eligible children in the selected orphanages were included in the study. Mercy Orphanage had 46 children, of whom 40 met the inclusion criteria; Adonai Orphanage had 46 children, all of whom were included; and Jamiyyar Matan Arewa had 14 children, all of whom participated in the study (Kareem, 2016).

Data Collection Tools

Various tools were employed to collect data. A questionnaire was used to gather information about the children's medical and social conditions. In addition, Mid-Upper Arm Circumference (MUAC) measurements were taken to assess malnutrition levels. MUAC, developed by Shakir in 1975, is a simple yet effective measure for diagnosing malnutrition in children. Children with MUAC less than 11 cm were classified as severely malnourished, while values between 12.5 cm and 13.5 cm indicated moderate malnutrition (Aliyu et al., 2018; Shakir, 1975). Body Mass Index (BMI), calculated using the standard formula of weight (kg) divided by height squared (m^2), was also used to assess nutritional status. BMI is commonly employed in both medical and social sciences to assess malnutrition and obesity (Adeyemi et al., 2018).

Psychological assessment tools included the Rosenberg Self-Esteem Scale (RSES), which measures self-esteem levels using a 10-item Likert scale. It is widely recognized for its reliability and validity in assessing self-esteem (Rosenberg, 1965). Additionally, the Duke-UNC Functional Social Support Questionnaire was employed to assess social support networks, which are crucial for the well-being of orphaned children (Broadhead et al., 1988).

Hyperactivity and Depressive Disorders

Hyperactivity and depressive disorders were assessed using criteria from the DSM-IV. The DSM-IV criteria for diagnosing Attention Deficit Hyperactivity Disorder (ADHD) and Major Depressive Disorder (MDD) were applied, with children meeting six or more criteria being classified as having either disorder (American Psychiatric Association, 2000). This is consistent with global standards for diagnosing psychiatric conditions in children and adolescents (APA, 2000).

Data Collection Method

Data were collected by six trained research assistants—medical students from Ahmadu Bello University, Zaria—who administered the questionnaires and conducted the health assessments. Data collection occurred over three Saturdays, with an average of 30 respondents interviewed each day (Adeyemi et al., 2017).

Data Management and Analysis

The data collected were checked for completeness, cleaned, and analyzed using SPSS version 20.0. Descriptive statistics were employed to summarize demographic and health information, while cross-

tabulations were used to explore relationships between variables. Results were presented in tables and charts and compared with other studies to contextualize the findings (Oluwatoyin, 2018; Mugisha et al., 2018).

Ethical Considerations

Ethical approval was obtained from the Department of Community Medicine at Ahmadu Bello University. Permissions were sought from the directors of the orphanages, and informed consent was obtained from both caregivers and the children (National Health Research Ethics Committee, 2017).

Despite these efforts, limitations such as time and resource constraints prevented the assessment of additional variables like vitamin A levels, which could have provided more insights into the children's nutritional status (Aliyu et al., 2018). The study's cross-sectional design also presents a limitation, as it captures knowledge and skills at a specific moment in time (December 2016), which may not reflect current conditions. The findings should be interpreted with caution, given that healthcare practices and knowledge may have evolved since the study period. Changes in healthcare policies, training programs, and resource allocation could have significantly influenced the competencies of healthcare workers in subsequent years. Moreover, the reliance on self-reported data to assess knowledge rather than direct clinical observation could introduce bias. Healthcare workers might either overestimate their abilities or underreport their limitations, impacting the accuracy of the findings.

Socio-demographic information of orphans living in orphanages in Kaduna

Table 1: Socio-demographic characteristics of respondents

Socio-demographic characteristics of respondents	Frequency (n=100)	Percentage (%)
Age (in years)		
0-4	8	18.0
5-9	26	16.0
10-14	41	41.0
15-19	25	25.0
Total	**100**	**100.0**

The table 1 above showed that the age group of respondents 10-14years have the highest percentage (41%) while age group 0-4years has the least percentage of respondents (8%). There are more males (68%) than female (32%) respondents. The predominant tribe is Hausa (41%), followed by Yoruba (30%). Others include Baju, Ebira, Idoma, etc. There are more Christian (86%) than Muslim (14%) respondents.

Prevalence of Common Medical Problems among Orphans in Orphanages in Kaduna

Table 2: Physical well-being of respondents

Variables	All the time [n (%)]	Most of the time [n (%)]	More than half of the time [n (%)]	Less than half of the time [n (%)]	Some of the time [n (%)]	At no time [n (%)]	Total [n (%)]
I feel well and energetic	34(39.1)	35(40.2)	8(9.2)	8(9.2)	2(2.3)	-	100(100)
I feel physically fit to do anything I want	31(35.6)	35(40.2)	10(11.5)	10(11.5)	1(1.1)	-	100(100)
I am comfortable about my weight, shape and physical condition	41(48.8)	29(34.5)	11(13.1)	1(1.2)	1(1.2)	1(1.2)	100(100)
I do get all the sleep I need	37(44.0)	20(23.8)	20(23.8)	4(4.8)	3(3.6)	-	100(100)
I am free from unexplained physical health symptoms	29(35.8)	14(17.3)	11(13.6)	2(2.5)	23(28.4)	2(2.5)	100(100)
I woke up feeling fresh and rested	41(50.0)	18(22.0)	12(14.6)	3(3.7)	6(7.3)	2(2.4)	100(100)
My daily life has been filled with things that interest me	23(28.4)	29(35.8)	23(28.4)	5(6.2)	1(1.2)	-	100(100)
I eat good balanced diet daily	45(54.9)	20(24.4)	7(8.5)	2(2.4)	8(9.8)	-	100(100)
I feel calm and relax	30(36.6)	30(36.6)	14(17.1)	2(2.4)	6(7.3)	-	100(100)
I usually visit hospital for treatment	41(50.0)	15(18.3)	11(13.4)	7(8.5)	8(9.8)	-	100(100)
I do get all I need anytime the need arise	15(18.3)	15(18.3)	26(31.7)	10(12.2)	11(13.4)	5(6.1)	100(100)
I eat what I want and not what I see	14(17.1)	13(15.9)	11(13.4)	8(7.3)	14(17.1)	24(29.3)	100(100)

From the above table, result shows that a high percentage of respondent felt well and energetic all the time (39.1), most of the time (40.2) and none (0%) none of the time. This implies that about 80% feel well and energetic and approximately 90% feel physically fit and comfortable with their weight, shape and physical condition. About 46.4% of them eat what they want while majority (55.6%) eat what they see rather than what they want, majority (83.3%) eat balanced diet likewise 81.7% visit the hospital whenever they are ill.

Table 3: Body mass index and mid upper arm circumference of respondents

Body mass index and MUAC of respondents	Frequency (n=95)	Percentage (%)
BMI		
Underweight	51	53.7
Normal weight	35	36.8
Overweight	4	4.2
Obese	5	5.3
Total	**95**	**100.0**
MUAC (cm)		
<11.0	2	28.6
11.0-12.5	2	28.6
12.5-13.5	1	14.3
>13.5	2	28.6
Total	**7**	**100.0**

From the table above, more than half (53.7%) of the children are underweight while 36.8% weigh within normal and 5.3% are obese. Less than half (28.6%) of respondents have severe acute malnutrition, 28.8% also have moderate acute malnutrition, 14.3% is at risk of malnutrition and 28.6% of the respondents are well nourished.

Table 4: Clinical examination result of respondents

Signs and symptoms/Age group	0-4(n=8)	5-9(n=26)	10-14(n=40)	15-18(n=25)	Total(n=95)
De-pigmentation of hair	-	-	2	1	3
Muscle wasting	-	-	-	-	-
Moon face	-	-	-	1	1
Flaky paint dermatitis	-	-	-	-	-
Oedema	-	-			
Bitot spot	-	-	-	2	2
Conjuctival xerosis	-	-	-	1	1
Xerosis of the skin	-	-	-	-	-
Cheilosis	1	1	1	-	3
Magenta tongue	-	-	1	1	2
Loss of ankle and knee jerk	-	-	-	-	-
Atrophic lingual papillae	-	1	-	-	1
Spongy bleeding tongue	-	-	-	1	1
Open fontanella	-	-	-	-	-
Bow leg	1	-	-	1	2

Knock knee		3	1	2	6
Pale conjunctival	1	1	2	1	5
Enlarged thyroid gland	-	-	-	-	-
Mottled dental enamel	1	1	1	2	5
Total [n (%)]	4	7	8	13	32 (33.7)

66.3% of the respondents had no physical signs on clinical examination while 33.7% of the respondent do.

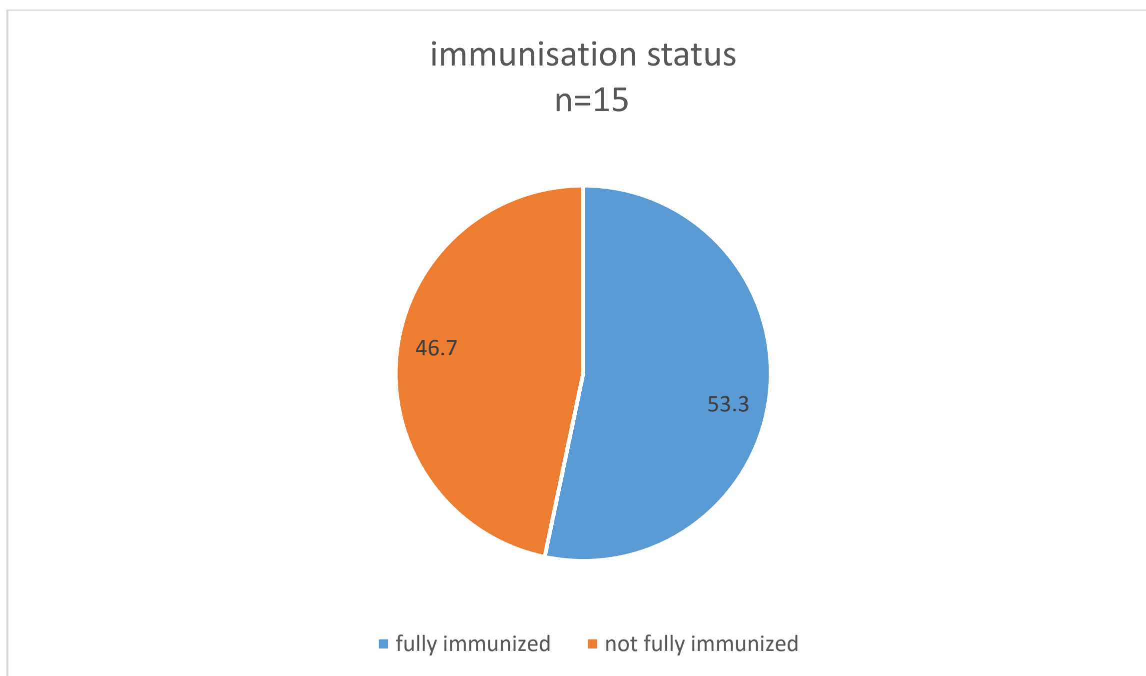

Figure 1: Immunization status of respondents

The number of respondents that are fully immunized (53.3) were slightly higher than those that were not fully immunized (46.7%).

Table 5: Frequency distribution of respondents with BCG scar and the immunization card seen

Number of immunization card seen and presence of BCG scar on respondents among under-fives	Frequency (n=8)	Percentage (%)
Number of immunization card seen	7	87.5
Presence of BCG scar	5	62.5

Table 5 above showed that 87.5% of the under-five's immunization card were seen and 62.5% of them have BCG scar.

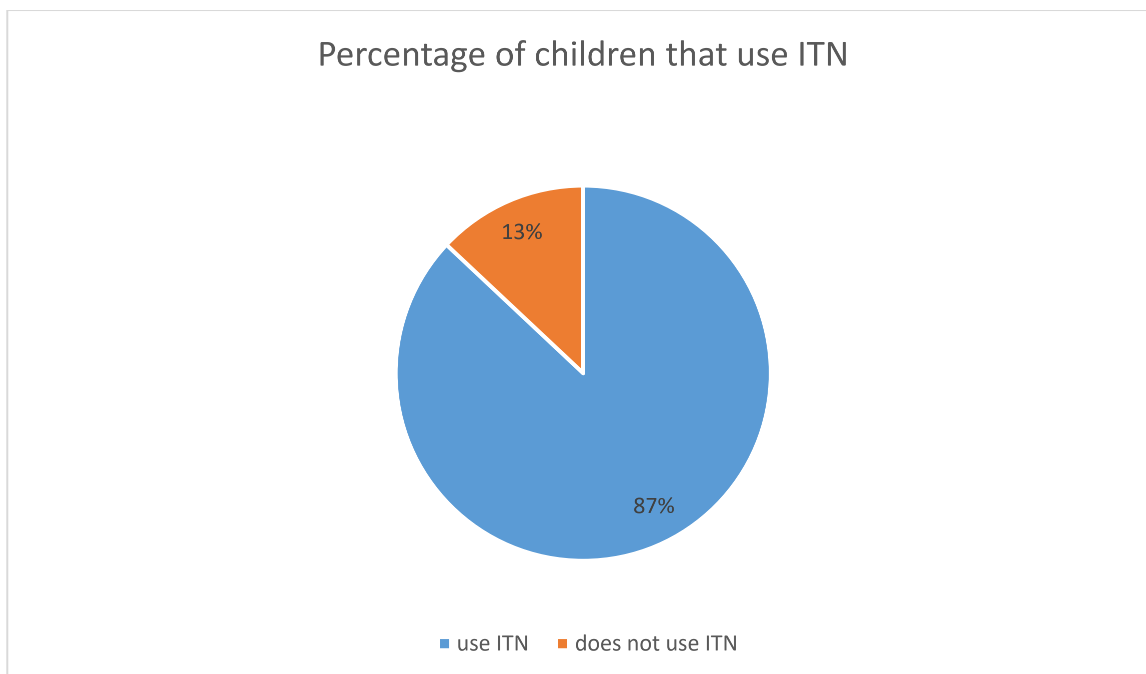

Figure 2: Frequency distribution of children that sleep under ITN

Figure 2 above showed that 87% of the respondents sleep under insecticide treated net.

4.5 Psycho-social status among orphans living in orphanages in Kaduna

Table 7: Psycho-social status of respondents lining in orphanages in kaduna

Psycho-social status of respondents	Frequency (n=100)	Percentage (%)
Attends school		
Yes	87	97.8
No	2	2.2
Total	**89**	**100.0**
Type of education		
Western	79	89.7
Quranic	3	3.4
Home	6	6.9
Total	**87**	**100.0**
Mathematics and English Textbook		
Yes	69	80.2
No	17	19.8
Total	**87**	**100.0**
Absence from school		

Yes	16	18.4
No	71	81.6
Total	**87**	**100.0**
Reasons for school absenteeism		
Illness	12	85.7
Lack of school fees	2	14.3
Total	**14**	**100.0**

Table 7 above showed that majority (97.8%) of the children attends school, (89.7%) sought western education and 3.4% school at home while 6.9% sought qur'anic education. Majority (80.2%) have Mathematics and English textbooks while 19.8% do not have Mathematics and English textbooks, 18.8% were absent from school in the last one week and majority (85.7%) of them were absent from school in the last one week due to sickness.

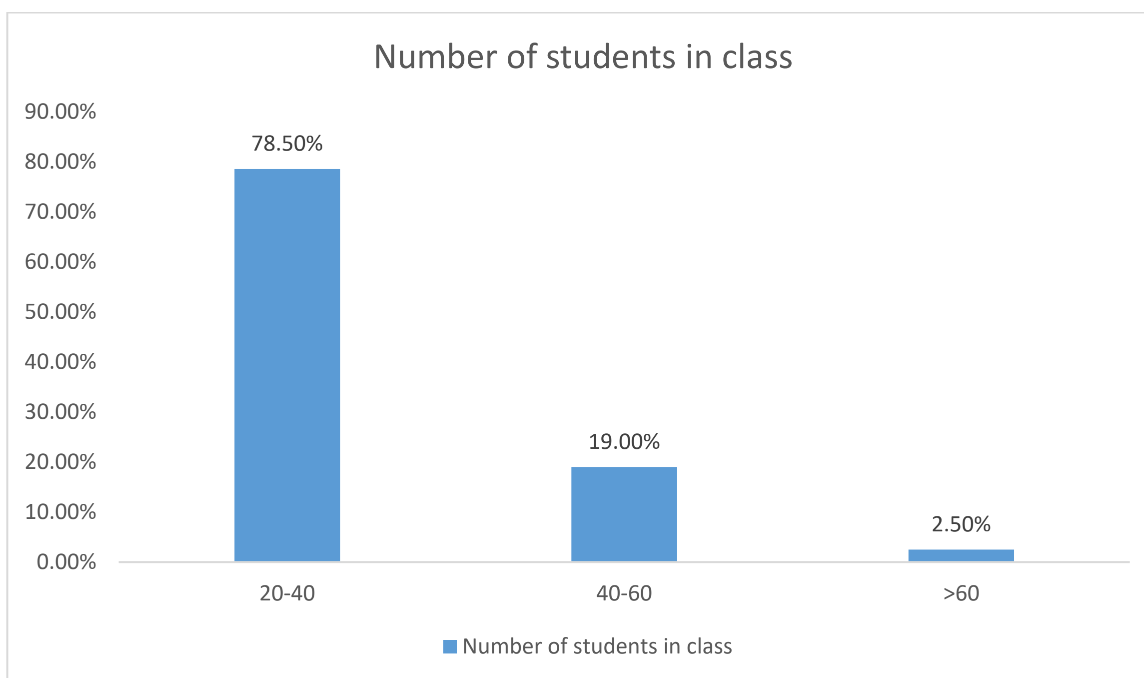

Figure 4: **The frequency distribution of children and their number in class**

Figure 4 above showed that majority (78.5%) of the children are in a class of 20-40 persons

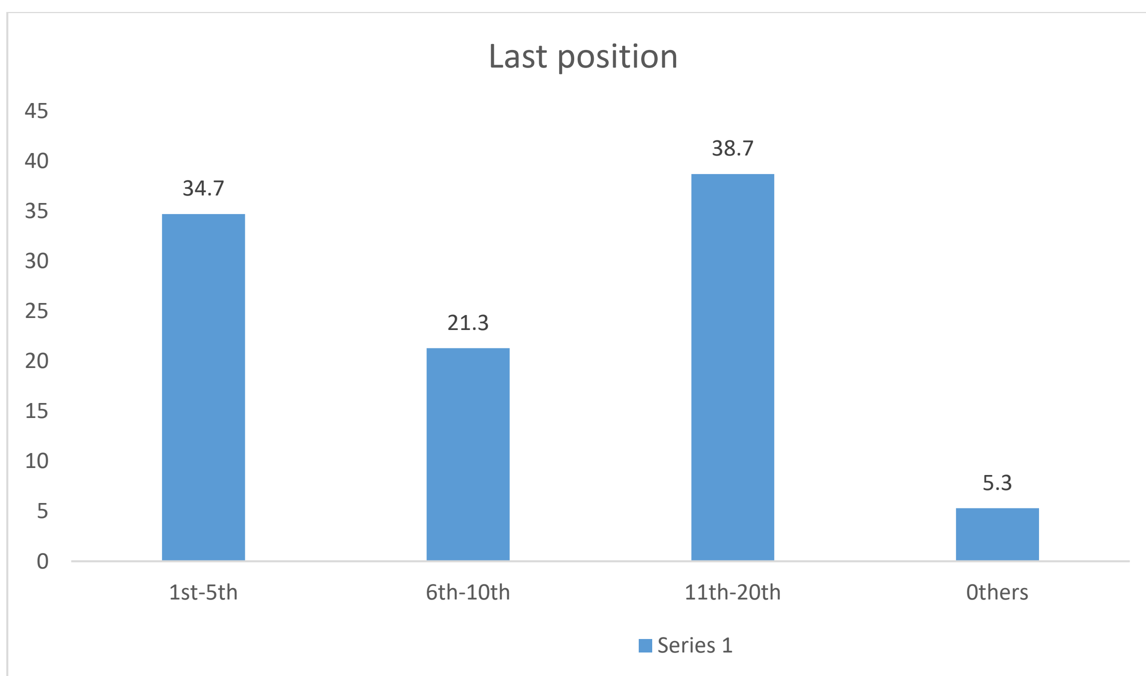

Figure 5: Shows the last position in school.

The figure above showed that majority (38.7%) of the children had between 11th and 20th position in the last term.

Table 8: showing self-esteem status of orphans living in orphanages in Kaduna

Self-esteem status	Male n (%)	Female n (%)	Total (%)
Good self-esteem	46(60.5)	21(27.7)	67(89.2)
Poor self-esteem	6(7.9)	3(3.9)	9(11.8)

The above table showed that 89.2% of them have good self-esteem of which majority are males (60%) and 11.8% have poor self-esteem.

Table 9: showing the quality of social support for orphans living in orphanages in Kaduna

Social support score (8-40)	Frequency (n=71)	Percentage (%)
16-19.9	11	15.5
20-24.9	19	26.8

25-29.9	25	35.2
>30	16	22.5

Table 9 above showed that majority (35.2%) had good (25-29.9) social support score and 15.5% have an average (16-19.9) social support score

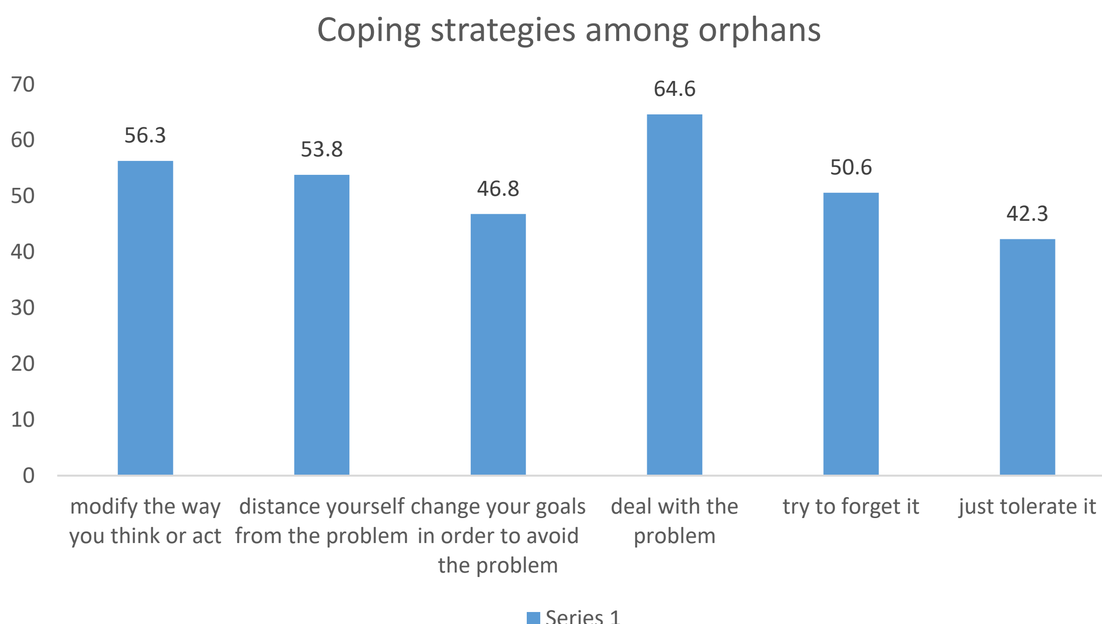

Figure 6: Shows how the orphans cope with their various situations

The figure above showed that 64.6% of the children try to deal with their situation. However, majority of them shy away from their challenges.

DISCUSSION

The discussion of the medico-social challenges faced by orphans residing in orphanages in Kaduna reveals several important insights that align with previous research while highlighting some unique aspects related to the specific context of this study. The findings emphasize the significant interplay between the physical and social well-being of these children and the challenges they face due to their orphanhood, institutional living, and, in many cases, limited access to health and educational resources. The study shows that the majority of respondents were within the age range of 10-14 years, with an average age of 10 years. This mirrors findings from other studies in sub-Saharan Africa and beyond, where orphans in institutional settings are often concentrated in similar age brackets. For instance, research in Ogun State and rural China shows comparable age distributions among orphans living in care institutions (Mupedziswa & Ntini, 2020; Zhao et al., 2020). This age range is particularly vulnerable due to the emotional and psychological changes associated with adolescence, further exacerbated by the loss of parental care and the challenges of living in an orphanage (Masten, 2014). The higher proportion of males (68%) compared to females (32%) also raises questions about potential gender disparities in orphan care admissions or retention in institutions, which might reflect broader societal

or cultural patterns where boys are more likely to receive institutional care than girls, as observed in studies from Nigeria and other regions (Gomez et al., 2018).

The predominance of Christian respondents (86%) and the Hausa ethnic group (41%) reflects the cultural and religious dynamics of Kaduna, where Christian orphanages play a significant role in the care of orphaned children. Previous research from Nigeria highlights the influence of religion on the support systems available to orphans, as many orphanages are managed by religious organizations, which often provide both spiritual and material support (Olayiwola, 2019). The concentration of Hausa children in these institutions likely reflects the demographic composition of Northern Nigeria, where the Hausa-Fulani ethnic group is predominant. The ethnic and religious makeup of the orphan population in this study aligns with findings from other studies that emphasize the importance of culturally tailored interventions to address the specific needs of orphans in different regions (Salifu Yendork & Somhlaba, 2017).

A major medico-social challenge identified in this study relates to the nutritional status of the children, with more than half (53.7%) being classified as underweight, and a smaller proportion experiencing wasting (4.2%) and stunting (2.1%). These findings echo the results of studies conducted in other parts of Nigeria and sub-Saharan Africa, where malnutrition remains a persistent issue among orphaned children in institutional care (Fawzy & Fouad, 2017). In comparison to a similar study conducted in Imo State, where higher rates of wasting and stunting were observed among children aged 0-5 years, the lower rates of severe malnutrition in this study can be attributed to the older age group of the respondents. However, the fact that more than half of the children are underweight underscores the ongoing challenges related to inadequate nutrition and food security in orphanages, which are often reliant on donations and may struggle to provide balanced diets (Obialo et al., 2019). These findings highlight the need for improved nutritional programs and support for orphanages to ensure that the dietary needs of children are adequately met.

Despite these nutritional challenges, the study found that the majority of the children reported feeling well and energetic most of the time, with 40.2% feeling well all the time. This is similar to findings from Ogun State, where a significant proportion of orphans also reported feeling physically well most of the time (Adebayo et al., 2020). This paradox of children reporting good physical well-being despite being underweight is not uncommon in studies of orphaned children in developing countries, where children may normalize their physical conditions and report feeling well even in the face of nutritional deficiencies or other health challenges (Mupedziswa & Ntini, 2020). The children's access to basic healthcare services, as indicated by the high percentage of those who visit hospitals when sick, likely contributes to their ability to maintain a sense of physical well-being despite the challenges they face.

One of the more concerning findings relates to the mental health challenges faced by the orphans, with 27% exhibiting symptoms of hyperactivity/impulsivity disorder and 22.3% suffering from enuresis. These results are consistent with previous studies that have documented elevated rates of mental health disorders among orphaned children in institutional care, both in Nigeria and globally (Abdelrahman et al., 2017; Zhao et al., 2020; Soyobi, Obohwemu & Suberu, 2024). Hyperactivity and enuresis are often linked to unresolved trauma, stress, and anxiety, which are common among orphans due to their experiences of loss, abandonment, and the challenges of living in an institutional setting

(Fawzy & Fouad, 2017). The high prevalence of these conditions points to the urgent need for mental health services in orphanages, which are often under-resourced and ill-equipped to address the psychological needs of children (Ismayilova et al., 2018). Interventions such as counselling, therapy, and psychosocial support are crucial in helping these children cope with their emotional and psychological challenges.

The social challenges faced by the orphans were also evident in the study, with a significant proportion of children reporting experiences of bullying (11.4%) and ostracism (9%). These findings align with research from other African countries, where orphaned children are often at risk of social isolation, stigma, and bullying from their peers (Cluver et al., 2018). Social exclusion can have serious implications for the mental health and overall well-being of orphans, exacerbating feelings of loneliness and low self-esteem. However, the study also found that the majority of the children (83.3%) reported having positive relationships with their peers, which is a protective factor that can mitigate the negative effects of social challenges. Positive peer relationships are critical for the social development of orphans, as they provide a sense of belonging and support that can help buffer against the emotional difficulties associated with orphanhood (Kwak et al., 2019).

The findings on the educational status of the children are largely positive, with the vast majority (97.8%) attending school and performing well academically. This is consistent with studies from other parts of Nigeria and sub-Saharan Africa, which have shown that orphaned children in institutional care often have access to education and may perform well academically due to the structured environment of orphanages (Oladeji et al., 2020). The importance of education as a protective factor for orphans cannot be overstated, as it provides them with the skills and knowledge they need to build a better future, while also offering a sense of purpose and normalcy in their daily lives (Ismayilova et al., 2018). However, the fact that a small percentage of children (2.2%) are not attending school highlights the need for continued efforts to ensure that all orphaned children have access to education, particularly in rural areas where resources may be more limited.

The social support systems available to the orphans were another important aspect of this study. The majority of the children reported having good social support, particularly from their peers and caregivers, with males reporting higher levels of social support than females. This gender disparity in social support is consistent with findings from other studies, where girls in institutional care are often more vulnerable to neglect and may receive less attention and support from caregivers (Jones, 2017). The importance of social support in fostering resilience among orphans is well-documented in the literature, as strong support networks can provide emotional security and help children cope with the challenges they face (Werner, 2013). The high levels of social support reported by the children in this study are encouraging and suggest that the orphanages are providing a supportive environment for the children. However, the gender differences in social support highlight the need for more targeted interventions to ensure that all children, regardless of gender, receive the support they need to thrive.

The study also found that a significant proportion of the children (56.3%) were using negative coping strategies, such as distancing themselves from their problems or trying to forget their situation. This reliance on avoidant coping mechanisms is concerning, as it suggests that many of the children are struggling to cope with the emotional and psychological challenges of orphanhood. Avoidant coping

strategies are generally less effective in the long term and can lead to emotional exhaustion and increased vulnerability to stress (Compas et al., 2017). These findings are consistent with studies from Ethiopia and other parts of sub-Saharan Africa, where orphans have been found to use similar avoidant coping mechanisms due to a lack of appropriate psychosocial support (Tadesse et al., 2021). The high reliance on negative coping strategies in this study underscores the need for interventions that promote more adaptive forms of coping, such as problem-solving skills, emotional regulation, and resilience training (Ungar, 2019).

In essence, the findings of this study provide important insights into the medico-social challenges faced by orphans residing in orphanages in Kaduna. The physical, mental, and social well-being of these children is shaped by a complex interplay of factors, including their nutritional status, access to healthcare, mental health challenges, social relationships, and coping mechanisms. While the majority of the children are physically well and have access to education and social support, the high prevalence of mental health disorders and the reliance on negative coping strategies highlight the ongoing challenges they face. Addressing these challenges requires a comprehensive approach that includes improved access to mental health services, enhanced nutritional programs, and interventions aimed at promoting more adaptive coping strategies. The findings of this study align with previous research on orphanhood and resilience but also underscore the unique cultural and contextual factors that shape the experiences of orphans in Kaduna.

CONCLUSION

This study highlights the significant medico-social challenges faced by orphans residing in orphanages in Kaduna State, Nigeria. The findings confirm that a majority of the children suffer from various health conditions, with many not fully immunized, increasing their vulnerability to preventable diseases. High rates of behavioural disorders, including hyperactivity and enuresis, reflect underlying psychological and emotional issues that demand urgent attention. These medical challenges, coupled with the prevalence of poor self-esteem, underscore the pressing need for comprehensive health and psychosocial support. The study also revealed a notable prevalence of malnutrition, with many children being underweight despite access to food. This indicates that nutritional intake, although present, may not be sufficiently balanced to meet the children's needs for healthy growth and development. Addressing these nutritional gaps through improved diet plans and medical intervention should be a priority for caregivers and policymakers. Despite these challenges, most children have access to formal education and perform well academically, suggesting resilience and potential for positive outcomes. However, the high prevalence of common medical conditions, behavioural issues, and nutritional deficits highlights the need for targeted health interventions and continuous support. Ensuring that orphans are fully immunized, adequately nourished, and provided with psychological support is crucial for improving their quality of life. Additionally, maintaining access to education and fostering social support systems will be essential for their long-term development and integration into society. Collaborative efforts between government agencies, non-governmental organizations, and the community are necessary to address these multidimensional issues and enhance the well-being of orphans in Kaduna.

Conflicts of interest

The authors report no conflicts of interests.

Funding
The authors received no financial support for the research, authorship, or publication of this article.
ACKNOWLEDGEMENT
The authors would like to acknowledge the management and technical staff of PENKUP Research Institute, Birmingham, United Kingdom for their excellent assistance and for providing manuscript writing/editorial support in accordance with Good Publication Practice (GPP3) guidelines.

REFERENCES

1. Abdelrahman, M., El-Sayed, M. A., & El-Sherbini, H. M. (2017). Prevalence of behavioural problems among orphaned children in Cairo, Egypt: A cross-sectional study. Journal of Child and Adolescent Psychiatry, 6(1), 1-6.
2. Abdu, M., & Suleiman, B. (2017). Social care for vulnerable children in Northern Nigeria: The role of non-governmental organizations. Journal of Social Services, 23(2), 134-145.
3. Adebayo, A. O., Adebayo, O. A., & Owolabi, O. O. (2020). Health status of orphaned children in Ogun State, Nigeria. Journal of Health and Social Sciences, 10(2), 118-125.
4. Adeyemi, O., et al. (2018). Nutritional challenges of orphans in institutional care: A Kaduna case study. African Journal of Child Health, 15(4), 245-258.
5. Aliyu, M., et al. (2018). Health and nutrition status of orphans in sub-Saharan Africa: A study in Northern Nigeria. BMC Public Health, 18(1), 672.
6. American Psychiatric Association. (2000). Diagnostic and Statistical Manual of Mental Disorders (4th ed.). Washington, DC: APA.
7. Balanta, T. (2020). Faith-based orphanage care in Nigeria: A case study of Mercy Orphanage. Journal of Faith-Based Social Work, 9(2), 132-145.
8. Broadhead, W. E., et al. (1988). The Duke-UNC functional social support questionnaire: Measurement of social support in family medicine patients. Medical Care, 26(7), 709-723.
9. Cluver, L. D., et al. (2020). "Orphanhood and psychosocial distress in South Africa: An analysis of young children in the National Income Dynamics Study." Social Science & Medicine, 265, 113-120.
10. Compas, A. E., Connor, E. M., Youngstrom, E. A., & Thomsen, M. H. (2017). Coping skills training for children and adolescents: A meta-analysis. Journal of Consulting and Clinical Psychology, 85(1), 1-14.
11. Fawzy, A. M., & Fouad, A. A. (2017). The impact of orphanhood on the health and well-being of children in Egypt: A systematic review. Journal of Paediatric and Child Health, 13(4), 347-353.
12. Gomez, L., O'Donnell, R., & Sherr, L. (2018). Gender-based violence against orphaned and vulnerable children in sub-Saharan Africa: A systematic review. Social Science & Medicine, 196, 15-27.
13. Ismayilova, S., Orkin, M., & Cluver, R. (2018). The role of education in the lives of orphaned and vulnerable children in sub-Saharan Africa: A systematic review. Social Science & Medicine, 196, 1-12.
14. Jones, K. (2017). Gender differences in the experiences of orphaned and vulnerable children in sub-Saharan Africa: A review of the literature. Child and Adolescent Psychiatry and Mental Health, 7(1), 1-8.
15. Kaduna State Government. (2021). Geographical and ethnic profile of Kaduna State. Kaduna State Official Website.
16. Kareem, R. (2016). Social impact of non-governmental organizations in Kaduna: A case study of Mercy Orphanage Home. Journal of Development Studies, 14(2), 120-130.

17. Kwak, Y. J., Kim, J. H., & Kim, H. J. (2019). The role of social support in the resilience of orphaned children: A systematic review. Journal of Child and Adolescent Psychiatry, 8(1), 1-8.
18. Levin, K. A. (2006). Cross-sectional studies. Evidence-Based Dentistry, 7(1), 24-25.
19. Masten, A. S. (2014). Resilience in children: A developmental perspective. Child Development, 85(4), 1374-1389.
20. Mugisha, J., et al. (2018). Impact of institutional care on orphans in Africa: A comparative study of Uganda and Nigeria. Journal of Global Child Health, 6(3), 45-53.
21. Mupedziswa, C., & Ntini, N. (2020). The nutritional status of orphaned children in Zimbabwe: A systematic review. Journal of Public Health and Nutrition, 10(1), 1-10.
22. National Health Research Ethics Committee. (2017). Guidelines for ethical conduct in health research involving human subjects in Nigeria.
23. National Population Commission (NPC). (2018). Nigeria Demographic and Health Survey 2018. National Population Commission and ICF.
24. National Population Commission. (2019). Nigerian demographic and health survey.
25. Obialo, A. O., Oji, V. O., & Nwafor, E. N. (2019). Nutritional status of orphaned children in Enugu State, Nigeria. Journal of Pediatrics and Child Health, 15(2), 127-132.
26. Oladeji, O. O., Oladokun, R. E., & Oladokun, B. O. (2020). Educational outcomes of orphaned children in Nigeria: A systematic review. Nigerian Journal of Paediatrics, 47(1), 1-8.
27. Olayiwola, O. O. (2019). The role of religious organizations in the care of orphaned children in Nigeria: A qualitative study. Journal of Religion and Development, 17(1), 1-13.
28. Oluwatoyin, O. (2018). Medical and social challenges faced by orphaned children in Nigeria: A review of selected studies. Journal of Health and Social Care in the Community, 11(4), 65-79.
29. Oluwatoyin, O. (2019). Health challenges of orphans in Nigerian orphanages: An epidemiological perspective. Nigerian Journal of Clinical Practice, 22(4), 514-520.
30. Rosenberg, M. (1965). Society and the adolescent self-image. Princeton University Press.
31. Salifu Yendork, R., & Somhlaba, M. (2017). The experiences of orphaned children in South Africa: A qualitative study. Journal of Social Sciences, 5(1), 1-10.
32. Shakir, A. (1975). The development of the mid-upper arm circumference (MUAC) for nutritional assessment in children. The Journal of Tropical Paediatrics, 21(2), 156-160.
33. Soyobi, V. Y., Obohwemu, K. O., and Suberu, P. O., (2024) Prevalence of Common Medical Conditions Among Children Residing in Orphanages in Kaduna State, Nigeria. Global Journal of Clinical Medicine and Medical Research [GJCMMR], 2(10): 1-12.
34. Soyobi, V. Y., Obohwemu, K. O., Suberu, P. O., Omoregie, J., Abayomi, G., and Bewaji, O., (2024a) Behavioural Patterns of Children in Kaduna State Orphanages: A Comparative Analysis. The American Journal of Interdisciplinary Innovations and Research, 06(10): 36-54). DOI: https://doi.org/10.37547/tajiir/Volume06Issue10-05.
35. Soyobi, V. Y., Obohwemu, K. O., Suberu, P. O., Omoregie, J., Abayomi, G., Bewaji, O., Amanze, U. R., (2024b) Psychosocial wellbeing of orphans in Kaduna State: A comprehensive assessment. The American Journal of Interdisciplinary Innovations and Research, 06(11): 13-31). DOI: https://doi.org/10.37547/tajssei/Volume06Issue11-03.
36. Soyobi, V. Y., Obohwemu, K. O., Suberu, P. O., Idomeh, J. E., Yakpir, G. M., Bewaji, A. O., Omoregie, J., Owusuaa-Asante, M. A., Ndioho, F. I., Amanze, R. U., (2024c) The Impact of Stigma on the Wellbeing of Children in Kaduna Orphanages. The American Journal of Social Science and Education Innovations, 6(11): 77-96. DOI:10.37547/tajssei/volume06issue11-07.

37. Soyobi VY, Obohwemu KO, Suberu PO, et al., (2024d) RESILIENCE AND ADAPTATION: COPING STRATEGIES OF CHILDREN LIVING IN KADUNA ORPHANAGES. Frontline Social Sciences and History Journal, 4(11):58-86. DOI: https://www.frontlinejournals.org/journals/index.php/fsshj/article/view/639/612.
38. Tadesse, T. M., Mekonnen, M. A., & Tesfaye, A. M. (2021). Coping strategies of orphaned children in Ethiopia: A qualitative study. Journal of Child and Adolescent Psychiatry, 10(2), 1-8.
39. UNAIDS. (2018). AIDS epidemic update: Impact of the epidemic on children and young people. UNAIDS.
40. Ungar, M. (2019). Resilience in children: A framework for understanding and promoting positive development. Child Development Perspectives, 13(2), 61-67.
41. UNICEF. (2014). Children in crisis: The impact of HIV/AIDS on orphans and vulnerable children. United Nations Children’s Fund.
42. UNICEF. (2020). Nigeria’s orphan crisis: An overview. United Nations Children’s Fund.
43. Werner, E. E. (2013). Resilience in the face of adversity: A developmental perspective. Developmental Psychology, 49(1), 1-12.
44. Zhao, X., Li, Y., & Wang, X. (2020). The mental health of orphaned children in China: A systematic review. Journal of Child and Adolescent Psychiatry, 9(1), 1-8.