

Healthcare Financing Options for Under-Five Child Care and Their Implications for Primary Healthcare Utilization in Oyo State, Nigeria

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Abstract: Under-five morbidity and mortality remain major public health challenges in Nigeria. Timely utilization of primary healthcare (PHC) is essential for preventing and managing common childhood illnesses. Caregivers' socio-demographic characteristics, education, and household income strongly influence PHC utilization. Out-of-pocket payments dominate healthcare financing, limiting timely utilization of PHC services, while enrolment in health insurance schemes remains low, particularly among informal and low-income households. Understanding how caregiver factors interact with financing methods is critical for improving PHC access and child health outcomes. This study assessed the relationship between caregivers' healthcare financing options and PHC utilization for under-five children in Oyo State, Nigeria. A cross-sectional survey was conducted among caregivers of under-five children, collecting data on socio-demographics, income, health-seeking patterns, and financing options. Descriptive statistics and chi-square tests were employed to examine associations between variables. The mean age of caregivers was 31.0 years (SD ± 8.5), with 91.7% female and 77.5% married. Informal employment was predominant (56.2%), and the majority earned below ₦100,000 per month. Out-of-pocket payment was the most common financing method (44.5%). PHC utilization was suboptimal, with only 22.7% of caregivers seeking care from PHC facilities during child illness and 53.1% delaying care by more than five days. Socio-demographic characteristics, particularly age, education, and income, significantly influenced financing choices and uptake of PHC. ($p < 0.001$). Expanding affordable insurance coverage, promoting caregiver-targeted health education, and strengthening PHC service delivery and governance are essential to enhance timely utilization and equitable access, contributing to improved child health and progress toward universal health coverage in Nigeria.

Keywords: Caregivers, Healthcare Financing, Health Insurance, Out-of-Pocket Payment, Primary Healthcare Utilization, Under-5-Children

Introduction

Healthcare financing remains a critical determinant of access to and utilization of primary healthcare services, particularly for vulnerable populations such as under-five children in low- and middle-income countries (LMICs). The manner in which healthcare is financed influences not only service availability and quality but also caregivers' decisions to seek timely and appropriate care for childhood illnesses (Luyten & Tubeuf, 2025; World Health Organization, 2022). In sub-Saharan Africa, weak risk-pooling mechanisms and heavy reliance on household payments continue to undermine progress toward Universal Health Coverage (UHC), exposing families to catastrophic health expenditure and limiting effective use of primary healthcare services (Aregbeshola & Khan, 2018; World Bank, 2022). In Nigeria, healthcare financing is characterized by a fragmented mix of

out-of-pocket payments (OOPs), limited tax-based funding, donor support, and under-developed insurance mechanisms. Out-of-pocket expenditure remains the dominant mode of financing, accounting for over 70% of total health expenditure, thereby placing a disproportionate financial burden on households (Nairametrics, 2024; World Bank, 2022). This financing structure has profound implications for caregivers of under-five children, whose health-seeking decisions are often constrained by household income, perceived affordability of services, and fear of incurring unmanageable medical costs (Adeoti & Cavallaro, 2022; Dougherty et al., 2020). Evidence from Nigeria and similar LMIC settings indicates that high reliance on OOPs leads to delayed care-seeking, self-medication, use of informal providers, and underutilization of public primary healthcare facilities, particularly for childhood illnesses such as malaria, diarrhoea, and acute respiratory infections (Aigbokhaode et al., 2023; Bakare et al., 2023). Among caregivers of under-five children, financial considerations frequently outweigh clinical need, resulting in treatment delays that increase the risk of complications, preventable morbidity, and mortality (Nwaneri & Sadoh, 2020; Motilewa et al., 2021). Although tax-based financing is intended to provide equitable access to essential health services, public spending on health in Nigeria remains persistently low. Government health expenditure accounts for less than 1% of GDP, far below regional and global benchmarks, with primary healthcare receiving an inadequate share of available funds (Nairametrics, 2024; WHO, 2022). This chronic underfunding has contributed to poor infrastructure, frequent drug stock-outs, limited diagnostic capacity, and staffing shortages at the primary healthcare level, eroding public confidence and discouraging utilization of government facilities for child healthcare (Ogah et al., 2024; Wright et al., 2024). Health insurance schemes represent a key risk-pooling strategy for improving financial protection and healthcare utilization. However, insurance coverage in Nigeria remains critically low. Despite the establishment of the National Health Insurance Scheme now the National Health Insurance Authority (NHIA) less than 10% of Nigerians are currently enrolled, with coverage largely restricted to the formal sector (Akinyemi et al., 2021; Dataphyte, 2024). Empirical studies suggest that insured households are more likely to utilize formal healthcare services and less likely to experience catastrophic health expenditure, yet awareness, trust, affordability, and administrative inefficiencies continue to limit uptake, particularly among informal sector workers and rural populations (Okedo-Alex et al., 2019; Alawode & Adewole, 2021). Community-based health insurance (CBHI) schemes have been proposed as an alternative financing mechanism for informal and rural populations, including caregivers of young children. While evidence indicates that CBHI can improve healthcare utilization and financial risk protection, sustainability challenges such as low enrollment, limited benefit packages, and weak governance structures persist (Eze et al., 2023; Onyemaechi & Ezenwaka, 2022). Similarly, private health insurance remains inaccessible to most Nigerians due to high premiums and urban concentration, further reinforcing inequities in access to child healthcare services (Nairametrics, 2024). Donor funding has historically supported child health interventions in Nigeria, particularly in immunization, nutrition, malaria control, and HIV/AIDS programs. However, declining external funding and increasing donor withdrawal have raised concerns about sustainability and continuity of essential child health services, especially at the primary healthcare level (Ikeke, 2023; Olson, 2020). This decline underscores the urgency of strengthening domestic healthcare financing mechanisms to safeguard gains in child survival and health outcomes. Within this context, caregivers' healthcare financing options play a decisive role in shaping primary healthcare utilization for under-five children. Studies across Nigeria demonstrate that socioeconomic status, household income, education, and decision-making dynamics interact with financing mechanisms to influence where, when, and whether care is sought for sick children (Aboaba et al., 2023; Adamu & Anjo, 2024; Ugochukwu et al., 2023). Despite growing evidence on health-seeking behavior, there remains a paucity of context-specific empirical research examining how different healthcare financing options directly affect primary healthcare utilization for under-five child care in Oyo State. This study therefore addresses a critical gap by examining the healthcare financing options available to caregivers of under-five children in Oyo State, Nigeria, and analyzing their implications for the utilization of primary healthcare services. By situating

financing mechanisms within caregivers' lived realities, the study contributes to policy-relevant evidence needed to strengthen financial protection, enhance primary healthcare utilization, and advance progress toward Universal Health Coverage for children in Nigeria.

Materials and Methods

Study Setting

The study was conducted in Oyo State, located in the South-West geopolitical zone of Nigeria. Oyo State comprises 33 Local Government Areas (LGAs) and operates a three-tier healthcare delivery system involving primary, secondary, and tertiary facilities managed by public and private sectors. Primary Health Care (PHC) facilities constitute the foundation of maternal and child health service delivery in the state, providing services such as immunization, treatment of common childhood illnesses, growth monitoring, and nutrition counselling. Despite existing infrastructure and policy frameworks, PHC utilization remains uneven, partly due to financial, socio-economic, and systemic barriers.

Study Design

A cross-sectional descriptive analytical study design was adopted. This design was appropriate for examining healthcare financing options available to caregivers of under-five children and assessing their relationship with the utilization of primary healthcare services at a single point in time.

Study Population

The study population comprised caregivers (male or female) of children under five years of age residing in Oyo State at the time of the survey.

Sampling Procedure

A total of 422 caregivers of under-five children participated in the study. A multi-stage sampling technique was employed. Selected Local Government Areas were identified across Oyo State, after which wards were randomly selected using simple random sampling. Communities within the selected wards were subsequently chosen, followed by systematic selection of households. In each selected household, one eligible caregiver aged 18 years or older with at least one under-five child was selected using simple random sampling.

Data Collection Instruments

Data were collected using a semi-structured interviewer-administered questionnaire developed in accordance with the study objectives. The instrument captured information on respondents' socio-demographic characteristics, health-seeking patterns for under-five children, healthcare financing options, and uptake of primary healthcare services. The questionnaire was pre-tested in a comparable population outside the study area, and feedback from the pre-test was used to refine question wording and improve content validity. Trained research assistants administered the questionnaires to ensure uniform data collection procedures and reduce interviewer-related variability. The internal consistency of scale-based items was assessed using Cronbach's alpha, and the reliability coefficients met acceptable thresholds.

Data Analysis

Quantitative data were coded, entered, and analyzed using IBM SPSS Statistics (version 20). Descriptive statistics were used to summarize socio-demographic characteristics, healthcare financing options, and PHC utilization patterns using frequencies, percentages, means, and standard deviations. Inferential analysis was conducted using Chi-square tests to assess associations between sociodemographic characteristics of the caregivers and healthcare financing options.

Inclusion and Exclusion Criteria

Caregivers aged 18 years and above, with at least one child under five years, who had resided in the

study area for a minimum of six months were included. Caregivers who were critically ill or declined consent were excluded.

Ethical Considerations

Ethical approval was obtained from the Oyo State Ministry of Health Ethical Review Committee. Written informed consent was obtained from all participants. Confidentiality and anonymity were assured, and participation was voluntary with the right to withdraw at any stage without consequence.

Results

The socio-demographic characteristics of the caregivers show that respondents were predominantly young adults, with a mean age of 31.0 years ($SD \pm 8.5$), and nearly half (47.2%) within the 25–34-year age group. Females constituted the majority of respondents (91.7%). Most caregivers were married (77.5%), while smaller proportions were single, co-habiting, separated, divorced, or widowed. In terms of education, a substantial proportion had at least secondary education, with 37.9% completing secondary school and 32.5% attaining tertiary education, while 12.3% had no formal education. Employment was largely informal, as over half of the respondents (56.2%) were self-employed, and 18.5% were unemployed; fewer were employed in the government (16.6%) or private sector (8.8%). Household income levels were generally low, with the majority earning below ₦100,000 per month. Religiously, respondents were mainly Christian (45.3%) or Muslim (51.7%), with a small proportion practicing traditional African religion (3.1%). Half of the caregivers resided in the Oyo zone, while others were distributed across Ibadan (27.7%) and Ibarapa (33.6%) zones. Most respondents had one or two under-five children (87.4%). Primary healthcare decision-making for under-five children was most commonly undertaken by mothers (49.1%), followed by spouses (28.4%) and shared decision-making (15.9%).

Table 1. Socio-demographic Characteristics of Caregivers of Under-Five Children in Oyo State (N = 422)

Variable	Frequency (N)	Percentage (%)
Age of respondents (years)		
18–24	108	25.6
25–34	199	47.2
35–44	77	18.2
≥45	38	9.0
Mean age (\pm SD)	31.0 \pm 8.5	
Sex of respondent		
Male	35	8.3
Female	387	91.7
Marital status		
Single	31	7.3
Married	327	77.5
Co-habiting	21	5.0
Separated	21	5.0
Divorced	18	4.3
Widowed	4	0.9
Educational level		

Variable	Frequency (N)	Percentage (%)
No formal education	52	12.3
Primary education	73	17.3
Secondary education	160	37.9
Tertiary education	137	32.5
Employment status		
Unemployed	78	18.5
Self-employed	237	56.2
Government employed	70	16.6
Private sector employed	37	8.8
Monthly household income (₦)		
<50,000	142	33.6
50,000–100,000	209	49.5
100,001–200,000	60	14.2
>200,000	11	2.6
Religion		
Christianity	191	45.3
Islam	218	51.7
Traditional religion	13	3.1
Place of residence		
Ibadan zone	117	27.7
Oyo zone	211	50.0
Ibarapa zone	94	22.3
Number of under-five children		
One	158	37.4
Two	211	50.0
Three or more	53	12.6
Primary decision-maker for child healthcare		
Mother	207	49.1
Spouse	120	28.4
Mother-in-law	24	5.7
Other family members	4	0.9
Joint decision (shared)	67	15.9

Healthcare Financing Options for Under-Five Children in Oyo State, Nigeria

Figure 1 shows the respondents' mode of payment for their child's healthcare. Most caregivers reported having a regular source of income (74.4%). Out-of-pocket payment was the most common method for financing child healthcare (44.5%), followed by family support (28.7%) and health insurance (17.8%). Only 11.1% of caregivers were enrolled in a health insurance scheme,

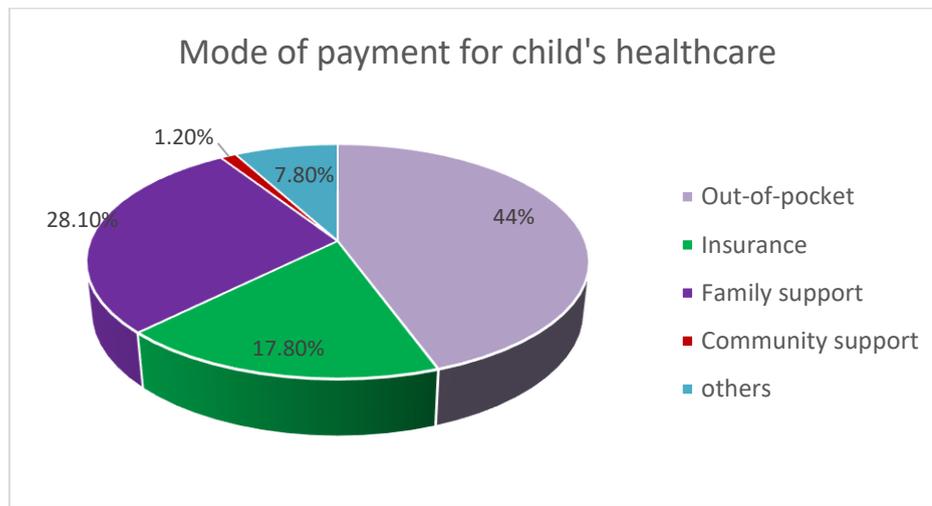


Figure 1. How respondents pay for child's healthcare

Table 2 shows 30.3% of the respondents had heard of the National Health Insurance Scheme (NHIS). Among those not enrolled, affordability was cited as a limiting factor by 8.1% of respondents. A minority of caregivers reported borrowing money (10.2%) or saving specifically for medical expenses (15.4%) to meet healthcare costs. Denial of healthcare due to lack of funds was reported by 8.5% of respondents. Community-based health financing had limited uptake (7.3%), and 28.7% of caregivers identified cost as a barrier to seeking early treatment. The primary source of financial support was mainly the caregivers themselves (56.2%), followed by the spouse (28.4%). Most households spent between ₦5,000 and ₦10,000 per month on healthcare (49.5%). Regarding perceived affordability, 47.9% of caregivers considered healthcare affordable, while 39.1% considered it not affordable.

Table 2. Healthcare Financing Options of respondents for their under-five children

Variable	Frequency (n)	Percentage (%)
Do you currently have a regular source of income?		
Yes	314	74.4
No	76	18.0
Are you enrolled in a health insurance scheme?		
Yes	47	11.1
No	344	81.5
Not sure	31	7.3
Have you heard of the National Health Insurance Scheme (NHIS)?		
Yes	128	30.3
No	241	57.1
Not sure	53	12.6
If not enrolled, is it because of affordability?		
Yes	34	8.1
No	299	70.9
Not sure	89	21.1
Do you borrow money to pay for your child's healthcare?		

Variable	Frequency (n)	Percentage (%)
Yes	43	10.2
No	328	77.7
Not sure	51	12.1
Do you save specifically for medical expenses?		
Yes	65	15.4
No	315	74.4
Not sure	43	10.2
Have you ever been denied healthcare due to lack of funds?		
Yes	36	8.5
No	307	72.2
Not sure	79	18.7
Have you used community-based health financing before?		
Yes	31	7.3
No	343	81.3
Not sure	48	11.4
Is the cost of healthcare a barrier to seeking early treatment?		
Yes	121	28.7
No	249	59.0
Not sure	52	12.3
Primary source of financial support for healthcare		
Self	237	56.2
Spouse	120	28.4
Extended family	24	5.7
Community/others	41	9.7
Frequency of healthcare spending per month		
Less than ₦5,000	142	33.6
₦5,000–₦10,000	209	49.5
₦10,001–₦20,000	60	14.2
Above ₦20,000	11	2.6
Perceived affordability of healthcare		
Very affordable	55	13.0
Affordable	202	47.9
Not affordable	165	39.1

Health-Seeking Behavior and Primary Healthcare Utilization Patterns among Caregivers of Under-Five Children

Table 3 presents caregivers' health-seeking behavior and primary healthcare utilization patterns for under-five children. In the three months preceding the survey, 41.5% of caregivers reported that their child had been ill, while 52.1% reported no illness. When illness occurred, the first point of care was most commonly sourced from classified as "others" (48.3%), followed by primary healthcare facilities (22.7%), chemists or patent medicine vendors (10.7%), and home remedies

(8.5%).

More than half of caregivers (53.1%) sought care more than five days after noticing symptoms, whereas 20.6% sought care on the same day. Health facility utilisation when a child was ill was reported as always or often by 60.2% of caregivers, while 5.2% reported never visiting a health facility. Preference for traditional medicine was reported as never or rarely by 59.0% of respondents, although 30.6% reported sometimes preferring traditional medicine.

Home treatment without professional consultation was reported as always or often by 17.7% of caregivers. Cost considerations influenced treatment choices, with 58.4% reporting that cost was always, often, or sometimes considered first. Completion of prescribed treatment regimens was reported as always or often by 81.5% of caregivers. Treatment decisions were most frequently made by caregivers themselves (46.4%), followed by spouses (28.7%). Seeking care from a qualified health worker was reported as always or often by 74.4% of respondents.

Table 3. Health-Seeking Behavior and Primary Healthcare Utilization Patterns among Caregivers of Under-Five Children

Variable	Category	n (%)
Under-five child illness in the past 3 months	Yes	175 (41.5)
	No	220 (52.1)
	Not sure	27 (6.4)
First place care was sought for child's illness	Home remedy	36 (8.5)
	Chemist / Patent medicine vendor	45 (10.7)
	Primary Health Care facility	96 (22.7)
	Private hospital	22 (5.2)
	Traditional healer	19 (4.5)
	Others	201 (48.3)
Time taken to seek care after symptom onset	Same day	87 (20.6)
	1–2 days	79 (18.7)
	3–5 days	32 (7.6)
	More than 5 days	224 (53.1)
Frequency of visiting a health facility when child is ill	Always	167 (39.6)
	Often	87 (20.6)
	Sometimes	85 (20.1)
	Rarely	61 (14.5)
	Never	22 (5.2)
Preference for traditional medicine over modern healthcare	Always	19 (4.5)
	Often	25 (5.9)
	Sometimes	129 (30.6)
	Rarely	93 (22.0)
	Never	156 (37.0)

Variable	Category	n (%)
Treatment of child at home without professional consultation	Always	25 (5.9)
	Often	50 (11.8)
	Sometimes	124 (29.4)
	Rarely	64 (15.2)
	Never	159 (37.7)
Cost considered first when choosing treatment	Always	72 (17.1)
	Often	69 (16.4)
	Sometimes	105 (24.9)
	Rarely	45 (10.7)
	Never	131 (31.0)
Completion of prescribed treatment regimen	Always	296 (70.1)
	Often	48 (11.4)
	Sometimes	45 (10.7)
	Rarely	21 (5.0)
	Never	12 (2.8)
Decision-maker on child's treatment location	Self	196 (46.4)
	Spouse	121 (28.7)
	Family	69 (16.4)
	Health worker	29 (6.9)
	Others	7 (1.7)
Seeking care from a qualified health worker	Always	246 (58.3)
	Often	68 (16.1)
	Sometimes	89 (21.1)
	Rarely	13 (3.1)
	Never	6 (1.4)

Relationship between Socio-demographic Characteristics of Caregivers and Healthcare Financing Options for Under-five Children

Healthcare financing options for under-five children varied significantly by caregivers' age, level of education, and monthly income (χ^2 tests; $p < 0.001$ for each). Across age groups, out-of-pocket payment was the most commonly reported financing option, particularly among caregivers aged 35–44 years. Use of family support was more frequently reported among younger caregivers aged 18–24 years. Gender was not significantly associated with healthcare financing options ($p = 0.085$). Educational attainment showed marked differences in financing patterns, with out-of-pocket payment predominating among caregivers with secondary and tertiary education, while insurance use was relatively higher among those with primary or no formal education. Monthly income was also significantly associated with healthcare financing options, with higher proportions of community scheme utilization reported among caregivers earning above ₦200,000, and greater reliance on out-of-pocket payment among those in lower income categories. Healthcare financing options for under-five children varied significantly by caregivers' age, level of education, and

monthly income (χ^2 tests; $p < 0.001$ for each). Across age groups, out-of-pocket payment was the most commonly reported financing option, particularly among caregivers aged 35–44 years. Use of family support was more frequently reported among younger caregivers aged 18–24 years. Gender was not significantly associated with healthcare financing options ($p = 0.085$). Educational attainment showed marked differences in financing patterns, with out-of-pocket payment predominating among caregivers with secondary and tertiary education, while insurance use was relatively higher among those with primary or no formal education. Monthly income was also significantly associated with healthcare financing options, with higher proportions of community scheme utilization reported among caregivers earning above ₦200,000, and greater reliance on out-of-pocket payment among those in lower income categories.

Table 4. Relationship between Socio-demographic Characteristics of Caregivers and Healthcare Financing Options for Under-five Children

Socio-demographic characteristics	Out-of-pocket n(%)	Insurance n(%)	Family support n(%)	Community scheme n(%)	Others n(%)	df	p-value
Age of respondents (years)						12	<0.001
18–24	36 (33.3)	15 (13.9)	50 (46.3)	1 (0.9)	6 (5.6)		
25–34	86 (43.2)	34 (17.1)	53 (26.6)	3 (1.5)	23 (11.6)		
35–44	48 (62.3)	20 (26.0)	4 (5.2)	1 (1.3)	4 (5.2)		
≥45	18 (47.4)	6 (15.8)	14 (36.8)	0 (0.0)	0 (0.0)		
Gender						4	0.085
Male	22 (62.9)	7 (20.0)	6 (17.1)	0 (0.0)	0 (0.0)		
Female	166 (42.5)	68 (17.6)	115 (29.7)	5 (1.3)	33 (8.5)		
Level of education						12	<0.001
No formal education	14 (26.9)	15 (28.8)	18 (34.6)	2 (3.8)	3 (5.8)		
Primary education	15 (20.5)	28 (38.4)	18 (24.7)	0 (0.0)	12 (16.4)		
Secondary education	74 (46.2)	20 (12.5)	57 (35.6)	1 (0.6)	8 (5.0)		
Tertiary education	85 (62.0)	12 (8.8)	28 (20.4)	2 (1.5)	10 (7.3)		
Monthly income (₦)						12	<0.001
<50,000	29 (20.4)	34 (23.9)	44 (31.0)	19 (13.4)	16 (11.3)		
50,000–100,000	79 (37.8)	59 (28.2)	47 (22.5)	17 (8.1)	7 (3.3)		

Socio-demographic characteristics	Out-of-pocket n(%)	Insurance n(%)	Family support n(%)	Community scheme n(%)	Others n(%)	df	p-value
100,000–200,000	29 (48.3)	11 (18.3)	11 (18.3)	7 (11.7)	2 (3.3)		
>200,000	17 (9.1)	2 (18.2)	2 (18.2)	6 (54.5)	0 (0.0)		

Discussion

Socio-Demographic Characteristics of Caregivers

The study population was predominantly young adults, with a mean age of 31.0 years ($SD \pm 8.5$), and nearly half of caregivers aged 25–34 years, reflecting Nigeria’s demographic trends and the central role of this age group in child health decision-making (Adedokun et al., 2020; Ajibade et al., 2013). Females accounted for 91.7% of respondents, confirming global patterns where mothers are the principal caregivers for under-five children (Aigbokhaode et al., 2023; Panter-Brick et al., 2014). Most caregivers were married (77.5%), highlighting the potential influence of spousal involvement in child healthcare decisions, consistent with prior studies showing that marital status shapes access to resources and care-seeking behaviors (Dang et al., 2015; Adegbola et al., 2013). Educational attainment was relatively high, with 37.9% completing secondary education and 32.5% tertiary education, while only 12.3% had no formal education. Higher education levels were associated with increased awareness of healthcare services and adherence to recommended child health practices (Afolabi et al., 2023; Aboaba et al., 2023). Nonetheless, delayed care-seeking despite formal education suggests that knowledge alone is insufficient to overcome structural or financial barriers, which directly affects the timely and effective utilization of primary healthcare services (Adeoti & Cavallaro, 2022). Informal employment dominated, with 56.2% self-employed and 18.5% unemployed, reflecting the high prevalence of informal work in Nigeria and its impact on financial stability (Alawode & Adewole, 2021). Household incomes were generally low, with the majority earning below ₦100,000 per month, corroborating findings that financial constraints limit timely access to PHC facilities and reduce the likelihood of consistent engagement with essential child health services (Aregbeshola & Khan, 2018; World Bank, 2022).

Healthcare Financing Option

Out-of-pocket payments were the most common financing method for child healthcare (44.5%), followed by family support (28.7%) and health insurance (17.8%). Only 11.1% of caregivers were enrolled in a health insurance scheme, despite 30.3% being aware of the NHIS, reflecting persistent barriers including affordability and limited scheme penetration (Ilesanmi et al., 2014; Akinyemi et al., 2021; Okedo-Alex et al., 2019). Community-based health financing was limited (7.3%), consistent with evidence from low- and middle-income countries showing under-utilisation of schemes designed to reduce financial risk and promote sustained use of PHC services (Eze et al., 2023; Luyten & Tubeuf, 2025). Socio-demographic characteristics significantly influenced financing choices (Table 4). Older caregivers were more likely to rely on out-of-pocket payments, whereas younger caregivers often utilized family support. Educational attainment also shaped financing behavior, with higher-educated caregivers preferring out-of-pocket payments and lower-educated caregivers slightly more likely to use insurance. Income levels were a key determinant; caregivers with higher incomes used community schemes more frequently, while lower-income households relied heavily on direct payments. These inequities in financial access have direct implications for PHC utilisation, as households constrained by cost are less likely to seek timely care or complete recommended treatment regimens (Al-Hanawi et al., 2020; Ipinimo et al., 2021).

Health-Seeking Behavior and Primary Healthcare Utilization

Caregivers’ health-seeking behavior (Table 3) indicated partial engagement with formal healthcare

systems. In the three months preceding the survey, 41.5% of caregivers reported their child had been ill, with the majority seeking care from non-formal sources classified as “others” (48.3%) rather than PHC facilities (22.7%). Chemists or patent medicine vendors and home remedies were less frequently used (10.7% and 8.5%, respectively), reflecting pluralistic care-seeking patterns commonly observed in Nigeria and sub-Saharan Africa (Burra, 2019; Nsungwa-Sabiiti et al., 2004). Timeliness of care was suboptimal, as 53.1% sought treatment more than five days after symptom onset, while only 20.6% sought care on the same day. Delays in care-seeking have been widely reported as determinants of adverse child health outcomes, and they reduce the effectiveness of PHC interventions aimed at early detection and treatment of childhood illnesses (Bakare et al., 2023; Nwaneri & Sadoh, 2020). While preference for traditional medicine was generally low, 30.6% of caregivers reported occasional use, indicating persistence of complementary cultural health practices, which can divert engagement from PHC facilities (Adeyemo et al., 2021; Adegbola et al., 2013). Cost considerations strongly influenced treatment choices; 58.4% of caregivers reported that cost was a primary factor in selecting treatment options. Home treatment without professional consultation was reported by 17.7%, while adherence to prescribed regimens was relatively high (81.5%). Decisions were primarily caregiver-driven (46.4%), with spouses participating in 28.7% of cases, highlighting the role of intra-household decision-making in determining the timing, location, and consistency of PHC utilization (Aubel, 2012; Dang et al., 2015).

Implications for Primary Healthcare Utilization and Policy

The findings underscore that, although caregivers demonstrate awareness of formal healthcare and willingness to engage, economic and structural barriers constrain timely and equitable PHC utilization. Delayed care-seeking, reliance on out-of-pocket payments, and pluralistic health-seeking behaviors reduce early detection and treatment of common childhood illnesses, undermining the effectiveness of PHC programs. Financial protection mechanisms, including expanded health insurance coverage and community-based schemes, are crucial to enhancing access and ensuring that caregivers can utilize PHC services without undue economic hardship (Aregbeshola & Khan, 2018; WHO, 2022; Ogah et al., 2024). Targeted interventions must account for socio-demographic realities, combining health education, subsidized insurance or tiered payment options, and community outreach programs to promote timely PHC engagement. Engaging fathers and other household decision-makers can further enhance adherence to recommended child health practices, reinforcing the role of family dynamics in PHC utilization (Panter-Brick et al., 2014; Lungu et al., 2020). Strengthening PHC governance, improving service quality, and ensuring financial protection for low-income households are critical strategies to achieve universal health coverage and reduce under-five morbidity and mortality in Nigeria (WHO, 2019; Al-Mansur et al., 2023).

Conclusion

This study highlights that caregivers of under-five children in Oyo State are predominantly young, female, and married, with relatively high educational attainment but largely engaged in informal employment and low-income households. Despite awareness of formal healthcare services, economic constraints, reliance on out-of-pocket payments, and pluralistic health-seeking behaviours, limit timely and consistent utilization of primary healthcare facilities. Delays in seeking care, preference for non-formal sources, and under-enrolment in health insurance schemes collectively reduce the effectiveness of PHC interventions aimed at preventing and managing childhood illnesses. To improve PHC utilization, policies and programs must address both financial and structural barriers. Expanding affordable health insurance coverage, including community-based schemes, is essential to reduce economic hardship and promoting equitable access. Health education campaigns should target caregivers and household decision-makers, emphasising the importance of timely engagement with PHC services and adherence to prescribed treatment regimens. Outreach initiatives and culturally sensitive interventions can help integrate traditional

practices with formal healthcare, ensuring that care-seeking decisions support optimal child health outcomes. Strengthening governance, service quality, and financial protection within the PHC system will be critical to achieving universal health coverage, reducing under-five morbidity and mortality, and promoting sustainable improvements in child health in Nigeria.

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