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Original Research

PATTERNS AND DETERMINANTS OF PARENTAL SELF-MEDICATION AND CHILDREN'S HEALTH STATUS: EVIDENCE FROM DELTA STATE, NIGERIA.

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Abstract
Despite the widespread practice of parental self-medication in Nigeria, there is limited empirical evidence on how the pattern and determinants of this practice influence children's health status, particularly in Delta State. This study examined the patterns and determinants of parental self-medication and their association with children's health status in Delta State, Nigeria. Guided by the Health Belief Model and Rational Choice Theory, the study adopted a descriptive mixed-method research design involving parents and caregivers of children. Data were collected through structured questionnaires and key informant interviews and analyzed using descriptive statistics, correlation analysis, and thematic analysis. The findings revealed that antimalarial drugs, antibiotics, analgesics, and herbal medicines were the most commonly administered medications without professional consultation. Financial constraints, previous treatment experience, easy access to medicines, long hospital waiting times, and perceived mildness of childhood illnesses were identified as the major determinants of self-medication. The study further found a statistically significant association between parental self-medication practices and children's health status, with inappropriate drug use contributing to delayed diagnosis, adverse drug reactions, and increased risks of antimicrobial resistance. The study concludes that parental self-medication remains a significant child welfare and public health concern requiring coordinated social work interventions, strengthened health education, improved access to affordable healthcare, and stricter regulation of non-prescription medicine sales.

Keywords: Parental self-medication, children's health status, caregivers, Health Belief Model, Rational Choice Theory, Delta State, Nigeria.

Background to the Study
Self-medication has become a major public health concern worldwide due to its widespread practice among individuals and families. The World Health Organization (WHO) defines self-medication as the selection and use of medicines by individuals to treat self-recognized illnesses or symptoms without professional medical advice (World Health Organization [WHO], 2000). While responsible self-medication may reduce healthcare costs and improve access to treatment for minor ailments, inappropriate self-medication exposes individuals, particularly children, to medication errors, delayed diagnosis, adverse drug reactions, antimicrobial resistance, and increased morbidity (WHO, 2023; Hughes et al., 2001). These concerns have attracted growing attention from health professionals, policymakers, and social workers because children depend entirely on parental decisions regarding their health and wellbeing.

Parents and caregivers are the primary decision-makers regarding children's healthcare, especially during childhood when children cannot independently seek medical attention. In many low- and middle-income countries, parents frequently administer medicines to their children without consulting qualified healthcare professionals. Such practices are often influenced by previous treatment experiences, easy access to over-the-counter medicines, financial constraints, long waiting times at health facilities, cultural beliefs, and inadequate knowledge of appropriate medication use (Bennadi, 2014; Awad et al., 2005). Although parents may perceive self-medication as a practical and cost-effective solution, inappropriate use of medicines can worsen childhood illnesses, mask serious diseases, and contribute to drug resistance and poor health outcomes.

In Nigeria, parental self-medication has become increasingly common due to persistent challenges within the healthcare system, including poverty, inadequate healthcare infrastructure, high out-of-pocket healthcare expenditure, shortage of healthcare personnel, and unrestricted access to prescription medicines. Studies have shown that many Nigerian parents administer antibiotics, antimalarials, analgesics, cough syrups, and herbal preparations to children without professional prescriptions (Afolabi, 2008; Osemene & Lamikanra, 2012; Echendu et al., 2024). Such practices not only compromise children's health but also increase the burden on healthcare services through complications that could have been prevented by timely medical intervention.

From a social work perspective, parental self-medication extends beyond a medical issue to reflect broader social and structural inequalities affecting family wellbeing. Social workers recognize that health-related behaviours are shaped by socioeconomic conditions, educational attainment, family resources, community norms, and access to healthcare services. Families experiencing financial hardship or limited healthcare accessibility may resort to self-medication as a coping strategy despite its associated risks. Consequently, understanding the social determinants that influence parental medication decisions is essential for designing interventions that promote child protection, health education, family support, and equitable access to healthcare services (WHO, 2023; UNICEF, 2023).

Despite increasing evidence on self-medication globally, relatively few empirical studies have comprehensively examined the patterns, determinants, and health implications of parental self-medication practices within Delta State, particularly in Warri. Given the socio-economic diversity of the area and varying access to healthcare services, there is a need to understand why parents engage in self-medication, the medications commonly administered, and how these practices influence children's health outcomes. This study therefore investigates the patterns and determinants of parental self-medication and examines their association with children's health status in Delta State, Nigeria, with the aim of generating evidence to inform social work practice, public health interventions, and policies that promote safer healthcare decisions for children.

Parental Self-Medication in Nigeria: Patterns, Determinants and Implications for Children's Health

Parental self-medication has emerged as a significant family health behaviour in Nigeria, reflecting the interaction between caregiver beliefs, socioeconomic conditions, healthcare accessibility and community influences. The practice involves the use of medicines for children without prior consultation with qualified healthcare professionals and may include the use of previously prescribed drugs, over-the-counter medications, antibiotics, herbal preparations and other remedies. Although self-medication may provide immediate responses to minor childhood illnesses, inappropriate practices among caregivers have raised concerns regarding incorrect

dosage, delayed medical attention, adverse reactions and poor health outcomes among children (World Health Organization [WHO], 2019; Bennadi, 2014).

Studies in Nigeria indicate that parental self-medication is influenced by different social and environmental factors. Okunola (2020) identified that caregivers of under-five children commonly combine orthodox medicines, herbal remedies and faith-based treatments when managing childhood illnesses. The study further revealed that caregiver characteristics such as age, educational level, cultural orientation and relationship with the child influence decisions regarding medication use. This demonstrates that parental self-medication is not merely an individual medical decision but a social behaviour shaped by family experiences, cultural expectations and available community resources.

The patterns of medication use among Nigerian parents show that commonly administered drugs include antimalarials, antibiotics, analgesics, antipyretics and cough preparations. Research has shown that caregivers often rely on previous experiences with similar childhood illnesses, advice from relatives, patent medicine vendors and perceived severity of symptoms when deciding whether to seek professional healthcare services (Afolabi, 2008; Osemene & Lamikanra, 2012). These practices highlight the importance of understanding parental health-seeking behaviour within the broader social context of Nigerian families.

Several determinants contribute to parental self-medication practices. Economic challenges, healthcare costs, long waiting periods in health facilities, accessibility of medicines and confidence in personal knowledge of childhood illnesses have been identified as major factors influencing caregivers' decisions (WHO, 2023; Akinyemi et al., 2021). In many Nigerian communities, families experiencing socioeconomic difficulties may adopt self-medication as a coping strategy because it appears more affordable and convenient compared with formal healthcare services. Therefore, addressing parental self-medication requires attention to social inequalities, family resources and healthcare accessibility rather than focusing only on individual caregiver behaviour.

From a social work perspective, parental self-medication is closely connected with child welfare, family functioning and the social determinants of health. Social workers recognise that caregivers' decisions regarding children's health are influenced by their social environment, economic circumstances, knowledge level and available support systems. Consequently, interventions aimed at reducing harmful self-medication practices should involve caregiver education, community awareness programmes, improved health literacy and strengthening of social support networks. Such approaches align with the social work commitment to promoting child protection, family empowerment and equitable access to healthcare.

Despite existing studies on self-medication in Nigeria, limited attention has been given to how parental self-medication patterns and determinants influence children's health status within Delta State, particularly from a social work perspective. Most existing studies have focused on general populations or other geographical areas, creating a gap in understanding the experiences of families within the Niger Delta region. This study therefore examines parental self-medication practices in Delta State by exploring their patterns, determinants and implications for children's health outcomes.

Theoretical Framework

Health Belief Theory and the Determinants of Parental Self-Medication

The Health Belief Model (HBM) is one of the most influential behavioural theories used to explain health-related decision-making. The model was originally developed by Rosenstock (1966) and

later expanded by Becker and Rosenstock (1984) to explain why individuals engage in preventive or health-seeking behaviours. The theory proposes that individuals' health decisions are determined by their perceptions of health threats and the expected benefits or barriers associated with a particular health action. The major constructs of the model include perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action, and self-efficacy (Rosenstock, 1974; Becker & Rosenstock, 1984).

Within the context of parental self-medication, the Health Belief Model provides a useful explanation for why parents choose to treat childhood illnesses without professional medical consultation. Parents often assess symptoms such as fever, cough, diarrhoea, skin infections or malaria based on previous experiences and personal judgement. When they perceive these illnesses as common or non-life-threatening, they may conclude that home treatment is sufficient. Conversely, when symptoms are viewed as severe or unusual, parents are more likely to seek professional healthcare services. Thus, parental perceptions significantly influence treatment decisions and health-seeking behaviour (Bennadi, 2014; Hughes et al., 2001).

The Health Belief Model further explains that parents evaluate the perceived benefits of self-medication against its perceived barriers. The perceived benefits may include immediate relief of symptoms, reduced healthcare expenses, convenience, previous successful experiences with similar medications, and shorter waiting times compared to visiting healthcare facilities. On the other hand, perceived barriers to formal healthcare may include financial constraints, transportation challenges, long hospital waiting periods, shortage of healthcare personnel, geographical inaccessibility of health facilities, and distrust in healthcare providers. These barriers often encourage caregivers to rely on medicines already available at home or drugs obtained from patent medicine vendors without medical prescriptions (World Health Organization [WHO], 2023; Federal Ministry of Health [FMoH], 2022).

Socio-economic characteristics further shape these perceptions. Parents with lower income, limited education, unstable employment or poor health literacy are generally more vulnerable to inappropriate self-medication practices because they may have fewer healthcare options and limited access to reliable medical information. Conversely, parents with higher educational attainment and better access to healthcare services are more likely to recognise the dangers associated with irrational drug use and seek professional medical advice before administering medications to their children (Echendu et al., 2024; Akinyemi et al., 2021).

From a social work perspective, the Health Belief Model extends beyond individual decision-making to illuminate how structural inequalities influence parental behaviour. Social workers recognise that health decisions are embedded within broader social environments characterised by poverty, unemployment, inadequate healthcare infrastructure, social exclusion, and unequal access to health information. These structural factors shape parents' perceptions of risk and determine the choices available to them. Consequently, parental self-medication should not merely be interpreted as irresponsible behaviour but also as an adaptive coping strategy adopted by families experiencing social and economic disadvantage. This ecological understanding aligns with the profession's commitment to promoting social justice, reducing health inequalities, and strengthening access to quality healthcare services.

The model also recognises the importance of cues to action, which refer to internal or external factors that trigger health-related behaviour. Advice from family members, neighbours, pharmacists, community health workers, previous prescriptions, media campaigns, or health education programmes may either encourage or discourage parental self-medication. Similarly, increasing public awareness regarding antimicrobial resistance and medication safety may

positively influence parents to seek professional healthcare before administering medicines to children (WHO, 2023).

Overall, the Health Belief Model provides a comprehensive framework for understanding how parents' perceptions of illness, healthcare accessibility, and socio-economic realities collectively determine self-medication practices and ultimately influence children's health outcomes.

Rational Choice Theory and Parental Self-Medication

Rational Choice Theory originated from classical economic thought and was systematically developed within sociology by Coleman (1990). The theory argues that individuals make decisions after carefully evaluating available alternatives and selecting the option perceived to maximise benefits while minimising costs. Although decision-making is considered rational, the choices individuals make are constrained by the resources, opportunities, and information available to them (Coleman, 1990).

Applied to parental self-medication, Rational Choice Theory suggests that parents intentionally compare the costs and benefits of seeking professional healthcare with administering medicines independently. This comparison is often influenced by consultation fees, transportation costs, time required to visit health facilities, distance to hospitals, waiting periods, previous treatment experiences, and expected treatment outcomes. Where formal healthcare is perceived as expensive or inaccessible, self-medication becomes the preferred and economically rational alternative (Hughes et al., 2001; Bennadi, 2014).

Economic hardship remains one of the strongest determinants of parental self-medication across many developing countries. Families experiencing financial difficulties frequently prioritise immediate symptom relief over professional diagnosis because available resources are insufficient to meet healthcare expenses. Consequently, caregivers often purchase over-the-counter medicines, antibiotics, antimalarials, analgesics, herbal preparations, or previously prescribed medications based on prior experience rather than medical advice (Awad et al., 2005; Osemene & Lamikanra, 2012).

However, Rational Choice Theory acknowledges that rational decisions do not necessarily produce desirable health outcomes. Parents may believe they are acting in the best interests of their children by saving money and avoiding delays, yet inappropriate medication use may contribute to delayed diagnosis, adverse drug reactions, antimicrobial resistance, treatment failure, prolonged illness, or preventable complications (Torres et al., 2022; WHO, 2023).

Within social work, Rational Choice Theory highlights how families make health decisions within the constraints of poverty, limited healthcare access, and unequal social opportunities. Rather than viewing parents as negligent, the theory encourages practitioners to appreciate that many caregivers are responding rationally to structural barriers that restrict healthcare choices. Social workers therefore seek to reduce these barriers by strengthening social protection programmes, improving access to affordable healthcare, enhancing community health education, and advocating for policies that promote equitable healthcare delivery.

Relevance of the Theories to the Study

The integration of the Health Belief Model and Rational Choice Theory provides a comprehensive explanation for parental self-medication practices and their implications for children's health status in Delta State, Nigeria. While the Health Belief Model explains how parents' perceptions, beliefs, and health knowledge influence medication decisions, Rational Choice Theory explains how

economic realities, social circumstances, and resource constraints shape those decisions. Together, the theories demonstrate that parental self-medication results from an interaction between cognitive perceptions and structural conditions rather than individual behaviour alone.

The Health Belief Model is particularly relevant in explaining determinants such as perceived severity of childhood illnesses, previous treatment experiences, health literacy, confidence in self-treatment, and perceived barriers to healthcare access. In contrast, Rational Choice Theory provides insight into determinants including household income, cost of healthcare services, accessibility of health facilities, availability of medicines, opportunity costs, and time considerations. Both theories therefore complement one another by capturing the psychological and socio-economic dimensions of parental decision-making.

From a social work perspective, these theories reinforce the importance of adopting a person-in-environment approach to child health. They recognise that parents' healthcare decisions are influenced not only by personal beliefs but also by broader social determinants such as poverty, education, healthcare accessibility, and community support systems. This theoretical integration supports social work interventions aimed at improving health literacy, strengthening family resilience, expanding access to affordable healthcare services, and advocating for policies that reduce structural inequalities affecting child health.

Research Method

This study adopted a mixed-methods research design, integrating quantitative and qualitative approaches to examine the patterns and determinants of parental self-medication and their association with children's health status in Delta State, Nigeria. The mixed-methods approach was considered appropriate because it enabled the collection of both numerical and contextual data, thereby providing a more comprehensive understanding of parental healthcare decision-making (Creswell & Creswell, 2018).

The study was conducted in Warri Metropolis, comprising Warri South, Warri North, and Warri South West Local Government Areas of Delta State, Nigeria. These areas were purposively selected because of their population diversity and the widespread occurrence of self-medication practices reported in Nigerian communities (Federal Ministry of Health [FMoH], 2022; National Agency for Food and Drug Administration and Control [NAFDAC], 2023). The target population consisted of parents and guardians responsible for the healthcare of children within the study area.

A purposive sampling technique was employed to select respondents with direct experience in administering medications to children. Using the Taro Yamane (1967) formula, a sample size of 400 respondents was determined, of which 376 valid questionnaires were retrieved and analysed, representing a 94.0% response rate.

Primary data were collected through a structured questionnaire and a semi-structured interview guide. The questionnaire generated quantitative data on respondents' socio-demographic characteristics, self-medication practices, commonly used medications, determinants of self-medication, and perceived children's health outcomes, while the interview guide provided qualitative insights into parents' experiences and decision-making processes.

Quantitative data were analysed using the Statistical Package for the Social Sciences (SPSS) version 27. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to summarise the data, while inferential statistics were employed to test the study hypotheses at a 0.05 level of significance. Qualitative data were analysed using thematic analysis, with findings integrated to enrich the interpretation of the quantitative results.

Ethical standards consistent with social work research were observed throughout the study. Participation was voluntary, informed consent was obtained from all respondents, confidentiality and anonymity were assured, and respondents were informed of their right to withdraw from the study at any stage without any adverse consequences.

Response Rate

No of Questionnaires Distributed	No of Questionnaires Retrieved	No of useable Questionnaires	% of Success
400	376	376	94

Source: Filed Survey, 2026.

Allocation of Sample Size in Warri LGAs

No	Local Government Area (LGA)	Projected population	Sample Size
1	Warri South	427,600	221
2	Warri North	186,600	97
3	Warri South West	159700	82
Total		773,900	400

Source: Field Survey, 2026

Demographic Characteristics of Respondents

VARIABLE	CATEGORY	FREQUENCY	PERCENT	CUMULATIVE PERCENT
GENDER	Male	143	38.0	38.0
	Female	233	62.0	100.0
	Total	**376**	**100**	
AGE BRACKET	Less than 18	17	4.5	4.5
	18–24 Years	81	21.5	26.0
	25–34 Years	134	35.6	61.6
	35–44 Years	92	24.5	86.1
	45 Years and Above	52	13.8	100.0
	Total	**376**	**100**	
EDUCATIONAL QUALIFICATION	No Formal Education	17	4.5	4.5
	Primary Education	43	11.4	15.9
	Secondary Education (JSS)	68	18.1	34.0
	Secondary Education (SSS)	98	26.1	60.1
	Tertiary Education	85	22.6	82.7

	Higher Diploma/Degree/Professional Qualification	65	17.3	100.0
	Total	**376**	**100**	
OCCUPATION	Civil Servant	64	17.0	17.0
	Trader/Business	105	27.9	44.9
	Fishing	34	9.0	53.9
	Transportation	39	10.4	64.3
	Farming	45	12.0	76.3
	Unemployed	32	8.5	84.8
	Pensioner	19	5.1	89.9
	Housewife	26	6.9	96.8
	Others (Specify)	12	3.2	100.0
	Total	**376**	**100**	
INCOME RANGE	₦50,000 – ₦99,999	90	23.9	23.9
	₦100,000 – ₦149,999	79	21.0	44.9
	₦150,000 – ₦199,999	68	18.1	63.0
	₦200,000 – ₦249,999	60	16.0	79.0
	₦250,000 – ₦299,999	43	11.4	90.4
	₦300,000 and Above	36	9.6	100.0
	Total	**376**	**100**	
LGA OF RESPONDENTS	Warri South	208	55.3	55.3
	Warri North	91	24.2	79.5
	Warri South West	77	20.5	100.0
	Total	**376**	**100**	

Source: Field Sirvey, 2026

Analysis Based on Research Objectives

Objective 1: To Determine The Level of Parental Self-Medication Practices

Variable	Yes/Positive Response (%)
Given medication without consulting healthcare professional	80.1
Often/Very Often practice self-medication	70.2
Keep medicines at home without prescription	76.3
Reuse old prescriptions	66.2
Stop medication when symptoms improve	71.3
Self-medicate before hospital treatment	78.5
Use drugs recommended by friends/relatives	64.1
Child later taken to hospital after self-medication	59.3

Source: Field Sirvey, 2026

Interpretation

The findings indicate that parental self-medication is highly prevalent among respondents in the study area.

Objective Two: Types of Medication Commonly Used for Self Medication

Variable	Dominant Response	Percentage (%)
Most commonly used medication	Malaria drugs	31.4
Major source of medication	Pharmacy	39.6
Read drug instructions before use	Yes	67.6
Common illness treated	Malaria	34.3
Most used medication form	Syrup	37.5
Check expiry dates before use	Yes	76.1
Combine two or more drugs	Yes	61.4
Follow correct dosage	Yes	65.7

Source: Field Sirvey, 2026

Interpretation

The findings suggest that although many parents observe basic medication safety practices, inappropriate drug use remains common.

Objective Thress: Indentifying Determinants and Factors Influencing Parental Self-Medication

Variable	Positive Response (%)
Self-medication saves time and money	77.7
Distance to healthcare facilities influences practice	63.3
Drugs easily accessible without prescription	82.2
Lack of health insurance influences practice	72.1
Confidence in treating minor illnesses	65.4
Previous successful treatment encourages self-medication	76.3
Family members influence decision	56.9
Healthcare workers' attitude discourages hospital visits	60.6

Source: Field Sirvey, 2026

Interpretation

The findings indicate that financial constraints, healthcare accessibility challenges, and easy access to medicines are the major factors influencing parental self-medication practices among respondents.

Objective Four: Analyzing Respondents Opinion on the Effects of Parental Self Medication

S/N	Effect of Self-Medication	Mean Score	Decision
1	Self-medication can cause adverse side effects in children	4.00	Agree
2	Self-medication can delay proper treatment of children's illnesses	3.87	Agree
3	Self-medication contributes to drug resistance among children	3.84	Agree
4	Self-medication can negatively affect the health status of children	3.92	Agree
5	Parents often take their children to the hospital only after self-medication fails	3.89	Agree

Source: Field Sirvey, 2026

Interpretation

The findings indicate that respondents generally perceive parental self-medication as having adverse effects on children's health, particularly through delayed treatment, drug resistance, adverse drug reactions, and poor overall health outcomes.

Qualitative Findings

Theme 1: Understanding Parental Self Medication

Many participants explained that parents often rely on personal experience, previous prescriptions, advice from relatives, or over-the-counter drugs in treating children at home.

One participant stated:

"Most parents treat their children at home first before going to the hospital because they feel the sickness is minor."

Theme 2: Commonly Used Medications for Parental Self-Medication

Participants identified malaria drugs, antibiotics, pain relievers such as paracetamol, cough syrups, and herbal medicines as the medications most commonly used by parents for self-medicating children in the study area. Respondents explained that these medications are often used for treating common childhood illnesses such as malaria, fever, cough, diarrhea, and headache.

One participant stated:

"Most parents use malaria drugs and paracetamol because children usually have fever and malaria."

Themes 3: Factors Influencing Parental Self-Medication Practices

Many respondents explained that high hospital bills, poverty, long waiting time in hospitals, and easy access to drugs encourage parents to self-medicate their children instead of seeking professional healthcare services.

One participant stated:

"Many parents in Warri Southwest cannot afford hospital bills, so they buy drugs from medicine stores to treat their children."

Theme 4: Effects of Parental Self-Medication on Children's Health

Many Participants explained that self-medication can worsen children's health conditions when the wrong drugs or incorrect dosages are administered or delay in proper treatment.

Another respondent explained:

"Self-medication sometimes delays proper treatment because parents only take the child to the hospital when the sickness becomes serious."

Theme 5: Measures for Reducing Parental Self-Medication Practices

Participants suggested several measures that could help reduce parental self-medication practices among residents of Warri Southwest, Delta State. Many respondents emphasized that health care services should be made cheaper.

One participant remarked:

"If healthcare services become cheaper and faster, many parents will stop treating children at home.

Test of Hypothesis

Hypothesis One

Ho_1: There is no significant relationship between parental self-medication practices among guardians of children in Warri, Delta State.

Parson correlation Analysis

Variables	r- value	p- value	Decision
PSM vs GC	0.846	0.000	Reject H_0

Source: Field Sirvey, 2026

Analysis

The Pearson correlation result showed a strong positive relationship between parental self-medication practices (PSM) and guardians of children in Warri, Delta State ($r = .846$, $p < .001$). This indicates that parental self-medication practices are highly prevalent among guardians, including keeping drugs at home, using old prescriptions, and self-prescribing before seeking medical care. Since the p-value is less than 0.05, the null hypothesis was rejected, confirming a statistically significant relationship between parental self-medication practices and guardians of children in Warri, Delta State.

Hypothesis Two

H_{02}: There is no significant relationship between the types of medications used and parental self-medication practices among guardians of children in Warri, Delta State.

Variables	r-value	p- value	Decision
TMU vs PSP	-0.691	0.000	Reject H_0

Source: Field Sirvey, 2026

Analysis

The Pearson correlation analysis showed a strong negative and statistically significant relationship between the types of medications used and parental self-medication practices among guardians of children in Warri, Delta State ($r = -0.691$, $p < 0.001$). Since the p-value was less than the 0.05 level of significance, the null hypothesis was rejected. This indicates that the types of medications used significantly influence parental self-medication practices in the study area.

Hypothesis Three

H_{03}: There are no significant factors influencing parental self-medication practices in Warri, Delta State.

Variables	r-value	p-value	Decision
FI vs PSM	0.846	0.000	Reject H_0

Source: Field Sirvey, 2026

Analysis

The findings revealed a very strong positive and statistically significant relationship between the factors influencing parental self-medication and parental self-medication practices ($r = 0.846$, $p < 0.001$). This indicates that factors such as high hospital bills, long waiting times, advice from friends or relatives, distance to healthcare facilities, lack of health insurance, and the attitude of health workers significantly influence parental self-medication practices among guardians of children in Warri, Delta State. Since the p-value was less than the 0.05 level of significance, the null hypothesis was rejected.

Discussion of Findings

Parental Self-Medication Practices Among Guardians of Children

The findings revealed a high prevalence of parental self-medication among guardians of children in Warri, Delta State. Most respondents reported administering medicines without consulting healthcare professionals, keeping medicines at home, reusing old prescriptions, and discontinuing treatment once symptoms improved. These findings suggest that self-medication has become a routine first-line response to childhood illnesses rather than professional healthcare seeking. This pattern is consistent with previous studies conducted in Nigeria and other low- and middle-income countries, where caregivers frequently manage childhood illnesses at home because of perceived familiarity with symptoms, previous treatment experiences, and the convenience of self-care (Afolabi, 2008; Bennadi, 2014; Echendu et al., 2024; Hughes et al., 2001).

The findings also support the Health Belief Model, which posits that individuals' health behaviours are influenced by their perceptions of illness severity, perceived benefits of action, and barriers to accessing healthcare (Rosenstock, 1974; Becker & Rosenstock, 1984). Many parents appear to believe that common childhood illnesses can be successfully managed at home, while the financial and time costs associated with hospital visits encourage self-medication. From a

social work perspective, these findings highlight structural barriers to healthcare access and underscore the need for interventions that strengthen caregivers' health literacy and improve equitable access to child health services.

Types of Medications Commonly Used for Self-Medication

The study found that antimalarial drugs and antibiotics were the medications most frequently administered to children without professional prescription, while pharmacies and patent medicine vendors served as the principal sources of these medicines. Malaria and fever were the illnesses most commonly treated through self-medication. Although many respondents reported reading medication instructions and checking expiry dates, inappropriate practices such as combining multiple drugs and incorrect dosage remained common.

These findings corroborate earlier studies that reported widespread inappropriate use of antibiotics and antimalarial medicines among caregivers in sub-Saharan Africa (Awad et al., 2005; Osemene & Lamikanra, 2012; Torres et al., 2022). The unrestricted availability of prescription medicines increases the likelihood of irrational drug use and contributes to antimicrobial resistance, adverse drug reactions, and treatment failure (World Health Organization [WHO], 2023). For social workers, these findings emphasize the importance of community-based health education programmes and multidisciplinary collaboration aimed at promoting responsible medication practices among caregivers.

Determinants of Parental Self-Medication Practices

The study identified financial constraints, lack of health insurance, high hospital costs, long waiting times, easy access to medicines, previous successful treatment experiences, and healthcare workers' attitudes as the major determinants of parental self-medication. These findings demonstrate that parental decisions are shaped not only by individual beliefs but also by broader socioeconomic and health system factors.

This finding agrees with previous studies which identified healthcare costs, accessibility challenges, and inadequate health insurance coverage as major predictors of self-medication among caregivers (Afolabi, 2008; Bennadi, 2014; Simon & Kazaura, 2021; Echendu et al., 2024). The findings further support Social Learning Theory, which argues that behaviours are acquired through observation, imitation, and previous experiences (Bandura, 1977). Parents who previously experienced successful outcomes through self-medication are more likely to repeat the behaviour and recommend it to others. Likewise, Systems Theory explains that parental medication practices are influenced by interactions among family, healthcare institutions, economic conditions, and community environments (Bronfenbrenner, 1979). From a social work perspective, these findings reinforce the importance of addressing structural inequalities, improving healthcare accessibility, and strengthening family-centred interventions that reduce dependence on unsafe self-medication.

Perceived Effects of Parental Self-Medication on Children's Health Status

The findings indicate that respondents generally acknowledged the adverse consequences of parental self-medication on children's health. Participants agreed that self-medication contributes to adverse drug reactions, delays appropriate treatment, promotes antimicrobial resistance, negatively affects children's overall health, and often results in hospital visits only after home treatment has failed.

These findings are consistent with WHO (2019, 2023), Bennadi (2014), and Torres et al. (2022), who observed that irrational medicine use among children increases the risks of medication

errors, delayed diagnosis, antimicrobial resistance, and preventable morbidity. The significant relationship established through hypothesis testing further demonstrates that increased parental self-medication is associated with poorer child health outcomes. From the perspective of the Health Belief Model, caregivers often underestimate the severity of childhood illnesses and overestimate the benefits of self-treatment, thereby delaying appropriate medical intervention. For the social work profession, these findings underscore the need for preventive interventions, caregiver education, advocacy for affordable healthcare, and policies that promote rational medicine use to safeguard children's health and wellbeing.

Conclusion

The primary objective of this study was to examine the patterns and determinants of parental self-medication practices and their association with children's health status in Delta State, Nigeria. The findings demonstrate that parental self-medication remains a widespread practice among caregivers, with analgesics, antimalarials, antibiotics, and herbal medicines being the most commonly administered medications without professional medical consultation. The study further revealed that socioeconomic constraints, previous treatment experience, easy access to over-the-counter medicines, long waiting times at health facilities, perceived mildness of childhood illnesses, and limited access to healthcare services are major determinants influencing parental decisions to self-medicate their children. Guided by the Health Belief Theory and Rational Choice Theory, the findings suggest that parents' medication decisions are largely shaped by their perceptions of illness severity, perceived benefits and barriers to seeking formal healthcare, and rational evaluation of available alternatives. While self-medication may provide immediate relief and reduce healthcare costs, inappropriate medication use, particularly antibiotics, poses significant risks including delayed diagnosis, adverse drug reactions, antimicrobial resistance, and poor child health outcomes. From a social work perspective, these findings underscore the need for community-based health education, strengthened caregiver awareness, improved access to affordable healthcare services, and multidisciplinary collaboration among social workers, healthcare professionals, and policy makers to promote responsible medication practices and improve child health outcomes. Addressing the underlying social and economic determinants of self-medication will contribute significantly to safeguarding children's health and advancing public health objectives in Nigeria.

Recommendations

Based on the findings of this study, the following recommendations are proposed:

1. Community-based health education programmes should be strengthened to improve parents' knowledge of the risks associated with inappropriate self-medication, particularly the misuse of antibiotics and other prescription medicines. Social workers, community health workers, and primary healthcare professionals should collaborate in delivering culturally appropriate health education that promotes appropriate health-seeking behaviour among caregivers.
2. Government should address the socioeconomic factors that encourage parental self-medication by improving access to affordable and quality healthcare services, expanding health insurance coverage, and implementing social protection programmes for low-income households. Reducing financial barriers to healthcare is likely to decrease reliance on self-medication among parents and caregivers.

3. The National Agency for Food and Drug Administration and Control (NAFDAC) and the Pharmacists Council of Nigeria (PCN) should strengthen the enforcement of regulations governing the sale of prescription-only medicines, particularly antibiotics, to curb indiscriminate access and reduce the risks associated with irrational drug use.
4. Primary healthcare facilities should improve service delivery by reducing waiting times, ensuring the availability of essential medicines, and strengthening patient-centred care. These measures will encourage parents to seek professional medical attention instead of resorting to self-medication.
5. Social workers should integrate medication safety education into family welfare, child protection, and community development programmes. Through counselling, advocacy, and community outreach, social workers can empower caregivers to make informed decisions regarding childhood illnesses and appropriate use of medicines.
6. Future research should employ longitudinal and multi-state studies to examine how socioeconomic conditions, health literacy, healthcare accessibility, and cultural beliefs influence parental self-medication practices and children's health outcomes across different regions of Nigeria.

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