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Quality of Child Health Services and Its Utilization Among Staff and Mothers in Selected Primary Healthcare Facilities in Enugu South Local Government Area Enugu State Nigeria

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Abstract

Background: Children carry a disproportionate burden of disease globally, and strengthening child health services (CHS) in primary health care (PHC) can improve access to safe, effective, quality, and affordable care. **Objective:** This study assessed the quality and utilization of CHS in two selected PHC facilities in Enugu South LGA, focusing on infrastructure, equipment and personnel; clinical consultation, diagnosis and treatment of common childhood illnesses; service utilization; and clients' satisfaction. **Method**: A cross-sectional descriptive survey design was used, with researcher-developed questionnaires, and data were analyzed using SPSS version 25. **Result:** Findings showed that staffing was inadequate, with most providers being SCHEWs (35.2%) and JCHEWs (29.4%). Facility structures were largely adequate, but one PHC lacked a functional pharmacy and laboratory. Essential drugs and some key equipment were insufficient, although consultation processes and the diagnosis and treatment of common childhood illnesses were rated adequate. Overall service quality was reported as good across the two facilities (80% and 60%). Mothers had a mean age of 31.11 ± 6.09 years; over half had secondary education (52.7%), many were traders (36.0%), and most had 1–2 children (43.3%). Utilization of CHS was high (87.2% and 84.4%), and satisfaction levels were very high (97.9% and 99.4%). **Conclusion:** The study concludes that while utilization and satisfaction were high and clinical care was generally adequate, gaps remain in staffing and the availability of essential drugs and equipment, including pharmacy and laboratory services in one facility. **Recommendation**: It recommends improving staffing and training, providing basic amenities, and adopting standard minimum equipment and supply requirements for PHC facilities.

Keywords: Quality services, children, primary health centre, utilization and satisfaction.

INTRODUCTION

Children are vital to the socio-economic and cultural continuity of any society. In low- and middle-income nations like Nigeria, children and women collectively constitute nearly three-quarters of the population, emphasizing their essential role in societal sustainability (1). However, children under five years of age remain highly vulnerable, with preventable or treatable conditions like preterm birth, low birth weight, pneumonia, diarrhea, malaria, measles, and malnutrition accounting for the majority of deaths in this age group. The ability of health systems to provide timely and effective interventions, particularly at the community and health facility levels, is crucial in mitigating these avoidable fatalities (2). Globally, substantial progress has been achieved in reducing child mortality over the last few decades. Between 1990 and 2019, the annual number of under-five deaths decreased dramatically from 12.6 million to 5.2 million, representing a 59% reduction in the under-five mortality rate—from 93 deaths per 1,000 live births to 38 per 1,000 live births (3). Despite these advances, the global burden remains significant, especially in sub-Saharan Africa and South Asia, where disparities in child survival persist. Sub-Saharan Africa continues to experience the world's highest under-five mortality rates, with one in 13 children dying before their fifth birthday. In 2019 alone, this region, alongside Central and Southern Asia, accounted for over 80% of all under-five deaths, despite representing just over half of the global under-five population. Furthermore, five countries—Nigeria, India, Pakistan, the Democratic Republic of the Congo, and Ethiopia—were responsible for nearly half of these deaths, with Nigeria and India alone contributing about one-third (3).

The under-five mortality rate is a critical health indicator, measuring the likelihood of a newborn dying before the age of five per 1,000 live births. In 2022, an estimated 4.9 million under-five deaths occurred globally, translating to an average of 13,400 deaths daily. Leading causes of these deaths include infectious diseases such as pneumonia, diarrhea, and malaria, alongside complications from preterm births and intrapartum events. Although the global under-five mortality rate has declined by 60% since 1990, the unacceptably high prevalence of preventable deaths underscores an urgent need for intensified efforts (4). A significant proportion of these deaths occur among neonates. In 2020, 2.4 million neonatal deaths were recorded globally, accounting for nearly half of all under-five deaths (5). These figures highlight the heightened vulnerability of children, particularly newborns, and their increased sensitivity to environmental and health system deficiencies. To address these challenges, robust child health services are essential to promote children's physical and psychosocial development. Additional components include educating caregivers on oral rehydration therapy, malaria prevention, and managing existing health conditions.

The quality of child health services directly impacts child survival rates. However, many developing countries, including Nigeria, lack comprehensive evaluations of primary health care (PHC) quality, especially regarding child health services. Effective PHC depends on adequately equipped and staffed facilities supported by essential medicines and infrastructure (6). In response to these gaps, the World Health Organization (WHO) and UNICEF introduced the Integrated Management of Childhood Illness (IMCI) strategy in 1990. This strategy aims to reduce childhood morbidity and mortality by promoting an integrated approach to health care delivery, particularly in resource-constrained settings (7).

The utilization of child health services is a critical factor in determining their effectiveness. Utilization, defined as the proportion of individuals in need who access services, is influenced by maternal education, age, accessibility, and the quality of health infrastructure. Barriers such as long waiting times, inadequate resources, and ineffective policies exacerbate low utilization rates (8). Increasing the uptake of these services, particularly in regions with low coverage, is essential for reducing childhood illness and mortality. A previous study (9) emphasized the importance of child health services in mitigating the risk of child morbidity and mortality. Specific interventions such as growth monitoring, oral rehydration, breastfeeding

promotion, and immunization have been identified as critical to improving child health outcomes (10). Children remains highly vulnerable to killer diseases that causes death of under-5 children. Even now, deaths of children under-5 are still being recorded in our primary health care facilities, but can be prevented if the hospitals provide quality and adequate care to the children. This prompted the researcher to carry out a study on the quality of child health services they receive from primary health care facilities and how mothers utilize these services for their children well-being.

OBJECTIVE

The objectives of this study were to evaluate the availability of essential infrastructure, equipment, and personnel in selected PHC facilities within Enugu South; to assess the effectiveness of clinical service delivery by examining consultations, diagnosis, and treatment of common childhood illnesses such as fever, diarrhea, and acute respiratory infections; to measure the level of CHS utilization among the target population in the selected facilities; and to determine clients' satisfaction with the child health services they receive.

Theoritical Framework

The Donabedian Model, introduced by Avedis Donabedian in 1966, provides a structured framework for evaluating healthcare quality. The model focuses on three interrelated dimensions: "Structure" refers to all physical infrastructure and the knowledge workers involved in providing care for the sick and injured (11) Conversely, "process" encompasses everything that occurs during the patient care experience, including communication involved in treatment and the distribution of medications and supplies. The process also covers diagnosis, treatment, and preventive care. Ultimately, "outcome" is often considered the most crucial aspect of high-quality care. Every patient desires a high degree of satisfaction with their medical and social care while receiving services at healthcare facilities (11).

METHODS

Design

This study employs a cross-sectional descriptive survey design. A cross-sectional design is an observational research method that gathers data from a population at a single point in time, offering a snapshot of the current status of a phenomenon.

Sample, sample size and sampling technique

The study's target group comprised 20 healthcare professionals and 407 mothers of reproductive age who utilised child healthcare services at the Akwuke and Uwani PHC centres. 13 healthcare providers were from Uwani, while seven were from Akwuke but only five questionnaires were returned from akwuke making a total number of 17. 47 mothers from Akwuke and 360 mothers from Uwani but 406 questionarres were filled and returned from both. The participants were chosen based on their involvement with mother and child health services at the two designated primary health care centres. This complete cohort constituted the study population. Total population sampling was employed due to the research population's relatively small size and accessibility. The data collection process began following the acquisition of requisite ethical permissions. The researcher collaborated closely with experienced research assistants to distribute the surveys and perform interviews. Interviews with key informants were conducted with the leaders of the chosen PHC centres, and direct assessments of the centres' infrastructure were performed with the NPHCDA checklist. (12) The data gathering duration was one week.

This method facilitated a comprehensive and precise analysis of healthcare service utilisation at urban and rural primary healthcare centres, hence enhancing the study's validity and dependability.

Instrument for data collection.

The research utilized a qualitative technique. Semi-structured Questionnaires for Mothers: These questionnaires were distributed to mothers at the PHC centres, concentrating on utilization and satisfaction with the services

rendered, Interviews with Key Informants among Unit Leaders: Semi-structured interviews were performed with the unit directors of the two PHC centres to get comprehensive information regarding available resources, and overall healthcare delivery mechanisms. A checklist created based on directives from the National Primary Health Care Development Agency (NPHCDA) was utilized to guarantee comprehensive coverage of all pertinent areas. The checklist comprised two sections: Section A: Catalogue of accessible equipment, pharmaceuticals, and resources for the management of pediatric disorders. Section B: Evaluations of the physical infrastructure and facilities present in the PHC centres. Surveys for Healthcare Professionals: Healthcare professionals at the designated centres were administered a detailed questionnaire aimed at collecting data across five sections: Section A: Demographic information of the healthcare providers. Section B: Details regarding the quantity and categories of healthcare personnel present at each centre. Section C: Information on consultations, diagnoses, and treatments administered for paediatric illnesses.

Instrument validity

The researcher obtained face validity and content validity for the data collection tools by consulting a supervisor and two senior faculty members from the Department of Nursing Sciences at the University of Nigeria, Enugu Campus. The specialists evaluated the tools to ensure they effectively addressed the study objectives and enquiries. In response to their criticism, essential modifications were implemented to guarantee that the instruments were both thorough and pertinent to the study.

Instrument Reliability

A pilot research was performed involving 10% of the study population at the comparable PHC centre, Ikirike Health Centre in Enugu. Forty-one mothers and two healthcare practitioners participated in the pilot test. The instruments' reliability was evaluated using Cronbach's alpha coefficient, resulting in a score of 0.89, signifying strong internal consistency and reliability for the study.

Data collection procedure

Ethical approval for the study was secured from the University of Nigeria, Enugu Campus, the Ministry of Health, Enugu State, and the Ethics Committee of the Department of Primary Health Care, Enugu South LGA. Informed consent was secured from both healthcare providers and mothers, guaranteeing voluntary participation. Confidentiality was rigorously upheld during the trial, and personal identifiers were excluded from the presentation of results. The data collection process began following the acquisition of requisite ethical permissions. The researcher collaborated closely with experienced research assistants to distribute the surveys and perform interviews. Interviews with key informants were conducted with the leaders of the chosen PHC centres, and direct assessments of the centres' infrastructure were performed with the NPHCDA checklist. (12) The data gathering duration was one week.

Data analysis

The data were analysed utilising descriptive statistics, encompassing percentages, frequencies, means, and standard deviations. The analysis was conducted using IBM's Statistical Package for Social Sciences (SPSS), version 25. The average score for each questionnaire item was determined using the accompanying formula:

Mean = $\sum F / N$

Mean = $N \sum F$

Where: $\sum F$ = total summation of the scores

N = total number of participants

The questionnaire responses were evaluated using a four-point Likert scale:

Strongly Agree (SA) = 4 points, Agree (A) = 3 points , Disagree (D) = 2 points, Strongly Disagree (SD) = 1 point (13)

A mean cut-off score of 2.5 was employed to classify answers, with scores exceeding 2.5 deemed positive and scores falling below 2.5 regarded as negative. The evaluation of the physical conditions of the PHC centres

employed a binary scoring approach, wherein each criterion (such as equipment availability and building conditions) was assessed as either affirmative/negative or satisfactory/unsatisfactory, according to established standards.

RESULT

Demographic Data

Data collected were presented and analyzed in this chapter. For staff, among the 20 questionnaires distributed, 17 were duly filled and used for the analysis giving a response rate of 85.0% while for the mothers, among the 407 questionnaires distributed, 406 (duly filled) were used for the analysis giving a response rate of 99.7%. Findings of the study were interpreted in line with the stated research questions.

Table 1 Socio-demographic Characteristics of the staff respondents (n = 17)

Variables	Options	Frequency (n)	Percentage (%)
Age	18 – 25	2	11.8
	26 – 35	3	17.6
	36 – 45	10	58.8
	46 and above	2	11.8
Primary health centre	Akwuke	5	29.4
	Uwani	12	70.6
Designation	JCHEW	5	29.4
	SCHEW	6	35.2
	Nurse/midwife	1	5.9
	Doctor	0	0.0
	Lab technician	1	5.9
	CHO	1	5.9
	Pharmacy Technician	1	5.9
	Porter/Orderly	2	11.8

Findings show that majority of the staff were from Uwani(70.6%) and were SCHEW (35.2%).Findings reveals that greater number of staff from both PHC were SCHEWs 35.2% and JCHEWs 29.4%. registered nurse/midwife was only 5.9% of the participants, there was no doctor in any of the PHC which shows that personnel were inadequate according to NPHCDA minimum standard.

Table 2 Socio-demographic characteristics of the Mothers (n = 406)

Variables	Options	Frequency (N)	Percentage (%)
Age	18 – 25	94	23. 2
	26 – 35	199	49. 0
	36 – 45	109	26. 8
	46 years and above	4	1. 0
Mean (±SD) age	**31.11 years (± 6.09)**		
Highest educational qualification	No formal education	4	1. 0
	Primary education	7	1.7
	Secondary education	214	52.7
	Tertiary education	181	44.6
Occupation	Farming	20	
	Trading	146	
	Sowing cloth/hairdressing	84	
	Public civil servant	94	
	Housewife	49	
	Others (students)	13	
Number of Children	1 – 2	176	43.3
	3 – 4	157	38.7
	5 and above	73	18.0

Table 3. Availability of equipment and drugs for managing Childhood diseases

	Akwuke	Uwani
Equipments		
- Thermometer	7	-
- Stethoscope	2	1
- Measuring scale	1	1
- Children Ambubag	1	1
- Suction machine	1	1
- Oxygen cylinder	0	1
- Beds for children under 5	0	0
- Newborn cots	2	0
- Fridge/freezer	1	1
- Cold box	4	1
- Vaccine carrier	4	3
- Sterilizer	1	1
- Table infant weighing scale (Seward)	1	1
- Stainless Galipot (medium size	3	1
- Graduated cups medicine	0	0
- Stainless covered bowl for cotton wool	2	0
- Length measure for babies	2	0
- Wall clock	2	1
- Dressing Trolley	1	0
- Basket with lid for ORS	1	1
Essential drugs		
- Paracetamol injection	20	20
- Paracetamol tablet	300	300
- Paraldehyde	0	10
- Cotrimoxazole	350	100

- Oral rehydration therapy	4 pkts	10 pkts
- Metronidazole syrup+	7	15
- Fansidar	10	15
- Benzyl benzoate	5	20
- Mebendazole	15	40
- Ampiclox syrup	6	8
- Ampiclox injection	12	5
- Anti-tuberculosis drugs	0	0
- Calamine – Lotion	2	7
- Nystatin - Ointment, cream	1	0
- Neomycin+Bacitracin - Ointment, powder	0	0
- Methylated spirit – Solution	2 bottles	5 bottles
- Chloramphenicol - Eye drops	5	0
- Vitamin A – Capsule	100	200
- Salbutamol – Tablet	100	150

Table 4. Physical structure of health facilities and basic amenities

Items	Akwuke		Uwani	
	Good	Bad	Good	Bad
Building	✓		✓	
- Waiting/Reception areas for Child Welfare, ANC, Health Education and ORT corner	✓		✓	
- Staff station	✓		✓	
- Pharmacy & Dispensing unit		×	✓	
- In-patient ward section	✓		✓	
- 2 delivery room	✓		✓	
- Laboratory		×	✓	
- Medical records area	✓		✓	
- Injection/Dressing area		×	✓	
Regularity of water supply up to 12hrs		×	✓	
Regularity of light supply	✓		✓	
Disposal of waste	✓		✓	
Road		×	✓	
Latrine	✓		✓	
Chairs	✓		✓	
Curtains	✓		✓	
Furniture	✓		✓	
Surroundings	✓		✓	
Dust bin (pedal)	✓			×
Kerosene pressure lamp (Rechargeable)	✓		✓	
Overall physical structure of health facilities and basic amenities	75.0 %	25.0 %	95.0 %	5.0 %

Table 5 .Child health services provided by the facility

Child health services provided by your facility	**Akwuke**				**Uwani**			
	Out-Patient	In-patient	Both	Not offered	Out-Patient	In-patient	Both	Not offered
Infant(<1yr) immunization	1	0	1	0	12	0	0	0
Child(1-5yrs) Immunisation	0	0	1	0	12	0	0	0
Adolescent Immunization		0	1	1	12	0	0	0
Treatment of child malnutrition	1	0	1	0	1	0	0	11
Care for the healthy new born	0	0	2	0	12	0	0	0
Care for the small or sick newborn	0	0	2	0	9	0	0	3
Delivery/child birth services	0	2	1	0	6	0	6	0
Services for prevention of mother to child transmission	0	0	1	0	12	0	0	0
Services for children affected by maltreatment	0	0	0	1	11	0	0	1
Mode of circumcision	1	0	1	0	12	0	0	0
Treatment of child hood diseases e.g malaria, fever, diarrhea, measles and ARI	1	0	2	0	12	0	0	0
24hr emergency services	0	0	1	1	12	0	0	0
Overall Level of child health services provided		**Freq**		**%**		**Freq.**		**%**
- Provided		3		60.0		10		80.0
- Not provided		2		40.0		2		20.0

Findings revealed that majority 10(80.0%) of the Uwani respondents affirmed that they provide child health services More 3(60.0%) of the Akwuke respondents affirmed that they provide the listed child health services which are considered adequate for the PHCs.

Table 6. Level of utilization of CHS in two PHC facilities in Enugu South (n=406)

	Akwuke (n=47)					Uwani (n=359)				
Child health services	**Every time**	**Some times**	**Rarely**	**Never**	**Mean±S.D.**	**Every time**	**Some times**	**Rarely**	**Never**	**Mean±S.D.**
Growth monitoring					**3.59±0.55**					**3.53±0.83**
Child weighing	32	14	1	0	3.66±0.52	246	101	9	3	3.64±0.58
Measurement of height	29	17	1	0	3.60±0.54	231	104	9	15	3.53±0.74
Measurement of mid-arm circumference	26	19	2	0	3.51±0.59	210	110	15	24	3.41±1.18
Nutritional services					3.63±0.71					3.65±0.64
Vitamin A supplement	33	12	2	0	3.66±0.56	256	94	9	0	3.69±0.52
Micronutrient supplementation	32	13	1	1	3.62±0.84	253	79	9	18	3.58±0.77
Education on breast feeding/weaning diet	34	10	1	2	3.62±0.74	265	82	3	9	3.68±0.62
Curative services					2.79±1.28					2.70±1.37
Physical examination	23	11	2	11	2.98±1.23	165	102	21	71	3.01±1.15
Laboratory examination	17	13	1	16	2.66±1.29	88	120	50	101	2.54±1.14
Treatment of ailment	20	10	2	15	2.74±1.31	98	106	47	108	2.54±1.83
Oral dehydration therapy					2.86±1.16					3.07±1.09
Oral rehydration sachet	18	16	2	11	2.87±1.17	173	92	37	57	3.06±1.10
Education on salt sugar solution	18	15	3	11	2.85±1.18	180	86	30	63	3.07±1.13
Education on use of available home fluid	17	16	4	10	2.85±1.14	174	92	36	57	3.07±1.04
Immunization services					3.84±0.48					3.86±0.50
Needed vaccines	41	4	1	1	3.81±0.58	335	12	6	6	3.88±0.49
Documentation/ Recording note	41	5	0	1	3.83±0.52	320	24	3	12	3.82±0.61
Health education or talk on immunization	41	6	0	0	3.87±0.34	326	27	3	3	3.88±0.41
Level of Utilization	Freq.	%				Freq.	%			
- Utilized	41	87.2				303	84.4			
- Not utilized	6	12.8				56	15.6			

Item with mean (M) > 2.5 was accepted by the women for utilization

Table 6 showed that growth monitoring, nutritional services, curative services, oral rehydration therapy and immunization services were significant factors associated with the level of utilization of child health services. The odd ratio analysis result indicated that child weighing (OR = 1.02; 95% CI: 0.98–1.07), measurement of height (OR = 1.02; 95% CI: 0.98–1.07), and measurement of mid-arm circumference (OR = 1.05; 95% CI: 0.98–1.13) were significantly associated with utilization of growth monitoring; micronutrient supplementation (OR = 1.05; 95% CI: 0.98–1.12) is significantly associated with utilization of nutritional services; and needed vaccines (OR = 1.05; 95% CI: 0.98–1.11), and documentation/recording note (OR = 1.02; 95% CI: 0.98–1.07) were significantly associated with utilization of immunization services.

Table 7. Client satisfaction with services received

	Akwuke (n=47)					Uwani (n=359)				
Child health services received	**VS**	**S**	**D**	**VD**	**Mean±S.D.**	**VS**	**S**	**D**	**VD**	**Mean±S.D.**
Growth monitoring	37	10	0	0	3.79±0.41	278	81	0	0	3.77±0.42
Nutritional services	37	10	0	0	3.79±0.41	277	82	0	0	3.77±0.42
Curative services	38	9	0	0	3.81±0.40	287	72	0	0	3.80±0.40
Oral dehydration therapy	37	9	1	0	3.77±0.48	278	75	6	0	3.76±0.47
Immunization services	36	10	1	0	3.74±0.49	251	105	3	0	3.69±0.48
Referral services	38	9	0	0	3.81±0.40	283	76	0	0	3.79±0.41
Level of satisfaction	**Freq.**		**%**			**Freq.**		**%**		
- Satisfied	46		97.9			357		99.4		
- Not satisfied	1		2.1			2		0.6		

Item with mean (M) > 2.5 was accepted by the women for satisfaction

Table 7: Revealed the client satisfaction with services received. Findings revealed the following: For Akwuke, growth monitoring (3.79±0.41), followed by nutritional services (3.79±0.41), curative services (3.81±0.40) and oral dehydration therapy (3.77±0.48). immunization services (3.74±0.49), referral services (3.81±0.40), for Uwani, followed by **high.** growth monitoring (3.77±0.42), nutritional services (3.77±0.42), curative services (3.80±0.40) and oral dehydration therapy (3.76±0.47). immunization services (3.69±0.48) referral services (3.79±0.41), The level of satisfaction of CHS in two PHC facilities was 97.9.0%. and 99.4% respectively which were very

DISCUSSION

Essential Infrastructure, Equipment, and Personnel in Selected PHC Facilities in Enugu South

The study revealed that the Primary Health facilities were inadequately equipped with basic equipment The researcher concluded that because some basic equipment and drugs were not up to minimum standard they were considered inadequate for the PHCs. This aligns with Nnebue (1), who reported that while health facility managers often perceived their equipment as adequate, none of the facilities studied met the NPHCDA's minimum equipment and drug standards. Similarly, Nwokoro et al. (14) highlighted the absence of medical doctors, insufficient drugs, and inadequate staffing as key factors deterring effective utilization of PHCs. However, these findings contrast with those of Arije et al. (1), who identified the availability of drugs as the most critical determinant of service quality from the users' perspective.

Clinical Consultations, Diagnosis, and Treatment of Childhood Illnesses

Findings revealed that majority 10(80.0%) of the Uwani respondents affirmed that they provide child heath services More 3(60.0%) of the Akwuke respondents affirmed that they provide the listed child health services which are considered adequate for the PHCs. These findings are in line with Onunze (8), who reported that PHCs in Nsukka health district adequately provided similar services, including immunizations, growth monitoring, and curative care

Level of Utilization of Child Health Services

Findings showed that growth monitoring, nutritional services, curative services, oral rehydration therapy and immunization services were significant factors associated with the level of utilization of child health services. The odd ratio analysis result indicated that child weighing (OR = 1.02; 95% CI: 0.98–1.07), measurement of height (OR = 1.02; 95% CI: 0.98–1.07), and measurement of mid-arm circumference (OR = 1.05; 95% CI: 0.98–1.13) were significantly associated with utilization of growth monitoring; micronutrient supplementation (OR = 1.05; 95% CI: 0.98–1.12) is significantly associated with utilization of nutritional services; and needed vaccines (OR = 1.05; 95% CI: 0.98–1.11), and documentation/recording note (OR = 1.02; 95% CI: 0.98–1.07) were significantly associated with utilization of immunization services.therefore the level of utilization of CHS in two PHC facilities were considered adequate as the mean criterion for all was above 2.5. The high utilization rates align with Onunze (8), who found that mothers effectively utilized available child health services in PHCs. However, these findings contrast with Nwokoro et al. (14) who reported low utilization rates in under-resourced rural communities.

Client Satisfaction with Services Received

Findings revealed the following: For Akwuke, growth monitoring (3.79±0.41), followed by nutritional services (3.79±0.41), curative services (3.81±0.40) and oral dehydration therapy (3.77±0.48). immunization services (3.74±0.49), referral services (3.81±0.40), for Uwani, followed by growth monitoring (3.77±0.42), nutritional services (3.77±0.42), curative services (3.80±0.40) and oral dehydration therapy (3.76±0.47). immunization services (3.69±0.48) referral services (3.79±0.41), The level of satisfaction of CHS in two PHC facilities was 97.9.0%. and 99.4% respectively which were very high. Finding suggests that the mothers have satisfaction with CHS provided for their children and is related to the socio-demographic characteristics of mothers where mean score is 31.11years(±6.09) and most achieved secondary and tertiary education. This aligns with Getachew et al. (16), who found that clients expressed high levels of satisfaction with PHC services, with structural and process-related factors showing no significant impact on their perceptions. This is contrary to the study done by Jibril et al (17) in Kaduna State, Northwest, Nigeria which evaluated the satisfaction of clients and caregivers accessing healthcare in PHC centres. He concluded that Clients' satisfaction with PHC services in Kaduna State, Northwest Nigeria was sub-optimal and recommended to improve their attitude bearing in mind clients' peculiarities

Definition of terms

Adequacy of Structure: Refers to the suitability and functionality of a facility's design, materials, and components in delivering high-quality patient care.

Adequacy of Management Process: Relates to the effectiveness of processes such as training, supervision, and record-keeping in advancing children's physical, mental, and emotional well-being.

Outcome: The measurable effects or results of healthcare services on the health status of children and the community.

Personnel: Includes all healthcare workers and support staff employed in the PHC facilities under study.

Quality of Care: The degree to which available resources are effectively utilized to achieve optimal health outcomes, evaluated using the Donabedian model of quality assessment.

Level of Utilization: The extent to which community members access and make use of available child health services.

Conclusion

The study highlights several critical findings regarding the state of CHS in PHC facilities in Enugu: PHC facilities were found to lack essential equipment, including basic diagnostic tools and supplies, but maintained

adequate physical infrastructure in areas such as reception areas and outpatient wards.Respondents affirmed that key services such as immunizations, growth monitoring, and curative care for childhood illnesses were routinely offered. Daily provision of oral rehydration therapy, clinical consultations, and treatment services was noted as a positive feature. Utilization rates for CHS in both facilities were high, with Akwuke and Uwani achieving 87.2% and 84.4%, respectively. Satisfaction levels were also exceptionally high, at 97.9% and 99.4%, suggesting that most mothers were pleased with the quality and delivery of care.

Overall, while service delivery and satisfaction were commendable, attention must be given to improving sanitation, amenities, and staff attitudes to ensure sustained satisfaction and utilization. Evaluating patient satisfaction should remain a routine practice to identify areas for improvement and adapt nursing care practices accordingly.

Limitations of the Study

The study faced several limitations:

Respondent Attitudes: Many respondents initially showed reluctance, assuming the study was sponsored and expecting financial incentives.

Time and Financial Constraints: Conducting the study required significant time and resources, limiting the scope of data collection. In addition, it is limited to a particular geographical area and I advise other researchers to conduct this in a different location.

Recommendation

It is recommended that more skilled attendants including nurses be deployed to these facilities; training and updating staff on new guidelines and intervention, incentives should also be given to the nurses so to retain them in PHC. Government should address Resource Deficiencies, focus on Cost-Effective Measures and adopt Minimum Standards: The PHC department should implement and regularly update a standardized list of essential equipment and services, ensuring that facilities are well-stocked and functional.

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Disclosure of conflict

The Authors declare that they have no conflict of interest.

Statement of ethical approval

Ethical approval was gotten from Enugu state ministry of health and from Enugu south primary health care ethical committee which was submitted to the selected primary health care facilities to enable me carry out the research.

Statement of informed consent

Informed consent was obtained from staff and mothers used for this study.

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