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Assessing the job satisfaction of health workers in primary health centers in Anaocha, Anambra State in Nigeria.

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Abstract:

Background: Determining the effectiveness of a health system is the presence of an adequate and well-distributed workforce of skilled health professionals, particularly within the Primary Health Care sector. These healthcare personnel constitute a significant portion of public health expenditure and with their jobs form the cornerstone of numerous policies and management approaches aimed at augmenting productivity and efficacy.

Objective: This study sought to assess the level of job satisfaction among healthcare workers in Primary Health Centres in Anaocha LGA, Anambra State, Nigeria.

Methods: After obtaining approval from the ethics and research committees in Nnamdi Azikiwe University Teaching Hospital, a cross-sectional study of 70 consenting Primary healthcare workers who met the eligibility criteria was conducted. They were selected by simple random sampling from 1st February to 1st March 2021 at the Primary Healthcare Centres in Anaocha Local Government Area (L.G.A) of Anambra State. Data collection was by the use of a self-administered, semi-structured questionnaire and analyzed using the statistical package for Social Sciences (SPSS) version 25.0. The level of significance for this study was set at $P < 0.05$ for all analyses.

Results: The study showed a high level of overall job satisfaction, as 81.43% of the respondents were satisfied with their jobs. The workers' salary ($p = 0.021$), their physical working environment ($p = 0.043$), the distance of the workplace from their place of residence ($p = 0.041$), and payment of allowances ($p = 0.012$) were significantly associated with job satisfaction.

Conclusion: This study demonstrated a notably elevated level of job satisfaction. Special allowance schemes should be instituted for primary healthcare workers to encourage their stay in rural areas.

Keywords: Job satisfaction, Healthcare workers, Primary Healthcare Centres, Nigeria

INTRODUCTION:

The progress of Primary Health Care in Nigeria is marked by a shortage of both human and material resources, which are not evenly spread (Choonara et al., 2017). This situation can result in an increased burden on the limited workforce, leading to potential demotivation due to inadequate or insufficient compensation and incentives (Willis-Shattuck et al., 2008). Community health extension workers (CHEWS), Midwives and Doctors belong to the category of health professionals who play a crucial role in delivering vital health services by directly engaging with local community members, both within and outside health facilities (Perry et al., 2015). Their responsibilities encompass offering preventive, treatment, referral, and follow-up health services (Perry et al., 2015).

Job is one of the important elements of people's life, given that people's livelihoods and societal engagement are intertwined with their jobs, it becomes imperative for every organization to cultivate a contented workforce (Wasaf & Muhammad, 2021). Employee job satisfaction stands as one of the most intricate concepts within any organization, forming the foundation for numerous policies and management approaches aimed at enhancing productivity and efficiency (Hasanzadeh et al., 2015; Ali, 2016)

Job satisfaction (JB) refers to the level of happiness or contentment experienced by an employee in relation to their work (Jenkins et al., 1998). Montuori et al. (2022) in their study defined JB as a "pleasurable or positive emotional state, resulting from the appraisal of one's job experiences". It encapsulates the emotional reaction an employee has toward their job responsibilities, workload, and the overall conditions of their workplace (Willis-Shattuck et al., 2008; Jenkins et al., 1998). Hospice workers, for instance, perceive job satisfaction as encompassing various factors such as the significance of their tasks, effective supervision, autonomy, structured routines, manageable workloads, positive emotional disposition, positive interactions with team members, fair distribution of resources, and a strong motivation to perform well (Marmo et al., 2020).

The exploration of job satisfaction and its assessment has a history dating back to as early as 1911, with the research conducted by Frank Taylor (Donuk, 2009). Taylor believed that workers could be motivated by money, and therefore, he promoted the idea of the "a fair day's pay for a fair day's work" concept.

Since then, numerous researchers have conducted studies on various groups of healthcare workers across different regions of the world (Torun & Çavuşoğlu, 2018). Job satisfaction remains one of the most extensively examined subjects, used to gauge the behaviours and attitudes of healthcare professionals towards their respective institutions and this assessment serves to enhance professionalization, elevate the quality of care provided, and reduce the inclination to leave the job (Kaya & İşler-Dalgıç, 2020; Torun & Çavuşoğlu, 2018).

Globally, there exists a scarcity of skilled healthcare professionals, with underdeveloped nations being disproportionately affected by this shortage (Choonara et al., 2017). Frequently, these skilled workers seek better opportunities in more economically advanced countries, thereby jeopardizing the progress towards the Sustainable Development Goals (Cabeza-Garcia et al., 2018; Ossai et al., 2012). The presence of an adequate and appropriately distributed workforce of skilled healthcare personnel, particularly within the realm of Primary Health Care (PHC), is a pivotal factor influencing the resilience of a healthcare system (Gao et al., 2022; Ikem et al., 2011).

Efforts to attract and retain skilled personnel, particularly in remote Primary Health Care (PHC) centres, necessitate a comprehensive understanding of the relevant factors within the local context (Ali et al., 2016; Judith Logan & Kyla Everall, 2019). Moreover, the challenges posed by workplace environments and conditions, particularly in rural areas lacking sufficient social and infrastructural amenities, can exacerbate demotivation among healthcare workers (Connell et al., 2007). This, in turn, contributes to inadequate retention of critically needed skilled professionals, resulting in brain drain and decreased overall workforce efficiency (Piosik et al., 2019). The nation's healthcare workforce remains susceptible to the drain of talent, further weakening an already fragile health system (Piosik et al., 2019; Mellin-Olsen et al., 2017). The present study holds the potential to make a substantial contribution to the existing body of literature while also functioning as a valuable database for comparisons with similar and dissimilar settings. Particularly in contexts where data is scarce, it can establish a foundational point for the development, implementation, and evaluation of necessary intervention programs and policies aimed at enhancing

Primary Health Care (Zakumumpa et al., 2018).

A study akin to this one, focusing on job satisfaction, was carried out by Amoran et al. Their findings indicated that there wasn't a significant discrepancy in job satisfaction levels among the various categories of health workers in southwest Nigeria. However, factors like age and marital status were observed to be influential in shaping job satisfaction among PHC workers in the country (Amoran et al., 2005).[7] Another study, conducted by Kadiri-Eneh et al. investigated the job satisfaction of primary health care workers in Rivers State, Nigeria. Their research revealed that age, marital status, profession, location of the health facility, and duration of work played pivotal roles in determining the extent of job satisfaction among PHC workers.

The motivation behind the emphasis on job satisfaction among health workers likely stems from its potential effects on patient care, patient satisfaction, enhanced patient outcomes, and the overall quality of healthcare delivery (Ayamolowo et al., 2013). A significant consequence of job dissatisfaction and unfavourable working conditions among healthcare workers in Nigeria is the heightened inclination of these workers to exit the healthcare sector. This tendency is influenced by factors such as an individual's job-related experiences, level of control within the work environment, the balance between work and personal life, the extent of work-related stress, and overall emotional well-being (Halawani et al., 2021). Research has also shown the association of gender with higher levels of job satisfaction (William et al., 2015; Cabeza-Garcia et al., 2018).

Positive psychological states are linked to strong intrinsic work motivation, exceptional work performance, substantial job contentment, and minimal instances of absenteeism and turnover (Vawda and Steyn, 2014). The fundamental aspects of job roles notably forecast and shape these three psychological states, and these psychological states significantly affect the internal motivation, overall job satisfaction, and performance of civil servants (Nnamseh et al., 2014). Consequently, the aim of this study is to assess the level of job satisfaction among healthcare workers in Primary Health Centres in Anaocha LGA, Anambra State, Nigeria.

Materials and Methods:

Study Population: This study was conducted at PHC institutions in the Anaocha Local

Government Area (LGA). Anaocha is a LGA in Anambra State, south-eastern Nigeria made up of 10 towns which include: Aguluzigbo, Agulu, Neni, Ichida, Adazi-Ani, Adazi-Enu, Adazi-Nnukwu, Akwaeze, Nri and Obeledu. Anaocha is a rural LGA with headquarters at Neni and a population of 350,544.[26] There are 19 wards in the LGA with about 27 PHC institutions and their locations include Neni; NAUTH PHC Neni, Community reproductive referral centre Umudioka Neni, Umuabani PHC, Umunri PHC, AGULU; Amatutu Model PHC, Nkitaku PHC, Umubiala PHC, Obeagu PHC, Ifite PHC, Nneogidi PHC, Umuowelle PHC, Nneoha PHC, ICHIDA; Mgbuwa PHC Ichida, Ubulu Ichida PHC, AGULUZIGBO; Aguluzigbo PHC, AKWAEZE; Community Reproductive Referral Health Center Akwaeze, NRI; NRI 1 PHC Obeagu, Nri 11 PHC, OBELEDU; PHC Obeledu, Obeledu Health post, Adazi Ani; Adazi Ani 1 PHC, PHC Adazi Ani 2, ADAZI ENU; Adazi Enu 1 PHC, Akwankwo PHC, Ogwenioji PHC, ADAZI NNUKWU; Adazi-Nnukwu Community Reproductive Referral Health Centre, Adazinnukwu Health Post (https://hfr.health.gov.ng/facilities/hospitals-list?page=160). These PHC institutions are situated in the respective political wards in Anaocha such that each ward has at least one PHC institution. Important festivals held in the Anaocha local government area include the Igu Aro festival in Nri, the New Yam festival, the Ufejioku Umueze festival, and the Mmanka festival. Popular landmarks in the area are the Nri Museum and the Agulu Crocodile Lake.

Study Population: The study population comprised doctors, nurses, community health extension workers (CHEW), Community Health Officers (CHOs), Laboratory scientists, Laboratory technicians and Pharmacists working in the 27 PHC institutions in Anaocha L.G.A, Anambra state of Nigeria. A stratified sampling technique was used to categorize the PHC institutions based on the political wards. After stratification, 19 strata were created each stratum represents one political ward with one PHC institution. Currently, the total population of health workers (HWS) working at the PHC at 19 wards in the LGA are about 89. Simple random sampling was then used in the second stage to select participants.

Inclusion criteria:

- All members of staff in the PHC institutions, who are skilled to

contribute directly to the treatment of patients.

- All healthcare staff in the PHC institutions who have had at least one year of experience in any PHC institution to properly assess their job satisfaction.

Exclusion criteria:

- All members of staff in the PHC institutions, who are not skilled contribute directly to the treatment of patients.
- All health care staff in the PHC institutions who have not had up to one year experience in any PHC institution.
- Respondents who fail to give consent as ethics demands that consent needs to be given to show that the respondent willingly participated.

Study Design: This was a descriptive cross-sectional study carried out among 70 consenting HWs who consented and met the eligibility criteria and were selected to participate in the study from 1st February to 1st March 2021.

Sample size determination:

The sample size was determined using the Cochran formulae (Stephanie Glen) which is:

$$N = \frac{Z^2PQ}{D^2}$$

Where

N = minimum sample size for an infinite population (>10,000)

Z = standard normal deviation usually 1.96 (constant)

P = prevalence, taken as 88.9% (0.889) from a previous similar study on PHC workers in Rivers state.

Q = 1 – P (1 – 0.889) = 0.111

D = level of precision required = 0.05

N = estimated population size of 89

n = sample size to be used.

$$N = \frac{(1.96)^2 \text{ X } 0.889 \text{ X } 0.111}{0.05^2}$$

N = 151.6

Adjusting the sample for a finite population size of less than 10,000;

$N^f = N/ [1+ (N/n)]$

Where N^f is the adjusted sample size when the population is less than 10,000 (finite).

N is the minimum sample size calculated (151.6)

n is the size of the population of interest/source population estimated at 89

N^f = 151.6/ [1 + (151.6/89)]

N^f = 56.1

However, to take care of those that may be lost due to non-submission of the questionnaire and to improve the reliability of the study results, the sample size was increased to 70

Sampling Technique: Firstly stratified sampling technique was used and strata were created based on political wards in Anaocha, ensuring that each stratum represents one political ward. After stratification, simple random sampling within Strata was done. Within each stratum (ward), simple random sampling to select the participants to be included in the study. Microsoft Excel was used to generate random numbers. The participants were numbered 1-89 and randomly selected until a sample size of 70 was attained.

Data collection:

The procedure for the study was explained to each participant and thereafter informed consent was obtained before their participation in the study. Information was obtained through a self-administered questionnaire. To enhance accuracy; all participants were informed that their responses would remain confidential. The questionnaire was divided into four (3) sections (A, B and C). Section A: assessed the socio-demographic characteristics profile of the respondents. Section B: assessed their attitude towards the level of job satisfaction of the respondents. Section C: assessed the factors that affect (improve) job satisfaction. The clinical state of the respondents was ascertained before the interview so that chronically ill HWS would be excluded.

When the questionnaires were returned, the respondents were assessed and scored based on the answers they had given. The level of job satisfaction and affecting job satisfaction was assessed using a scale involving three items which include; Satisfied, Neither satisfied nor dissatisfied and Unsatisfied.

Data Analysis:

Data obtained was checked for completeness, then entered and analysed using SPSS version 25 developed by IBM Corporation. Qualitative data, such as occupation and marital status were presented as percentages while continuous variables such as age and duration of work experience (in years) were expressed as means ± standard deviation. Univariate analysis was carried out to achieve the frequency and prevalence. Bivariate analysis to test association, Chi-square test to check factors associated with job satisfaction.

Ethical Consideration:

Ethical approval was obtained from the Ethical Committee of the Nnamdi Azikiwe University Teaching Hospital (NAUTH), Nnewi. The participants were assured of the confidentiality of their responses and were assured that any information given would be used primarily for academic research purposes.

Results:

The results show that the mean age and standard derivation of the respondents in this study was 39.07±12.06 years with 87.14% females and 12.86% males. Of all the respondents, 68.57% were married and 42.86% of the respondents had worked for more than 12 years. Community Health Extension Workers (CHEWs) constituted 47.71% of the respondents, 27.14% were Nurses, 10% were Community health officers, 7.14% were Doctors, 5.71% were Laboratory scientists and 4.29% were Pharmacists.

Table 1: Showing the socio-demographic of the study participants

SOCIO-DEMOGRAPHIC	FREQUENCY	PERCENTAGE
Gender		
Female	61	87.14
Male	9	12.86
AGE (years)		
16-20	1	1.43
21-25	6	8.57
26-30	20	28.57
31-35	5	7.14
36-40	8	11.43
41-45	3	4.29
46-50	9	12.86
51-55	11	15.71
56-60	7	10.00
Mean age (Mean±STD)	39.07±12.06	
Marital status		
Married	48	68.57
Single	21	30.00
Widowed	1	1.43
Occupation		
Community Health Extension Workers	32	45.71
Community Health Officers	7	10.00
Doctors	5	7.14

Laboratory scientists	4	5.71
Nurses	19	27.14
Pharmacists	3	4.29
Religion		
Christianity	70	100
Denomination		
Anglican	20	28.57
Pentecostal	11	15.71
Roman catholic	39	55.71
Tribe		
Igbo	69	98.57
Yoruba	1	1.43
Work experience		
1-3yrs	22	31.43
4-6yrs	12	17.14
7-9yrs	4	5.71
10-12yrs	2	2.86
more than 12 yrs	30	42.86
Mean years of work experience (Mean±STD)	8.25±5.37	
Total	70	100

Table 2: Showing the levels of job satisfaction among the study participants

Items	Satisfied (%)
Overall satisfaction with the nature of your Job	57 (81.43)
Salary	34 (48.57)
Workload	39 (55.71)
Flexibility with work hours	43 (61.43)
Your relationship with co-workers	65 (92.86)
Physical working environment	42 (60.00)
Distance of workplace from the place of residence	47 (67.14)
Benefits	34 (48.57)
Promotion	39 (55.71)

Table 4: Factors that may improve (affect) job satisfaction

Items	Agree (%)
Increase in salary	67 (95.71)

Improvement in infrastructure/ Work Environment.	67 (95.71)
Provision of accommodation close to the PHC institution	64 (91.43)
Employment of more healthcare workers	64 (91.43)
Promotion as and when due.	68 (97.14)
Provision of incentives	67 (95.71)
Provision of transport allowance	55 (78.57)
Recommendation when one does a good job.	69 (98.57)

Table 5: Showing the overall level of Job satisfaction

Level of Job satisfaction	Frequency	Percentage (%)
Satisfied	57	81.43
Ambivalent	7	10.00
Unsatisfied	6	8.57

Table 6A: Chi-square analysis showing the relationship between Job satisfaction and socio-demographic Variables.

Variable	Total (freq)	Level of Job satisfaction (%)			χ^2-value	p-value
		Ambivalent	Satisfied	Unsatisfied		
Gender						
Female	61	5 (71.4)	51 (89.5)	5 (83.3)	1.897	0.387
Male	9	2 (28.6)	6 (10.5)	1 (16.7)		
AGE (years)						
16-20	1	0	1 (1.7)	0		
21-25	6	0	6 (10.5)	0		
26-30	20	5 (71.4)	13 (22.8)	2 (33.3)		
31-35	5	0	5 (8.7)	0		
36-40	8	1 (14.3)	6 (10.5)	1 (16.7)	12.841	0.684
41-45	3	0	3 (5.2)	0		
46-50	9	1 (14.3)	7 (12.3)	1 (16.7)		

51-55	11	0	9 (15.8)	2 (33.3)		
56-60	7	0	7 (12.3)	0		
Marital status						
Married	48	4 (57.1)	40 (70.2)	4 (66.6)		
Single	21	3 (42.9)	16 (28.0)	2 (33.3)	0.864	0.930
Widowed	1	0	1 (1.7)	0		
Occupation						
Community Health Extension Workers	32	2 (28.5)	28 (49.1)	2 (33.3)		
Community Health Officers	7	1 (14.3)	5 (8.7)	1 (16.7)		
Doctors	5	0	3 (5.2)	2 (33.3)	19.742	0.101
Laboratory scientists	4	0	4 (7.0)	0		
Nurses	19	2 (28.5)	16 (28.1)	1 (16.7)		
Pharmacists	3	2 (28.5)	1 (1.7)	0		

Table 6B: Chi-square analysis showing the relationship between Job satisfaction and socio-demographic Variables.

Denomination						
Anglican	20	1 (14.3)	18 (31.6)	1 (16.6)		
Pentecostal	11	1 (14.3)	9 (15.8)	1 (16.6)	1.527	0.912
Roman catholic	39	5 (71.4)	30 (52.6)	4 (66.8)		
Tribe						
Igbo	69	7 (100)	56 (98.2)	6 (100)	0.231	0.891
Yoruba	1	0	1 (1.7)	0		
Work experience						
1-3yrs	22	5 (71.4)	16 (28.1)	1 (16.6)		
4-6yrs	12	1 (14.2)	10 (17.5)	1 (16.6)		

7-9yrs	4	1 (14.2)	2 (3.5)	1 (16.6)	10.666	0.221
10-12yrs	2	0	2 (3.5)	0		
more than 12 years	30	0	27 (47.3)	3 (50.0)		
Total	70	7 (100)	57 (100)	6 (100)		

*=*significant p-value<0.05*

Table 7A: Chi-square analysis showing the relationship between Job satisfaction and other related Variables

Variable	Total (freq)	Level of Job satisfaction (%)			χ^2-value	p-value
		Ambivalent	Satisfied	Unsatisfied		
Salary						
Indifferent	14	4 (57.1)	9 (15.8)	1 (16.7)		
Dissatisfied	22	2 (28.5)	16 (28.1)	4 (66.6)	11.584	0.021*
Satisfied	34	1 (14.3)	32 (56.1)	1 (16.7)		
Workload						
Indifferent	5	0	5 (8.7)	0		
Dissatisfied	26	3 (42.8)	18 (31.6)	5 (83.3)	6.926	0.140
Satisfied	39	4 (57.1)	34 (59.6)	1 (16.7)		
Flexibilities with work hours						
Indifferent	7	2 (28.6)	5 (8.8)	0		
Dissatisfied	20	2 (28.6)	14 (24.6)	0	7.887	0.096
Satisfied	43	3 (42.8)	38 (66.6)	2 (100)		
Relationship with coworkers						
Indifferent	3	1 (14.3)	2 (3.5)	0		
Dissatisfied	2	1 (14.3)	1 (1.7)	0	5.985	0.230
Satisfied	65	5 (71.4)	54 (94.7)	6 (100)		

Physical working environment						
Indifferent	7	0	7 (12.3)	0		
Dissatisfied	21	3 (42.9)	13 (22.8)	5 (83.3)	10.770	0.043*
Satisfied	42	4 (42.8)	37 (64.9)	1 (16.7)		

Table 7B: Chi-square analysis showing the relationship between Job satisfaction and other related Variables

Distance of workplace from place of residence						
Indifferent	3	2 (28.6)	1 (1.7)	0		
Dissatisfied	20	2 (28.6)	15 (26.3)	3 (50.0)	12.880	0.041*
Satisfied	47	3 (42.8)	41 (71.9)	3 (50.0)		
Benefits						
Indifferent	15	4 (57.1)	10 (17.5)	1 (16.7)		
Dissatisfied	21	3 (42.9)	15 (26.3)	3 (50.0)	10.434	0.012*
Satisfied	34	0	32 (56.1)	2 (33.3)		
Promotion						
Indifferent	11	2 (28.5)	9 (15.8)	0		
Dissatisfied	20	4 (57.1)	13 (22.8)	3 (50.0)	7.829	0.098
Satisfied	39	1 (14.3)	35 (61.4)	3 (50.0)		
Total	70	7 (100)	57 (100)	6 (100)		

**=significant p-value<0.05*

DISCUSSION:

This study's findings demonstrated a notably elevated level of job satisfaction, with 81.4% of the participants expressing contentment with their employment. This outcome aligns with studies conducted in Saudi Arabia as reported by Abu-Helalah et al., 2014, and also in Rivers State, where 97% and 78.3% of respondents respectively expressed satisfaction with their workplace's general working conditions (Abu-Helalah et al., 2014; Azuike, 2018). Similarly high levels of job satisfaction were documented in Lao PDR (Khamlub et al., 2013) and Sweden (Nikic et al., 2008). This contrasts with a study conducted in Punjab, India, where three-quarters of respondents expressed dissatisfaction with their working conditions. In the current study, out of all participants, 81.4% were content with the nature of their job, 8.57% reported dissatisfaction, and 10% had mixed feelings.

Approximately two-thirds of the participants, 47 participants (67.1%), expressed contentment with the proximity of their workplace to their residential area. In contrast, 20 individuals (28.6%) reported dissatisfaction, and 3 individuals (4.3%) held ambivalent feelings. This contrasts with a study conducted in Rivers State, where nearly two-thirds of respondents expressed dissatisfaction with the distance of their workplace from their residences (Azuike, 2018).

In terms of the physical working environment within their Primary Health Care facility, 42 respondents (60.0%) indicated satisfaction. Additionally, 34 respondents (48.6%) expressed satisfaction with their salary, and 39 respondents (55.7%) were content with the potential for promotions at their workplace.

In the realm of work relationships, a significant 60 respondents (92.9%) conveyed contentment with their interactions with co-workers. This echoes findings from a study conducted in Rivers State, where nearly all respondents expressed satisfaction with their work relationships (Kadiri-Eneh et al., 2018). This attribute holds the potential to elevate job satisfaction, as it indicates a work environment where collaboration between supervisors and subordinates is commonplace for discussing job-related tasks and decisions (Campbell et al., 2014). In an environment characterized by meeting worker expectations and effective communication, the likelihood of higher retention is usually elevated (Campbell et al., 2014).

When looking at job satisfaction scores collectively, doctors exhibited lower levels of satisfaction in comparison to nurses, lab scientists, community health officers (CHOs), and community health extension workers (CHEWs). This finding corresponds with a study conducted in Kano by Yakasai et al., 2013.

Additionally, 43 respondents (61.4%) expressed contentment with the duration of hours spent at work, while 34 respondents (48.57%) reported satisfaction with the benefits derived from their work.

Conclusion: This study has shown that primary health workers in the study area had a high level of job satisfaction. The workers' Salary, physical working environment, distance of workplace from place of residence and benefits were significant factors found to affect job satisfaction ($P<0.05$).

Special allowance schemes should be instituted for primary healthcare workers to encourage their stay in rural areas.

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Author contributions:

S.I.E. (Nnamdi Azikiwe University, Awka, Nigeria) Conceived and carried out the research, and participated in protocol writing, data analysis, manuscript writing and review. D.I.M (Nnamdi Azikiwe University, Awka Nigeria) implementation and revision of the manuscript. C.C.E. (Nnamdi Azikiwe University, Awka, Nigeria) Conceived and carried out the research with the guidance of D.I.M. and S.I.E., participated in protocol writing and review of the manuscript. C.S.E. (Department of Medicine, America University of Barbados, Barbados) was involved in the writing of the protocol as well as the review of the manuscript. A.L.O.N. (Nnamdi Azikiwe University, Awka, Nigeria) Participated in manuscript writing and review. B.E.E. (St Charles Borromeo Hospital, Onitsha, Anambra State, Nigeria) Participated in manuscript writing and review. G.I.U. (Federal Medical Centre, Asaba) Participated in manuscript writing and review. U.C.O. (Nnamdi Azikiwe University, Awka, Nigeria) Participated in manuscript writing and review. The authors

read and approved the final manuscript and agreed to be accountable for all aspects of the work.

Data availability:

The data used to support the findings of this study are available from the corresponding author upon reasonable request.

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Conflict of interest: The authors hereby declare that they have no financial or personal relationship(s) with anybody/organization whatsoever that may have inappropriately influenced them in writing this article.

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