



Contributing Factors to Challenges of Oral Health Care Services among Health Care Professionals in Anambra State

*¹Okoli Scholastica Chidi, ²Onwuzuluigbo Nneka Ijeoma, ¹Ngwu Justina Nnenna, ¹Ohadoma Angela Nkechi, ¹Enebechi Paul Chika, ¹Obeta Jonas Chinwendu

¹Department of Dental Therapy, Federal College of Dental Technology and Therapy Enugu. Enugu State

²Dental Therapy Clinical Services Chukwuemeka Odimegwu Ojukwu University Teaching Hospital Amaku Awka Anambra State

*Corresponding author: E-mail: scholasticaokoli@yahoo.com ;Phone 08037243251

Abstract

This study assessed challenging factors to oral health care services among health care professionals in Anambra state. The descriptive survey design was utilized for the study. The population for the study was 77 oral health care professionals working in Anambra State. The sample size comprised 70 oral health care professionals that consented and present in different hospitals in Anambra State as at the time of data collection. This comprised of 33(47.15%) males and 37(52.85%) females. The instrument for data collection was a researcher-designed questionnaire on contributing factors to challenges of oral health care services among health care professionals. The reliability coefficient was 0.75. It was face and content validated by three experts from the Department of Dental Therapy, Federal College of Dental Technology and Therapy, Enugu. Frequencies and percentages were utilized to answer the research questions. 47(62.22%) of the respondents accepted that some challenges such as non-attendance, limited centers, limited oral health professionals, lack of facilities, ignorance, culture, myths and poor public dental health education affect utilization of oral health care services while 23(37.78%) did not accept these challenges exist. 46(64.47%) of the respondents perceived individual factors as a contributory factor to the challenges affecting oral health care services. 36(52.37%) accepted socio economic factors as a contributory factor to the challenges affecting oral health care services. 34(47.28%) accepted health system factors as a contributory factor to the challenges affecting oral health care services. The researchers recommended the institution of mobile dental clinics and oral health education campaign train to ensure wider coverage for all communities in Anambra State.

Keywords: Oral health, Contributory factors, Challenges, Oral health professionals, Public dental health education

Introduction

Oral health is the wellbeing of the mouth, encompassing many essential functions, including breathing, eating, speaking, smiling and socializing. Experiencing good Oral health comfortably and confidently, enables an individual to achieve their full capacity and participation in society. Oral health is integral to overall health, well-being and quality of life, from birth to old age.(WHO, 2021). Oral health is defined as a state of being free from mouth and facial pain, oral and throat cancer, oral sores, birth defects such as cleft lip and palate,



periodontal disease, tooth decay and tooth loss and other diseases that affect the oral cavity (WHO, 2010). Oral health has been demonstrated to be an integral component of general health and overall wellbeing and not merely the absence of disease or infirmity (Singh & Purohit, 2012).

Oral health services are those services which are designed to promote, maintain or restore oral health. In developing countries, oral health services are mostly offered from regional or central hospitals of urban centers and based on either private or public system (WHO, 2013). Oral health care services ideally should be available at the three tiers of health care services; that is at the primary health care level, secondary health care level and tertiary health care level. The Nigerian oral health policy mission is to improve the level of oral health of Nigerians through the development and promotion of accessible, effective, efficient and sustainable oral health system based on prevention, early detection and prompt treatment of oral diseases, using evidence-based interventions. The strategies and institutional framework is to utilize the community committee, primary, secondary and tertiary health care system to achieve optimal oral health at each level.

Oral health being an integral part of general health should be made available to the public. It should be accessible at the three tiers of health care; that is at the primary, secondary and tertiary health care services. The National Oral Health Policy (NOHP) advocated provision of oral health services at these tiers of health services, however the national oral health care program is still undergoing implementation in Nigeria (Quadri, 2013).

The oral health care professionals (OHP) include members of the dental team involved in the preventive, restorative, curative and rehabilitative oral care services (Federal Ministry of Health [FMOH], 2021). Typically, general dentists, dental therapist, dental technologist, dental nurses and dental hygienists provide oral care. Dental assistants and dental laboratory technicians provide support for care. In rural areas, new mid-level providers, such as advanced dental hygiene practitioners and dental therapists, are being used to help expand access to care. They are integrated into the primary health care system to function and the referral system is utilized to ensure wide and adequate coverage. In Nigeria, the oral health policy exists but has not been implemented. If implemented, the burden of oral diseases will be reduced and all oral health care professionals will be adequately distributed to all the health care levels. The choice of these cadre of health care professionals is because they are the ones directly responsible for oral health care services provision to individuals.

Oral health care in Nigeria, like other developing countries, is essentially dependent on the overall health system. Also, oral health services are still sparsely rendered in most Primary Health Centres (PHCs) across the Nigeria. (Amedari, 2020). Moreover, the Nigerian oral health system is still plagued with a lack of resources and is significantly overstretched. Oral health care is generally expensive and it is neither available nor accessible in rural communities. The integration of oral health care with existing PHCs, as promulgated in the National Oral Health Policy (NOHP), has been on a slow trajectory because, amongst other factors, the policy has not been backed with the requisite resources for its full implementation. The Primary Health Care Centres across the country remain vital to oral health services (OHSS) in Nigeria. Moreover, with proper dissemination, the NOHP will be instrumental to this process. However, beyond the formulation, development and review plans, its full implementation is more important especially at the PHCs. Actualization of its goals for human resource for health development, financing of oral health care, integrated delivery of services, oral health promotion and research, monitoring and evaluation are crucial to OHSS in Nigeria (FMOH, 2021)



In Anambra State, oral health services are provided only in the tertiary and secondary health care services. The primary health care services have no provisions for oral health care services. The rural dwellers at the primary health care level at the grassroots are deprived of such services and that is where majority of the population reside. This lack of oral health services is due to non-availability of material and human resources to kick start the units. Moreso, all dental professionals within the state reside in the urban areas (Ministry of Health Anambra State (MOHA), 2015).

Challenge is a situation, task, or problem that is difficult, new or complex and presents the possibility of testing skills or resources and being interpreted as or transformed into an opportunity. (Horikoshi, 2023). Challenge is defined as a demanding task or situation. Challenges to seeking oral health services have been identified to include; individual factors, socio economic factors and health system factors. Challenges in this context are the hindrances, obstacles, bottle necks and problems that mitigate oral health care services in Anambra State. Challenges to oral health care services can be greatly influenced by various factors related to lack of knowledge on oral diseases and the type of oral health care services offered in the facilities. Poor Access to oral health services due to distance, long waiting hours, high cost of services, dental fear and anxiety and lack of perceived need to seek services unless in pain. Other factors could be geographical misdistribution of oral health professionals within the state. Myths, cultural attitudes and values, level of education (Khan et al., 2022).

Uguru et al. (2021) disclosed that access to oral healthcare is mainly influenced by geographic location, educational status, socioeconomic status, oral health awareness and toothache. The contributing factors to challenges of oral health care services have been grouped to include individual factors, socioeconomic factors and health system factors. (Khan et al., 2022), The study findings would be a data base for the policy makers to review and adequately integrate oral health care services across the health care services within Anambra State.

Purpose of the Study

The main purpose of this research work was to assess the factors contributing to challenges to oral health care services among oral health care professionals in Anambra state. Specifically, the study determined the:

1. challenges of oral health services among oral health care professionals;
2. factors that contribute to oral health care services challenges among oral health care professionals.; and
3. factors that contribute to oral health care services challenges among oral health care professionals based on gender.

Research Questions

1. What are the challenges of oral health care services among oral health care professionals?
2. What factors contribute to oral health care services challenges among oral health care professionals?
3. What factors contribute to oral health care services challenges among oral health care professionals based on gender?



Methods

This study adopted a descriptive survey research design. Area of the study was Anambra state. Anambra State is a state in southeastern Nigeria. The state has a total of 21 local governments with Awka as the State capital. The study was carried out in all the government hospitals that have dental clinics in Anambra State. They include; General hospital Enugwu-ukwu, General Hospital Ossomala, General Hospital Ogidi, General Hospital Umuleri, General Hospital Ekwulobia and General Hospital Onitsha (Source: Administration Department, Ministry of Health Anambra State, 2019). The oral health professional in government hospitals Anambra State are seventy seven(77) in number, which includes the Dental Therapists, Dental Technologists and Dental surgeons. Only 70 oral health professionals that gave their consent participated in the study. These include; 25 dental therapists, 20 dental technologists and 25 dental surgeons. A researcher structured questionnaire on factors contributing to challenges to oral health care services among health care professionals was used for data collection. The questionnaire had two sections, section A consist of demographic data with three questions and section B consisting of eleven questions related to the research questions that guided the study. The responses were a yes or no option. The reliability was 0.75 using chi square statistics at 0.05 level of significance. The questionnaire was distributed and retrieved on the spot by the researchers. The data collected was analyzed using frequency and percentages. A percentage score of 50 per cent and above was interpreted as high challenge and below 50 per cent was interpreted as low challenge.

Results

Table 1: Challenges to Oral Health Care Services among Oral Health Professionals (n=70)

Challenges	YES.	NO
	f(%)	f(%)
1. Non attendance.	47(67.14).	23(32.86)
2. Limited centers.	65(92.86).	5(7.14)
3. Limited oral health professionals	50(71.43).	20(28.57)
4. Lack of facilities.	65(92.86).	5(7.14)
5. Ignorance.	40(57.14).	30(42.86)
6. Culture.	10(14.29).	60(85.71)
7. Myths and beliefs.	38(54.29).	32(45.71)
8. Poor public dental health education.	60(85.71).	10(14.29)
Overall percentage	62.22	37.78

Table 1 shows that overall the challenges to oral health care services as perceived by oral health care professionals in Anambra State is high with 47(62.22%). Limited oral health care



centers and lack of facilities posed the highest challenge with 65(92.86%), followed by poor public dental health education at 60(85.71%). Limited oral health professionals was 50(71.43%) followed by non-attendance at 47(67.14%), ignorance 40(57.14%), myths and beliefs 38(54.29%) and the least was culture with 10(14.29%).

Table 2: Factors Contributing to Challenges to Oral Health Care Services Challenges among Oral Health Care Professionals (n=70)

Factors	Frequency. f(%)	Number of males. f(%)	Number of females f(%)
1. Individual Factors.			
a. Fear.	39(55.71).	20(51.28).	19(48.73)
b. Anxiety.	45(64.28)	22(48.89)	23(51.11)
c. Perceived need.	50(71.42)	20(40.00)	30(60.00)
d. Oral health literacy.	60(85.71)	26(43.33)	34(56.67)
e. Finance.	40(51.14)	16(40.00)	24(60.00)
f. Lack of access.	44(58.57)	27(61.36)	17(38.64)
Cluster average	6(64.47)	22(47.48)	24(52.52)
2. Socio Economic Factors			
a. Income.	15(21.42)	5(33.33)	10(66.67)
b. Education.	50(71.42)	27(54.00)	23(46.00)
c. Occupational status.	45(64.28)	23(51.11)	22(48.89)
Cluster average	36(52.37)	18(46.14)	18(53.85)
3. Health System Factors			
a. Geographical.	46(65.71)	20(43.47)	26(56.52)
b. Transportation system.	10(14.28)	2(20.00)	8(80.00)
c. Poor attitude of OHP.	12(17.14)	3(25.00)	9(75.00)
d. Finance (cost of oral health services).	59(84.28)	27(45.76)	32(54.24)
e. Waiting time.	30(42.85)	20(66.67)	10(33.33)
f. Opening hours.	40(51.14)	22(55.00)	8(45.00)
g. Availability of services.	52(74.28)	24(46.15)	28(53.85)
h. Communication and attitude of OHP.	20(28.57)	7(35.00)	13(65.00)
Cluster average	34(47.28).	16(42.13).	18(57.87)
Overall average	39(57.70).	19(45.25).	20(54.75)

Table 2 shows the factors that contribute to challenges of oral health care services. Individual factors had a high cluster average of 46(64.47%). cluster average for males was 22(47.48%) which is lower than the cluster average for female respondents at 24(52.52%). Oral health literacy as a contributory individual factor was the highest at 60(85.71), followed by perceived need at 50(71.42%), anxiety 45(64.28%), lack of access 44(58.57%), finance 40(51.14%) and fear 39(55.71%).



The socio economic factors had a high cluster average of 36(52.37%) with the male respondents cluster average at 18(46.14%) and the female respondents cluster average at 18(53.85%). Education was the highest contributory factor to challenges affecting oral health care services with 50(71.42%) followed by occupational status 45(64.28%) and the least was income at 15(21.42%).

Health system factors as a contributing factor had low cluster average of 34(47.28%) with male respondent cluster average at 16(42.13%) and the female respondent cluster average at 18(57.87%). Finance (high cost of oral health care services) had the highest at 59(84.28%), availability of services 52(74.28%), Geographical 46(65.71%), opening hours 40(51.14%), waiting time 30(42.85%), communication and attitude of OHP 20(28.57%), poor attitude of OHP 12(17.14%) and the least was transportation system with 10(14.28%).

Discussion

The results from Table 1 revealed that the challenges to oral health care services as perceived by oral health care professionals in Anambra State are high with. Limited oral health care centers and lack of facilities posed the highest challenge, followed by poor public dental health education. Limited OHP was followed by non-attendance, ignorance, myths / beliefs and the least was culture. This is in agreement with the findings of Okeigbemen and Nnawuihe (2015) and Uguru, et al. (2021) where these factors were identified as challenges to oral health care services. These could be attributed to fear for and cost of oral health care services or procedures.

The findings revealed in Table 2 the factors that contribute to challenges affecting oral health care services. Individual factors had a high cluster average, the cluster average for males was lower than the female respondents. Oral health literacy as a contributory individual factor was the highest, followed by perceived need, anxiety, lack of access, finance and fear. These findings are in agreement with the studies by Ajayi and Arigbede (2012), Jain et al (2013) and Aikins and Braimoh (2015).

The socio economic factors had a high cluster average with the male respondents and the female respondents at close range. Education was the highest contributory factor to challenges affecting oral health care services followed by occupational status and the least was income. The findings are in alignment with the findings of Okeignemen and Nnawuihe (2015) and Uguru et al (2021) where these socio economic factors were identified as challenges to oral health care services.

Health system factors as a contributing factor had low cluster average with male respondent cluster average being lower than the female respondent cluster average. Finance (high cost of oral health care services) had the highest, availability of services, Geographical, opening hours, waiting time, communication and attitude of OHP, poor attitude of OHP and the least was transport system. The findings are in concord with the works of Adeniyi, Sofola and Kalliecharam (2012), Jain et al (2013) and Okeignemen and Nnawuihe (2015).

Conclusion

Oral health services challenges are high in Anambra State. Individual factors are the most contributing factors to oral health care services in the study area. Hence the provision public dental health education, community enlightenment on oral health services will reduce challenges to oral health care services within Anambra State. There is need for inclusion of oral health education into the school curriculum. The media houses should be used as tools for dissemination of oral health education. Oral health professionals can utilize the social



Media for oral health enlightenment. The state government can introduce mobile dental clinics and community outreach programs. Recruitment of more oral health professionals to spread the reach of oral health services to all areas of the State.

References

- Adeniyi, A. A., Sofola, O. O. & Kalliecharan, R. V.(2012) An appraisal of the oral health care system in Nigeria. *International Dental Journal*.
- Aikins EA & Braimoh O.B (2015). Utilization of dental services among civil servants in Port Harcourt, *Nigerian Journal of Dental Research Reviews* 2:62-6.
- Ajayi DMI & Arigbede A.O (2012). Barriers to oral health care utilization in Ibadan, South West Nigeria. *African Health Sciences* 20(4): 507 - 513.
- Amedari, M. I. (2020) Primary oral health care in Nigeria; four decades after the Alma Ata declaration. *PAMJ One Health*; 2:1-3.
- Armfield, J.M. & Heaton, L.J. (2013). Management of fear and anxiety in the dental clinic: a review. *Australian Dental Journal* 58: 390–407.
- Arineitwe, S. (2023) Factors Affecting Utilization of Oral and Dental Services Among Patients Attending Dental Clinic at Katate Health Center 1V , Kanungu District. A Cross sectional Study. *Students Journal of Health Research*. ISSN 2709 - 9997.
- Chee G, Pielemeier N, Lion A, Connor C.(2013) Why differentiating between health system support and health system strengthening is needed. *Int J Health Plann Manage*; 28:85-94.
- Esan, A., Folayan, M.O., Egbetade, G.O. & Oyedele, T. A. (2015)Effect of a school-based oral health education programme on use of recommended oral self-care for reducing the risk of caries by children in Nigeria. *Int J Paediatr Dent*; 25:282-90.
- Federal Ministry of Health (FMOH)(2021) National Oral Health Policy. Available from: <https://www.health.gov.ng/doc/ORALHEALTHPOLICY.pdf>. [Last accessed on 2021 Dec 24.
- Fotedar, S., Sharma, K .R., Bhardwaj, V. & Sogi, G.M. (2013). Barriers to the Utilization of Dental Services in Shimla, India. *Eur J Gen Dent* 2:139-43.
- Horikoshi, K. (2023) The Positive Psychology of Challenge: Towards Interdisciplinary Studies of Activities and Process Involving Challenges.*Frontiers in Psychology* 13:1090069.
- Jain V K, Sequeira. P, Jain. J, Chancy U, Maliyil MJ & Bhagwandas SC (2013). Barriers in Utilization of Oral Health Care Services Among Patients Attending Primary and



- Community Health Centres in Virajpet, South Karnataka. *Natl J Med Dent Res* 1(3) : 39-47.
- Khan, A J. Sabri, B. M. & Ahmad, M. S. (2022) Factors Affecting Provision of Oral Health Care for People with Special Needs: A Systemic Review. *Saudi Dental Journal* 34(4) : 527 - 537.
- Ministry of Health, Anambra (2015). Annual Joint Review Report (unpublished report).
- Okeigbemen, S. A. & Nnawuihe, C.U. (2015) Oral Health Trends and Services Utilization at a Rural Outreach Dental Clinic Udo, Southern Nigeria. *Journal of international Society for Community Dentistry* 5(2)118-122
- Quadri, S. (2013). The role of dental therapists in achieving National Oral Health Policy in Nigeria. *Journal of Oral Health*, 1(1), 24-25.,
- Uguru, N., Onwujekwe, O., Ugwu C.C. & Ogu, U. (2021). Achieving universal health coverage in Nigeria: the dilemma of accessing dental care in Enugu state, Nigeria, a mixed method study. *Heliyon*, 7(2021), e05977.
- Vashisth, S., Gupta, N., Bansal, M. & Rao, N.C. (2012). Utilization of Services Rendered in Dental Outreach Programs in Rural Areas of Haryana. *Contemporary Clinical Dentistry*; 3 Supplement.
- World Health Organization (WHO) (2015). Oral Health Services, Priority Action Areas. http://www.who.int/oral_health/action/services/en/
- World Health Organization (2021) WHO Discussion Paper: Draft Global Strategy on Oral Health.