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Knowledge and Practice of Oral Habits in Children



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Knowledge and Practice of Oral Habits in Children by Medical Practitioners at The Lagos State University Teaching Hospital

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Abstract

Background: Oral habits existing beyond the age of 4 years are a major risk factor for malocclusion, which negatively impacts on the functional and psychosocial well-being of a child. The majority of these patients present first to a physician, which is why their ability to detect these habits and refer them to the orthodontist is crucial. The purpose of this study was to assess the knowledge and practice of medical practitioners at the Lagos State University Teaching Hospital (LASUTH) concerning oral habits in children.

Methods: A survey was conducted among medical resident doctors in LASUTH. Questionnaires were distributed through an online data collection platform. Data collected was analysed using SPSS IBM 2023.

Results: A majority of the respondents (57.8%) were unaware that malocclusions are more likely to develop in children with oral habits. Although 93.3% agreed that patients with oral habits should be referred to paediatric dentists, only 66.7% (n = 120) of the respondents referred their patients.

Conclusion: The results showed inadequate knowledge and practice concerning oral habits in children by medical practitioners. This highlighted the need to educate more medical practitioners about oral habits and their effects on occlusion.

Keywords: Knowledge, practice, medical practitioners, oral habits

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ORIGINAL ARTICLE

Introduction

Oral habits are repetitive patterns of behaviour involving the oral cavity.[1] These are frequently encountered in dental practices and are regarded as a developmental trait until the age of 4.[2] Thereafter, the persistence of an oral habit may predispose to malocclusion which could negatively impact the morphology of the dentoalveolar structures as well the psychosocial well-being of the child.[3,4] These habits include activities such as digit sucking, tongue thrusting, mouth breathing, nail biting, lip sucking and bruxism.[2]

Malocclusion is an abnormal jaw relationship, it has been reported as the second most common dental issue encountered in children and adolescents.[5] It affects oral health, aesthetics, and functions such as mastication and speech. Medical practitioners play a vital role as the initial point of care for children and parents. Early diagnosis and referral by medical practitioners could improve the psychosocial well-being of the child as well as reduce the need for complex and costly orthodontic treatment later in life. Evaluation of the knowledge and practices of medical practitioners about oral habits could highlight their expertise in the identification and management of children with these habits.

Therefore, the aim of this study was to evaluate the knowledge and practice of medical practitioners in Lagos State University Teaching Hospital (LASUTH) about oral habits in children.

Materials and methods

The ethical approval for this study was obtained from the Health and Research Ethics Committee of LASUTH. It was a descriptive cross-sectional study carried out among medical resident doctors at Lagos State University Teaching Hospital (LASUTH). A total of 180 medical resident doctors were recruited for this study using convenience sampling. Consenting medical practitioners undergoing residency programs in LASUTH were included in this study. Dental resident doctors, allied health professionals, and non-consenting medical resident doctors were excluded from the study.

Data collection was done using anonymous electronic questionnaires on Google Forms shared via medical resident doctors' WhatsApp platform. Data collected included sociodemographic data, knowledge of oral habits and management of oral habits. Data was analysed using SPSS version 20 (IBM SPSS Inc., Chicago, IL, US).

Univariate analysis was done to determine the response rate, proportions and frequencies.

Results

A total of 228 medical professionals received electronic surveys via the WhatsApp platform, with a response rate of 78.89%. Of these, 57.8% were females while 42.2% were males. The respondents' sociodemographic characteristics are shown in Table 1.

Table 1: Socio-demographic characteristics of respondents

Variable	Frequency(n=180)	Percentage
Age group (Years)		
20-30	34	18.9
31-40	104	57.8
41-50	41	22.8
>50	1	0.6
Gender		
Female	104	57.8
Male	76	42.2
Marital		
Single	52	28.9
Married	125	69.4
Separated	3	1.7
Years of experience		
≤5	37	20.6
6-10	73	40.6
11-15	57	31.7
>16	11	6.1

Specialities		
Family medicine	26	14.4
Internal medicine	22	12.2
Obstetrics and Gynaecology	17	9.4
Paediatrics	16	8.8
Anaesthesia	15	8.3
Ophthalmology	11	6.1
Radiology	10	5.6
General Surgery	9	5.0
Psychiatry	6	3.3
Haematology	4	2.2
ENT	4	2.2
Community medicine	3	1.7
Oncology	3	1.7
Orthopaedics	3	1.7
Emergency medicine	2	1.1
Surgical Emergency	1	0.6
Pathology	1	0.6
Nephrology	1	0.6
Urology	1	0.6
Public Health	1	0.6
CTSU	1	0.6
Behavioural medicine	1	0.6

Concerning knowledge, respondents agreed that oral habits (42.3%), preterm and low birth weight (38.9%) as well as snoring and mouth breathing (45%) could predispose to malocclusion (Figure 1). Fewer respondents (33.3%) agreed that breastfeeding beyond six months may predispose to oral habits while 45% agreed that long-term bottle and breastfeeding may predispose to oral habits (Figure 1).

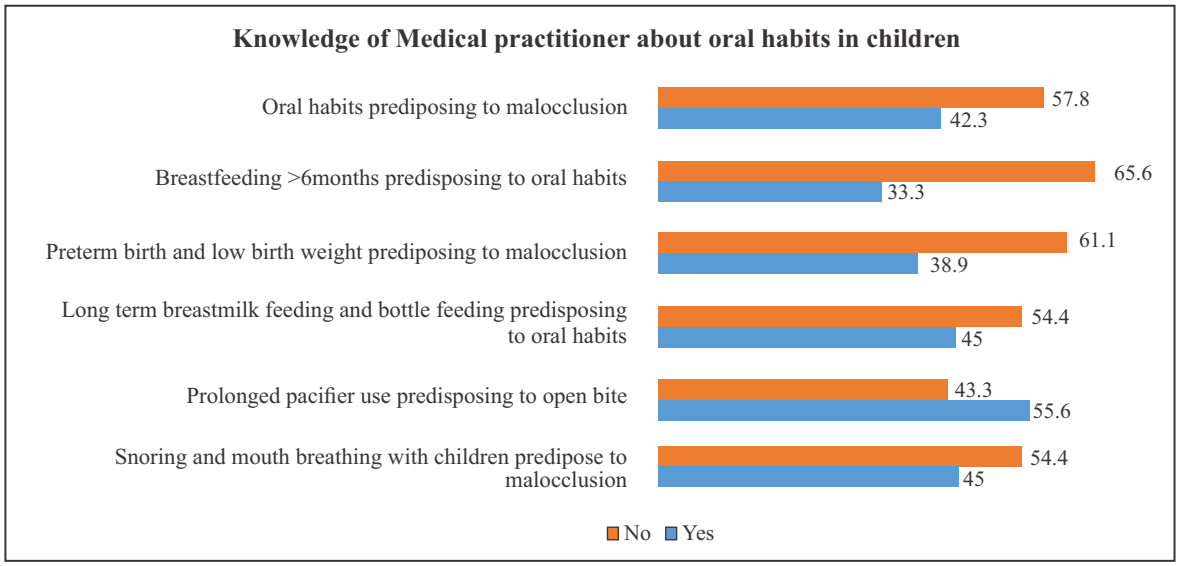


Figure 1: Respondents' knowledge of oral habits in children.

Figure 2 shows the results of the practice of medical practitioners towards oral habits in children. Few respondents evaluate their patients for oral functional habits (25%) and malocclusions (19.4%). However, the majority of respondents refer patients with malocclusion or oral habits to a paediatric dentist (66.7%).

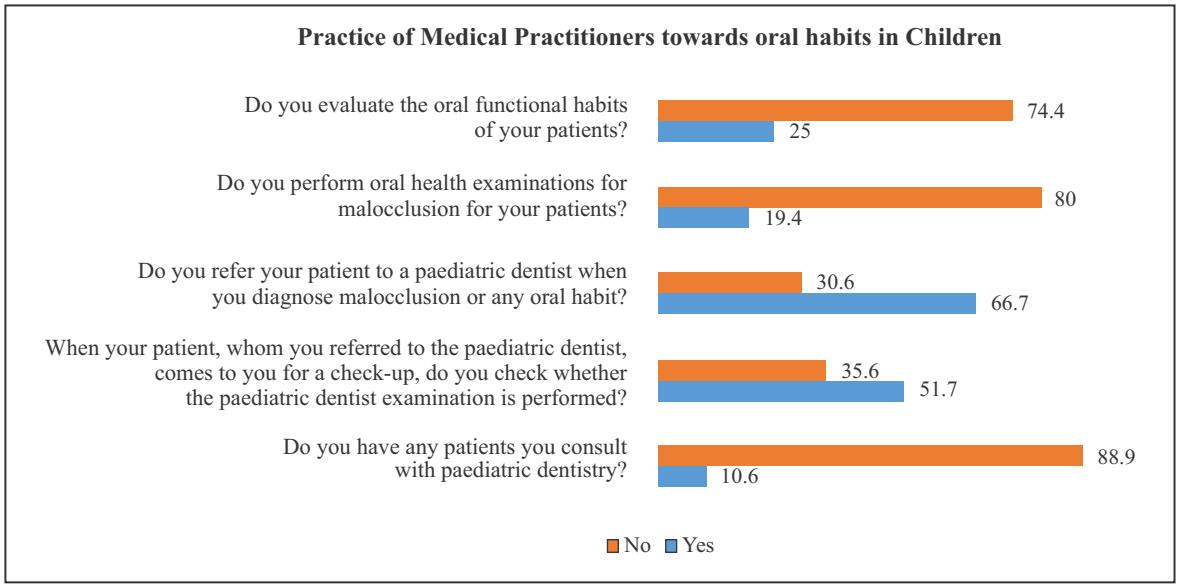


Figure 2: Respondents' practice about oral habits in children

Discussion

Oral health care and preventive education improve the chance for children to have a life free of oral disease; therefore, it is important that medical practitioners have a solid fundamental knowledge of oral habits to build good oral health-seeking behaviour in children and their caregivers, thus providing the patient with the necessary care he or she requires.[6]

This present study was carried out to assess the knowledge of medical practitioners across the different specialties in LASUTH about oral habits in children, as well as their practice towards these habits.

The present study highlighted variations in knowledge and practices among medical practitioners in LASUTH where this study was carried out. The results from this present study showed that the majority of respondents had no knowledge that oral habits such as snoring and mouth breathing and predisposing factors in children such as prolonged breastfeeding and bottle feeding, may cause the development of malocclusions in children. This is similar to findings reported by Maden et al[7] and Sharma et al[8] from their cross-sectional studies carried out among Turkish medical practitioners and Indian paediatricians respectively. Similarly, the majority were unaware that preterm birth and low birth weight may predispose to malocclusions. However, the majority of respondents in this present study agreed that prolonged pacifier use could predispose to the development of malocclusions such as open bite in agreement with findings reported by Maden et al.[7] The low level of knowledge may be attributed to a lack of oral health competencies in the education and training of medical practitioners.[10,11] The findings from this study revealed that the majority of respondents referred children with oral habits to the paediatric dentist consistent with findings reported by Maden et al[7] carried out in

Turkey amongst medical practitioners. However, this was contrary to findings in India reported by Kumar et al[12] from their cross-sectional study among paediatricians in India where 70% of respondents did not refer children with oral habits. This may be attributable to the variations in the population sampled and methods.

Fewer respondents routinely evaluated their patients for malocclusion and oral habits (Figure 2). This behaviour was reported in previous studies by Alshunaiber et al[13] and Di Giuseppe et al[14]. This poor tendency to diagnose malocclusion and oral habits and refer appropriately may be related to limited knowledge of orthodontics as a speciality, among medical specialties or lack of awareness of the impact of malocclusion on the health and general well-being of the patient.[12] However, another study reported by Indira et al[15] found the practice among paediatricians concerning oral habits to be high. These variations may be attributed to differences in the study populations and methods.

Conclusion

This study was able to demonstrate the knowledge gap among medical professionals on oral habits. The results showed poor knowledge and practice of medical practitioners towards oral habits in children. It is essential that medical practitioners who are more likely to see children much earlier than dentists are knowledgeable about the deleterious effects of oral habits.

Recommendations

1. Promote collaboration between medical practitioners and dentists in patient management for a more comprehensive approach.
2. Increase awareness and education among medical professionals about dental-related issues, their impacts, and the benefits of early detection and treatment. This can be achieved by integrating dental education into medical training programs.

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