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Consent Practice: Where are the Nigerian Orthodontists in this?

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Abstract

Objective: Orthodontic procedures can be noninvasive or invasive. Any of them could lead to some facial changes, so it is pertinent to have an ethical cover before treating patients. The study aims to assess the utilization of consent processes before treatment by Nigerian orthodontic practitioners.

Materials and Methods: A self-administered Google-based questionnaire of 2 sections (A and B) was used to elicit information concerning socio-demographic data, attitude of obtaining consent for treatment by orthodontic practitioner, knowledge of different forms of consent, orthodontic procedures consent is obtained for, and the practice of obtaining consent before orthodontic treatment. The data obtained were analyzed using IBM SPSS version 27, using descriptive statistics (percentages and frequencies). The test of significance was set at $p \leq 0.05$.

Results: Sixty-six orthodontic practitioners were involved in the study, females (46, 69.7%), males (20, 30.3%). All participants thought obtaining consent for dental treatment was necessary and same for orthodontic treatment. Forty-nine (74.2%) were found to routinely obtain consent from their patients before treatment and informed consent was the most favoured type for most orthodontic procedures. Most orthodontic practitioners (43, 65.2%) routinely obtain written consent from patients, and fixed appliance therapy was the procedure with the most (24, 36.3%) obtained written consent.

Conclusion: Informed consent was obtained for most orthodontic procedures done in Nigeria, though written consent was obtained more for fixed appliance therapy. Most orthodontic practitioners in the teaching hospital routinely obtained written consent from their patients.

Keywords: Orthodontic Practitioner; Written Consent; Fixed Appliance Therapy; Practice; Routine

1. Introduction

Consent can be said to be a voluntary and continuing permission of a patient so as to receive a particular treatment [1]. It is the result of a two-way communication process between the oral health practitioner/ orthodontist and the patient and there may be third-party involvement with a parent or guardian giving rise to a tripartite relationship [2, 3]. Orthodontic treatment is a form of dental treatment, that aims to provide patients with optimum dento-facial aesthetics, functional and a stable occlusion [4]. For a consent to be useful, it has to be valid. A valid consent, therefore, is generally a legal and ethical principle that is fundamental to all healthcare and necessary for the protection and well-being of patients and the oral health practitioner [5]. It is pertinent that orthodontists treat their patients with utmost respect and their interests considered at all times [6]. When an orthodontist sees the need for a patient to undergo orthodontic

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treatment, it is expected that the treatment should be based on a risk-benefit analysis [7, 8]. This will be achieved through the process of informed consent. The informed consent process has three main goals which are: to inform patients about the necessary details as regards their treatment, to document that the patient was informed, and to establish patients' voluntary and autonomous decision to undergo the treatment or participate in research [9]. For a patient to be adequately informed, the patient-orthodontist relationship is established on trust and the informed consent obtained is the fulfillment of the legal obligation that the patient is aware of the clinical situation to the best of his/her knowledge [10]. Any treatment that a patient has not fully and freely consented to, leaves the practitioner open to allegations of negligence [11]. It was discovered that the less educated patients are, the less information the physicians disclose to them and the less dissatisfied they are with information disclosed to them [12]. There are various forms of consent and knowing which procedure each can be obtained for by the orthodontist is useful. In medical practice, consent can be either expressed or implied. Consent being expressed can be done in writing or orally, though the kind of procedure required often determines which one is appropriate. Express consent should be obtained for procedures with attendant risk after adequate explanations have been made and necessary information made available to the patients that consent given is from an informed person. However, implied consent is seen from a behaviour or action in agreeing to take part in a procedure or treatment. In dental practice, the act of a patient walking into the clinic and sitting on the dental chair is often seen as an implied consent to his or her dental treatment. This form of consent is limited in nature as it applies only to minor procedures and where invasive procedures are required, a written consent is necessary [13]. Another form of consent is surrogate consent. Whatever consent is to be utilized, it should mainly depend on the procedure to be carried out. It is therefore important for the Nigerian orthodontic practitioner to be aware of the procedures each could be used for to avoid being found culpable. The study therefore was to assess the utilization of consent by Nigerian orthodontists in the management of their patients in the 21st-century practice of orthodontics where patients are very much aware of their rights as patients, and information readily available on the internet/ web.

2. Materials and Methods

It was a descriptive Google-based questionnaire study that was cross-sectional in nature involving sixty-six Orthodontists practicing in Nigeria with a response rate from participants being more than 80%. A 14-item Google form questionnaire was administered via emails and the Nigerian Association of Orthodontists WhatsApp platforms. The questionnaire was divided into two sections: Part A asked questions on socio-demographic data and Part B gathered information on the attitude of obtaining consent for treatment by the Orthodontist, Knowledge of different forms of consent and the orthodontic procedures consent are obtained for, and the practice of obtaining consent before orthodontic treatment. A consent box was provided for, in the Google form for those who accepted to be a part of the study before proceeding to answer other questions. The data obtained were analyzed using IBM version 27, using descriptive statistics (percentages and frequencies). The test of significance was set at $p \leq 0.05$. Ethical clearance was duly obtained from the University of Port Harcourt Teaching Hospital Ethics and Research Committee.

3. Results

Orthodontic practitioners in Nigeria involved in the study had a mean age of 43.7 ± 9.26 years of which 46 (69.7%) were females and 20 (30.3%) males. Based on the institution of practice, orthodontic practitioners at the teaching hospital had the highest percentage representation of 66.7% while those in the general hospital had the least representation with 9.1%. All participants, 100% thought obtaining consent for dental treatment was necessary and same for orthodontic treatment. Forty-nine (74.2%) of the participants were found to practice routine obtaining consent from their patients before orthodontic treatment while 17 (25.8%) were found not to have such routine practice.

Knowledge of Consent Types: Table 1 shows that most participants 64(97%) showed knowledge of informed consent, and 57 (86.4%) also said they were aware of verbal consent. , Forty-nine (74.2%) of the participants showed knowledge of implied consent and the least consent known by the participants was surrogate consent, 14(21.%).

Table 1 Consent types that Nigerian Orthodontists are aware of

Type of Consent	Frequency (Percentage)
Informed Consent	64(97%)
Verbal Consent	57(86.4%)
Implied Consent	49(74.2%)

Expressed Consent	32(48.5%)
Surrogate Consent	14(21.2%)
None	0(0%)

Table 2 Orthodontic procedures that Nigerian Orthodontists obtain consent for

S/N	Orthodontic procedures	Type of Consent	Frequency (Percentage)
	Removable Appliance Therapy	Implied Consent Expressed Consent Informed Consent Surrogate Consent	18(27.2) 21(31.8%) 49(74%) 3(4.54%)
	Fixed Appliance Therapy	Implied Consent Expressed Consent Informed Consent Surrogate Consent	4(6.1%) 18(27.3%) 62(94%) 2(3%)
	Aligners	Implied Consent Expressed Consent Informed Consent Surrogate Consent	4(6.1%) 17(26%) 62(94%) 2(3%)

Orthodontic Procedures and Required Consent Type: Informed consent was seen to be the most common form of consent obtained for removable appliance therapy, fixed appliance therapy, and aligners with 49 (74%), 62(94%), and 62(94%), respectively. This was followed by expressed consent seen to be obtained for removable appliance therapy, fixed appliance therapy, and aligners with 21(31.8%), 18(27.3%), and 17(26%), respectively. The least seen consent to be obtained was surrogate consent for removable appliance therapy, fixed appliance therapy, and aligners with 3 (4.54%), 2(3%), and 2(3%), respectively.

3.1. Type of Consent obtained before orthodontic treatment

Figure 1 shows informed consent, 52 (78.8%) was the most obtained consent before orthodontic treatment, followed by expressed consent, 27 (40.9%), implied consent 26(39.4%), and least was surrogate consent with 6 (9.1%).

Table 3 shows that orthodontic practitioners do give written consent for fixed appliances in a proportion of 24(36.3%). This was followed by aligners and all orthodontic treatments with 6 (9.1%), removable appliances with 5(7.5%), and 1(1.5%) for impacted canine and pre-surgical infant orthopedics.

Table 3 Orthodontic treatments that Orthodontic practitioners give written consent for

Type of Consent	Frequency (Percentage)
Fixed Appliance	24(36.3%)
Removable Appliances	5(7.5%)
Aligners	6(9.1%)
Impacted Canine	1(1.5%)
Presurgical infant Orthopedics	1(1.5%)
All orthodontic treatments	6(9.1%)

Table 4 shows that 43 (65.2%) practice obtaining written consent from patients before orthodontic treatment while 23 (34.8%) do not normally obtain written consent before treating their patients. Consultants not in the University, 27(40.8%) were found to obtain consent most from their patients before treating them while the Professors were found to obtain consent least, 6(9.1%) from their patients. There was a statistically significant association between professional status and obtaining written consent, $p < 0.05$. Orthodontic practitioners who practice in the teaching hospital 28(42.4%) were found to have the habit of obtaining written consent from their patients before treatment than those in the general hospital and private clinics with 8(12.1%) and 7(10.6%), respectively. There was no statistically significant association between institution of practice and obtaining written consent from patients, $p > 0.05$.

Table 4 Relationship between variables and orthodontic practitioners' giving written consent before treatment

Variables	**Yes obtained written consent before treatment Frequency (%)**	**No, do not obtain written consent before treatments Frequency (%)**	**Chi test**
	43(65.2%)	23(34.8%)	
Professional status;			$\chi2$ =20.14, p =0.000 <0.05.
Professor	6 (9.1%)	0 (0.0%)	
Honorary Consultant	10(15.2%)	2 (3.0%)	
Consultant	27(40.8%)	21(31.9%)	
Institution of practice;			$\chi2$ =2.436, p =0.487>0.05.
Private	7 (10.6%)	1(1.5%)	
General Hospital	8 (12.1%)	6(9.0%)	
Teaching Hospital	28(42.4%)	16(24.2%)	

$\chi2 = 20.14$, $p<0.05$ based on professional status,
$\chi2 = 2.436$, $p>0.05$ based on institution of practice,

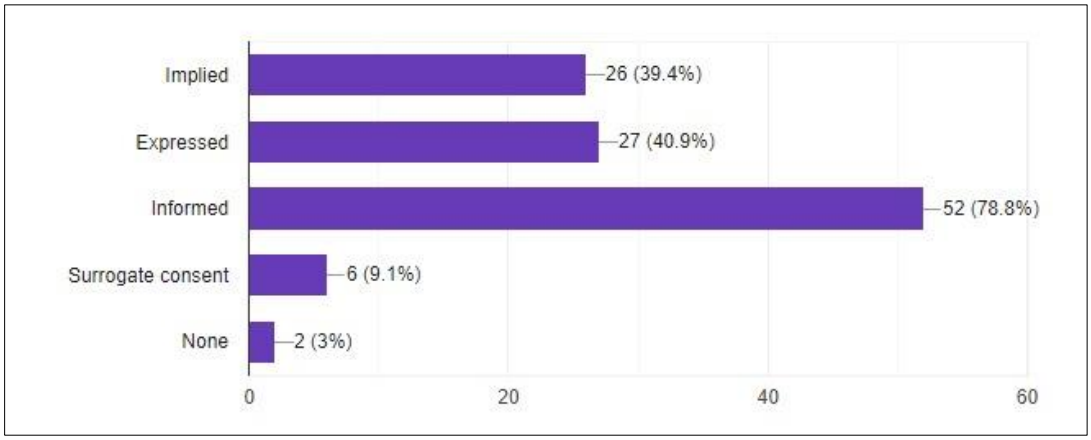

Figure 1 Consent obtained before orthodontic treatment

4. Discussion

A good professional communication between the orthodontist and the patients will effectively translate to better occlusion and pleasing aesthetics from orthodontic treatments and is expected that a consent session before the treatment from a trained orthodontic practitioner was involved. This research work revealed that all studied Nigerian

orthodontic practitioners felt that obtaining consent is necessary for dental procedures and orthodontic procedures. Most studied participants in the current study showed good knowledge of informed consent. This corroborated previous Nigerian studies [14, 15] that showed the majority of studied participants feeling informed consent was an essential part of dental treatment and another study where the majority had excellent knowledge of informed consent. Similarly, again to other previous studies [6, 16], orthodontists studied, were found to be well-informed about consent process before orthodontic treatment. It is good to have the feeling that consent process is essential and necessary and with good knowledge, but it is most important to put it into practice, making it a culture while carrying out clinical services to orthodontic patients. The present research revealed most participants were involved in obtaining routine informed consent from their patients. This report is similar to a previous Nigerian study [15] and a British study [17] where more than half of the studied participants and most, respectively, were found to have a practice of obtaining informed consent from their patients. This pattern of routinely obtaining informed consent from orthodontic patients, needs to be encouraged and maintained as standard practice so that no orthodontic practitioner will be left out or found wanting in that regard.

Informed consent was the most favoured consent type to be used by studied participants in all orthodontic treatments which include removable orthodontic appliances, fixed orthodontic appliances, aligners, impacted canine treatment, and pre-surgical orthopaedics. This report shows obtaining consent is part of most orthodontic procedures done in Nigeria. Even though most orthodontic procedures were found to have consent obtained for them from patients, fixed appliance therapy was the procedure that written consent was mostly obtained for. The Consultants (specialists) in the teaching hospitals were found to obtain written consent more, from their patients. There was a strong association between professional status and the practice of obtaining consent among the studied Nigerian orthodontic practitioners. This finding suggests that the more a person goes higher in the medical profession, more is expected, and practicing in a more standard manner is taken more seriously. The strong association found in this survey between obtaining written consent and professional status is similar to a previous study [18] by Gupta et al but contrary to a previous Nigerian study [14] where Dentists with older years were found to be less likely to obtain written consent from their patients. The difference here could be because this study involved only orthodontic practitioners as against that with Dentists generally, where some specialty involved could be that where non-invasive procedures are often carried out. Orthodontic practitioners at the teaching hospital were found to obtain written consent from their patients more than general hospitals and private clinics, however, there was no statistically significant difference in the association between institution of practice and obtaining written consent. This report supported that of Gupta et al [18] as Dentists at the teaching hospital in their study were found to obtain written consent significantly from their patients and was similar to a previous study [14] by Etim et al. Though there were more orthodontic practitioners who did practice obtaining written consent before treating their patients, about a third of the sample studied did not have such practice which shows more work still needs to be done, to get all to have the good ethical habit

5. Conclusion

All Nigerian orthodontic practitioners that were sampled demonstrated good knowledge of informed consent and most practiced obtaining informed consent to their patients for orthodontic procedures done for their patients. Informed consent was obtained for most orthodontic procedures done in Nigeria, though written consent was obtained more for fixed appliance therapy. Most orthodontic practitioners in the teaching hospital do practice obtaining routine written consent from their patients though there are still some that don't do this routinely. There is a need for continuous awareness drive among Nigerian orthodontic practitioners so as to make written consent a routine practice amongst them.

Recommendations

- Standard operating procedures of the orthodontic units of every hospital should have a consent form that addresses all consent needs of various types of orthodontic procedures before treatment.

- Every hospital having orthodontic practitioners should make it mandatory for consent forms to be used by orthodontic patients before any procedure.

Compliance with ethical standards

Disclosure of conflict of interest

The authors declare that there was no conflict of interest in carrying out this research work.

Statement of ethical approval

Approval for this research was duly obtained from the Ethics and Research Committee of the University of Port Harcourt Teaching Hospital

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