

Original Research Article

Evaluation of the Perception of Aesthetics in the Joint Prosthesis Department of the University Hospital Center of Odontostomatology (C.H.U.O.S) in Bamako

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Abstract: Tooth loss is, for the majority of patients, a strong physical and psychological disorder. The objective of this study was to evaluate the individual perception of dental aesthetics among patients received for joint prosthetic rehabilitation in the prosthesis department of the CHU-OS of Bamako. This was an epidemiological, descriptive and prospective study. The survey lasted 5 months, from April to August 2013. The population studied is made up of all the people seen in the prosthesis department. The variables studied were socio-demographic (sex, age) and clinical variables (reason for consultation, color, shape and position of teeth, personal appreciation of aesthetics, smile identification, patient satisfaction). The data obtained were entered and analyzed with SPSS version 20 software and processed with Word 2013 software. We examined 218 patients and the distribution according to sex showed a predominance of women with 67% with a sex ratio of 0.49. The study highlighted the youth of our population with 34.86% of people who are between 25 and 34 years old. In this study, white and well-positioned teeth are the dental aesthetic criteria most sought after by patients with respectively 91.3% and 54.6% of cases considering the position of the tooth always in association with the color as an important element in the aesthetics of a smile. The disability of edentulism opens up a psychological dimension that the practitioner must understand. It is a global care of the patient with his doubts and anxieties.

Keywords: Evaluation – Perception – Aesthetics - Joint prosthesis.

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INTRODUCTION

Tooth loss is, for the majority of patients, a strong physical and psychological disorder [1]. This means, for many of them, a loss of self-esteem, a reminder that the body ages and that no one is immortal [2].

The etymology of the word "aesthetics" refers to "what can be perceived by the senses", this perception is essentially subjective and whose concepts are subject to variability factors linked to culture, to periods which develop new ideals and fashions, ethnic context, environment and psyche [2, 3].

Oral health has improved due to medical advances and access to dental care in industrialized countries. More and more people keep their natural

teeth even in old age [4]. Edentulism is more common in women than in men and among the most disadvantaged social classes [5].

The edentulous patient has the feeling of losing his true personality and often has difficulty integrating socially. It is for these reasons that it is necessary to take into account the personality of the patient and his sufferings and not to deny them in order to meet all of his expectations. Nowadays, thanks to technical progress and in particular new materials, we have a therapeutic arsenal to meet this demand. The difficulty is not to create a perfect prosthesis but to make a prosthesis that looks natural, that goes unnoticed. Completely edentulous patients wish to have a prosthesis that cannot be seen.

Today under the influence of the media, demand continues to increase and patient pressure is growing. We are currently in a society where the desire to please, to seduce and the gaze of others are of real importance.

Thus, it seems interesting to contribute to the determination of the norms influencing the development of aesthetic treatment plans in joint prosthesis in a society culturally different from that whose criteria are defined in the literature.

The objective of this study was to evaluate the individual perception of dental aesthetics among patients received for joint prosthetic rehabilitation in the prosthesis department of the CHU-OS of Bamako.

METHODOLOGY

Our study was carried out in the University Hospital Center National Odontostomatology of Bamako (CHU-CNOS). This center is located in the river district, Rue Raymond Poincaré of Bamako on the left bank of the Niger River. It is a hospital center specializing in odontostomatology. This was an epidemiological, descriptive and prospective survey based on an individual questionnaire and involving a sample of men and women who came for consultation for joint prosthetic rehabilitation. The survey lasted 5 months, from April to August 2013. The study population was made up of all patients over 15 years old received in the prosthesis department with the reason for consulting a joint prosthetic rehabilitation. Were not included, patients reluctant to our study; patients who consulted for any other form of prosthesis. An investigation sheet was used and allowed us to record all the information collected during the interrogation.

We took at least five to ten minutes to be able to explain to them the purpose of our investigation; we dwelt on the need for the subject to clearly express his desires, his expectations in relation to the position, shape and color of his natural teeth and finally in relation to his current degree of satisfaction.

The parameters studied were: socio-demographic variables, reason for consultation, color, shape and position of teeth, personal appreciation of aesthetics, smile identification, patient satisfaction. The data obtained had been entered and analyzed with SPSS version 20 software and word processing with Word 2013 software. Participation in our study was completely voluntary. The patients had been informed of the aims of our study in order to obtain their

informed consent. Our study took place with anonymity and confidentiality.

Patients therefore had the option of withdrawing from the study at any time without compromising their care.

RESULTS

Sociodemographic Aspects

The distribution of subjects by gender is shown in Table I.

Table I: Distribution of patients by sex

Sex	Number (n)	Frequency (%)
Masculin	72	33,00
Féminin	146	67,00
Total	218	100

Sex ratio: M/F = 72/146 = 0.49

The female sex was the most represented with 67% of cases and a sex ratio of 0.49. The distribution of subjects by age is shown in Table II.

Table II: Distribution of patients by age

Age group (years)	Number	Frequency (%)
[15-24]	45	20,64
[25-34]	76	34,86
[35-44]	39	17,89
[45-54]	28	12,84
[55-64]	14	6,42
[65-74]	11	5,05
[75-84]	5	2,29
Total	218	100,0

The 25-34 age group was the most represented with 34.86% of cases. The extreme ages were 55 and over had the lowest representation with 7.34% of cases.

CLINICAL ASPECTS

Table III: Distribution of patients according to reason for prosthetic consultation.

Reason for consultation	Number	Frequency (%)
Aesthetics	108	49,5
Function	51	23,4
Function and aesthetics	58	26,6
Other reasons	1	0,5
Total	218	100,0

Aesthetics was the reason for consultation with 49.5%, followed by function and aesthetics with 26.6% of cases.

Table IV: Distribution of patients according to the importance of the tooth in aesthetics

Importance of the tooth in aesthetics		Number	Percentage %
Tooth color	Yes	199	91,3
	No	19	8,7
Tooth, shape	Yes	55	25,2
	No	163	74,8
Tooth position	Yes	123	56,4
	No	95	43,6
Tooth size	Yes	72	33,0
	No	146	67,0

Tooth color has been considered an important element of smile aesthetics in 91.3% of cases. The shape of the tooth is not considered an important element of smile aesthetics for 74.8% of patients.

In the sample, 56.4% considered the position of the tooth as an important element of smile aesthetics. The size of the tooth is not an important element of smile aesthetics for 67% of cases.

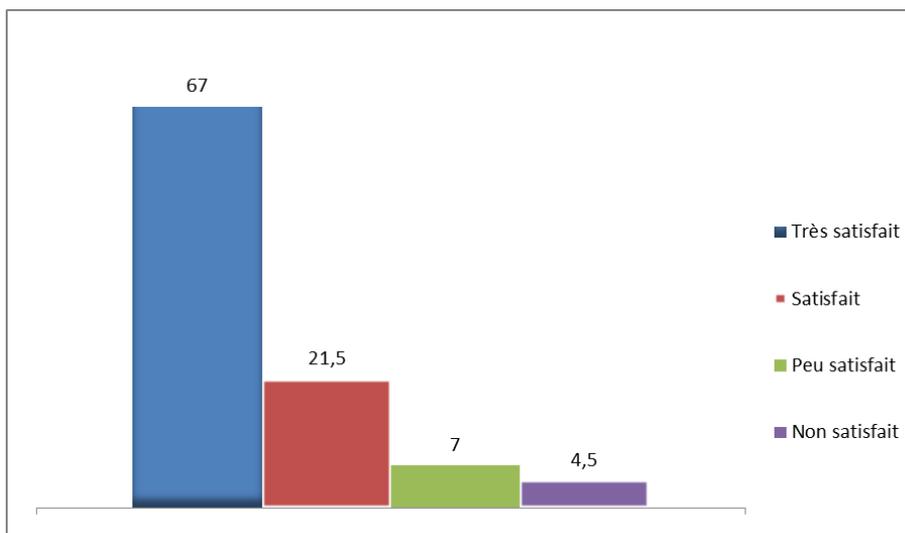


Figure 1: Distribution of patients according to satisfaction with the color of the natural teeth of the sample were very satisfied with the color of their natural teeth in 67% of cases

DISCUSSION

We looked at patients. The female predominance found in our series could be explained by 67 with a sex ratio of 0.49. These results are in agreement with those of Thioune *et al.*, [6] with respectively 55% women and 45% men. This result could be explained by the tendency of women to attend dental care centers more regularly because they have more availability but also worry more about their aesthetic appearance. The study highlighted the youth of our population with 34.86 of people who are between 25 and 34 years old, which is one of the characteristics of the population of Bamako and in particular of Mali and of the developing countries of a generally [7].

In the study, half of the population expressed aesthetics as the reason for consultation, i.e. 49.5%, followed by function and aesthetics 26.6%, then function and others with 23.4% and 0 respectively 5%. Thioune *et al.*, [6] find in Dakar 45% for aesthetics and 28% for function. The primary concern of both partial and total edentulism is first of all aesthetic, the functional aspect comes only in the background [8].

The dental aspect has always been one of the essential factors of appearance and this in all civilizations in various forms. Imperatively today, fashion tells us that teeth must be white and that for everyone. This whiteness has gradually become the apparent sign of flourishing health and a guarantee of beauty recognized by all.

A third of the sample is not satisfied with the color of their teeth because they were yellow, dark, spotted. These results are comparable to those of Thioune *et al.* [6] who found 37.75%. This percentage of dissatisfied people represents 1/3 of the workforce and these have teeth which, most often, have suffered abrasions, cracks and sometimes even myolysis to which are added the various original attacks. food (tea, cola, coffee, etc.) which reinforce this saturation.

The fact that white and well-aligned teeth are found as the main criterion of dental aesthetics in our series clearly shows that, despite changes, 91.3% of the people questioned who think that the color of the tooth is essential in the aesthetics of a smile. 56.4% of cases who consider the position of the tooth always in

association with the color as an important element in the aesthetics of a smile. 74.8% of patients for the shape and 67% for the size consider that teeth are not preponderant elements in the aesthetics of the smile.

Despite changes in thinking, it is still accepted that teeth contribute to the aesthetics of a face. There is therefore a certain notion of beauty through the teeth [9], They have even been described as the most beautiful ornament of the human figure, they "flatter our eyes and add new amenities to the beauty of the facial features [9], true natural ornaments, predominant "over all the other features of the figure" [10].

Approximately 4.5% of subjects were dissatisfied with their prosthetic restorations" and explain any reasons for dissatisfaction reported in the literature.

In the literature, it has been recommended to match the shape of prosthetic teeth to the shape of the face for mounting anterior teeth [11]. However, we must not omit the fact that our study population is mostly illiterate, hence its blatant ignorance of the main canons of beauty that are governed.

It would therefore be wise to know for prosthetists whether to adapt the prosthetic design to the demand of the population or simply to apply the recommended concepts.

CONCLUSION

Joint prosthetic rehabilitation of the oral cavity is not just a succession of technical acts. The disability of edentulism opens up a psychological dimension that the practitioner must understand.

It is a global care of the patient with his doubts and anxieties. Given the diversity of canons of beauty and in view of the complexity of the aesthetic demand, the deepening of the knowledge of the aesthetic criteria of certain ethnic groups is of capital interest to understand the requirements of certain patients and to succeed in a joint prosthetic restoration. We were able to observe thanks to this study that the majority of the patients questioned really have as a reason for consultation, the function and the aesthetics, as aesthetic reason for prosthetic rehabilitation, the improvement of the smile and define a beautiful smile

by white teeth and well aligned. The definition of beauty, the determination of its criteria and its evaluation are as much subjectivity and vary according to eras, environments, cultures as objective considerations of shape, of relatively stable size, commonly and consensually accepted. The final evaluation, "the one that counts", will always and necessarily come back to the patient and his entourage.

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