

Original Research Article

Fixed Prosthesis, Behavior of Dental Surgeons in the Bamako District, Mali

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Abstract: Masticatory dysfunction caused by missing teeth impacts not only general health but also oral quality of life. Prevention and the rise of minimally invasive restorative dentistry have improved the oral health of the general population. The objective of this study was to assess the knowledge of dentists in the Bamako District regarding the production of fixed prostheses. This was a descriptive cross-sectional study conducted over a two-month period, from August 4, 2023 to October 4, 2023. We included dentists in the Bamako District registered on the official list of the National Council of Dental Surgeons of Mali (ONCD) for the year 2023. The questionnaire was anonymous, and the data collected was confidential and stored in a secure location. The collected data were processed and entered using Word 2010 on Windows 7. Data analysis was performed using SPSS version 26. Males were the most common gender, with 78% of cases compared to 22% of cases, with a sex ratio of 3.5%. The 25-35 age group was the most common, with 71.7% of cases. During our study, 100% claimed to have knowledge of FP. Among our sample, 76.1% performed single-unit and multiple-unit fixed prostheses. This was followed by those who performed only single-unit fixed prostheses, with 15.2%. Among the crowns and prosthetic parts performed, CCC/CCM/CIV were the most common, with 45.7%. For 26.1% of participants, the choice of anchors was based on tooth anatomy, morphology, tooth group, and vitality. Alginate was the most used impression material for 67.4% of practitioners. This study shows that dentists need continuing education, especially in fixed prosthetics. It turned out that they were not at the same level of information, and that the majority presented insufficient knowledge, attitudes, and practices in the latter. As a result, prosthetic patient care is difficult and varies from one practitioner to another.

Keywords: Knowledge, Assessment, dentists, fixed prosthetics, Bamako.

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INTRODUCTION

Edentulousness, the result of tooth loss, constitutes a disability: the dysfunctions of the masticatory system caused by the absence of teeth have repercussions on general health as well as on oral quality of life. Prevention and the rise of minimally invasive restorative dentistry have led to improvements in the oral health of the general population. However, knowledge of the different rehabilitation methods remains essential: elderly patients, more affected by total edentulousness, represent a growing proportion of the population [1]. The functional and aesthetic rehabilitation of edentulousness is therefore a delicate and complex therapeutic procedure due to the numerous parameters we have just listed, as

well as the patient's expectations and requirements [2]. As for fixed (tooth-supported) prostheses, they consist of restoring (or replacing) one or more teeth when the number is less than the number of teeth present in the mouth, using the natural teeth as a support and preserving them.

This is a specific form of dental prosthesis characterized by the combination of prosthetic devices on prepared teeth.

It is a therapeutic method with very broad indications, ranging from the reconstruction of a single tooth to the rehabilitation of both dental arches [3].

Prosthetic rehabilitation is initially based on rigorous and meticulous planning, leading to the reasoned development of a treatment plan. Its design depends on the practitioner, the dental technician, and the patient. The practitioner is the architect of the fixed prosthetic piece and must carry out all the stages of its clinical fabrication in collaboration with the dental technician, who is responsible for the design in the prosthetic laboratory based on the clinical information provided. The patient also plays an essential role through their motivation, cooperation during the clinical stages, and concern for long-term maintenance [3].

The therapeutic approaches of dentists in the Bamako District regarding the fabrication of fixed prostheses have never been studied. Thus, the objective of this work was to evaluate the behavior of dental surgeons in the Bamako district with regard to the production of fixed prostheses.

METHODOLOGY

This was a descriptive cross-sectional study conducted over a two-month period, from August 4, 2023, to October 4, 2023. The study population consisted of all dentists in the Bamako District practicing in public, private, and semi-public dental clinics. All dentists who graduated from the Bamako District and were registered with the professional order in 2023 were included in our study.

Dentists not registered with the professional order and those not practicing in the Bamako District were not included in our study. Using a self-administered and mailed questionnaire, we were able to collect data on 46 dentists.

All additional information resulting from incorrectly completed forms was corrected via telephone call. The questionnaire had 3 sections:

- Practitioner identification: socio-professional information about the practitioner (professional seniority and sector of activity),
- The different sequences of prosthetic treatment: this concerns the different stages of execution specific to each practitioner in fixed prosthodontics.
- Difficulties and failures: this section outlines the major difficulties encountered by practitioners as well as the steps that may lead to failures in fixed prosthetic rehabilitation.

The data collected was processed and entered using Microsoft Word 2010 on Windows 7. Data analysis was performed using SPSS version 26. Graphs and tables will be created using Microsoft Excel and Microsoft Word 2010.

RESULTS

Socio- demographic Data

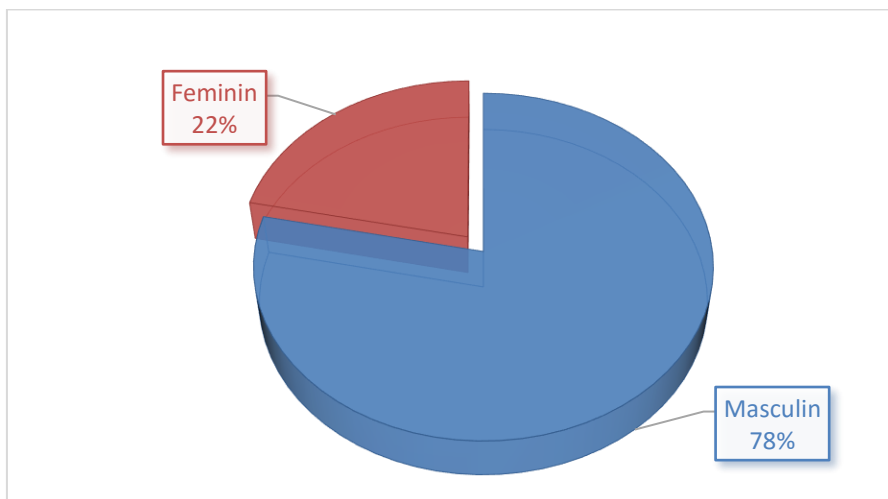


Figure 1: Distribution of the sample according to sex

Males were the most represented sex, accounting for 78% of cases compared to 22% of cases for women. with a sex ratio of 3.5%.

Table I: Distribution of the sample according to age group

Tranche (year)	Staff	Percentage (%)
[25-35]	33	71.8
[36-45]	10	21.7
[46-55]	1	2.2
More than 55	2	4.3
Total	46	100.0

The 25-35 age group was the most represented with 71.7% of cases.

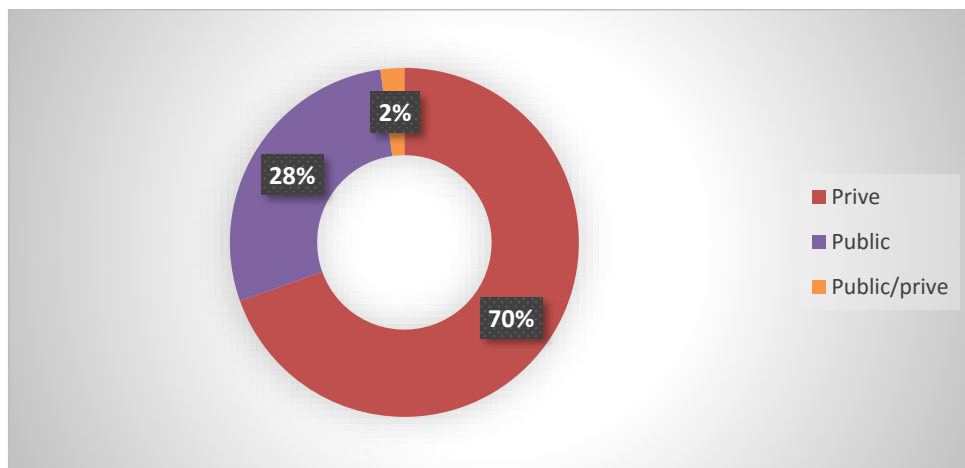


Figure 2: Distribution of the sample according to the sector of activity

The private sectors were heavily represented, accounting for 70% of cases.

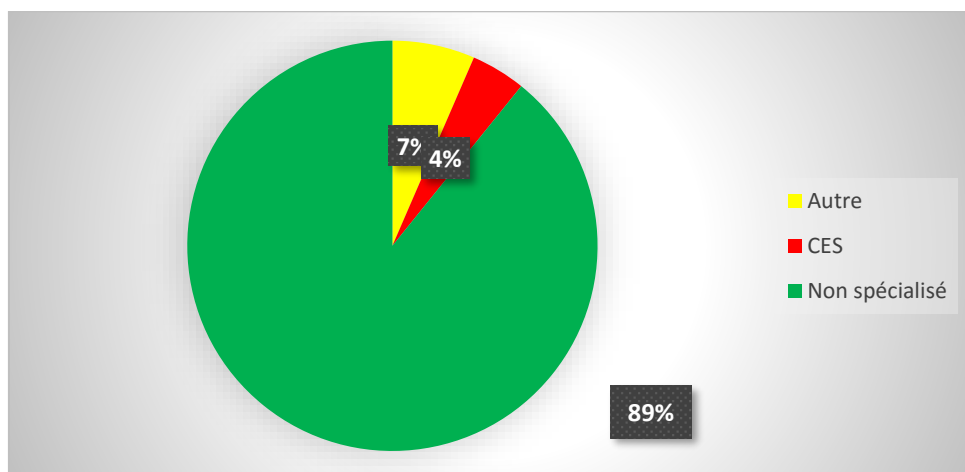


Figure 3: Distribution of the sample according to the level of continuing education of dental surgeons

Other qualifications: University Diploma in OCE (3 %), in Implantology (2 %), and CES in Periodontology (1 %).

Non-specialists were the most represented, accounting for 89% of cases.

Practitioner attitudes

Table II: Distribution of the sample according to age of exercise

Tranches (year)	Staff	Percentage (%)
20 and 30	1	2.2
]10 and 20]	6	13.02
]5 and 10]	19	41.3
Less than 5	19	41.3
More than 30	1	2.2
Total	46	100.0

Children under 5 and those between 5 and 10 years old were the most represented, with 41.3% of cases each.

Table III: Distribution of the sample according to the radiography procedure

RX (RVG and/or OPG)	Staff	Percentage%
No	33	71.7
Yes	13	28.3
Total	46	100.0

The study showed that 71.7% of cases did not have an X-ray, with 54.3% for private and 17.4% for public.

Table IV: Distribution according to the management of partial edentulism

support	Staff	Percentage (%)
Removable	12	26.1
Dento range	11	23.9
Dento ported/removable	10	21.7
Tooth-supported /removable/implant	7	15.2
Dento range/implant	1	2.2
Implant	5	10.9
Total	46	100.0

Removable prostheses were the most commonly offered, accounting for 26.1% of cases, followed by fixed tooth-supported prostheses at 23.9% of cases.

Table V: Distribution of the sample according to the selection criteria for fixed prostheses

Selection criteria	Staff	Percentage (%)
PF skill/professional habit/expected result	2	4.3
PF competence/expected result	2	4.3
Patient-related parameter	3	6.5
Patient-related parameter / PF expertise	2	4.3
Patient-related parameter/PF expertise/professional habit/financial dimension	1	2.2
Patient-related parameter/PF expertise/professional habit/financial dimension/expected outcome	3	6.5
Patient-related parameter/PF expertise/financial dimension	2	4.3
Patient-related parameter / PF expertise / financial dimension / expected outcome	3	6.5
Patient-related parameter / PF expertise / expected outcome	2	4.3
Patient-related parameter / financial dimension	3	6.5
Patient-related parameter / financial dimension / expected outcome	14	30.4
Patient-related parameter / expected outcome	4	8.7
Financial dimension / expected result	5	10.9

In 30.4% of cases the choice of anchors was based on patient-related parameters, financial dimension and expected result.

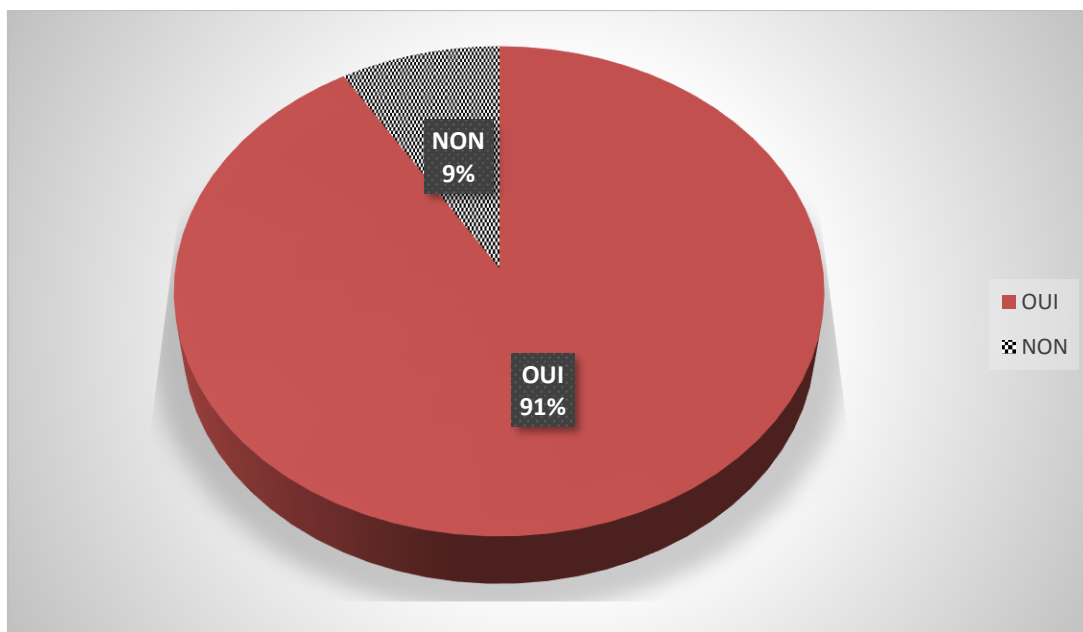


Figure 4: Distribution of the sample according to the decontamination of the fingerprints

According to our survey, 91% of the sample decontaminated fingerprints in their practice.

Table VI: Distribution of the sample according to the product used for decontamination

Variables	Staff	Percentage (%)
No	4	8.7
Hypochlorite	21	45.6
Hypochlorite/rinse	11	23.9
Hypochlorite/rinse/other	1	2.2
Rinsing	8	17.4
Rinse/other	1	2.2
Total	46	100.0

Other: Soapy water Among those used to decontaminate fingerprints, hypochlorite was the most used in 45.7% of cases.

Fixed prosthesis practice

Table VII: Distribution of the sample according to the fixed prosthesis procedure

Variables	Staff	Percentage (%)
Affordable	23	50.0
Easy	10	21.7
Easy/difficult	1	2.2
Difficult	12	26.1
Total	46	100.0

It turned out that in 50% of cases, the fixed prosthesis procedure was found to be affordable.

Table VIII: Distribution according to the devitalization of abutment teeth

Variables	Staff	Percentage (%)
Small cavity / other	1	2.2
Tooth discoloration/other	1	2.2
Systematic devitalization	23	50.0
Healthy tooth in normal position	4	8.7
Healthy tooth in normal position /other	1	2.2
Healthy tooth in normal position / small cavity	5	10.9
Healthy tooth in normal position / Small carious tooth / Other	1	2.2
Healthy tooth in normal position / Small cavity / Medium cavity	4	8.7
Healthy tooth in normal position / Small cavity / Medium cavity / Other	1	2.2
Healthy tooth in normal position / Small carious tooth / Dyschromic teeth	2	4.3
Healthy tooth in normal position / Small carious tooth / Malpositioned teeth / Dyschromic teeth	1	2.2
Healthy teeth in normal position / teeth in malposition / discolored teeth	1	2.2
Healthy tooth in normal position / systematic devitalization	1	2.2
Total	46	100.0

Other: Microdontia 6.5%.

Systematic devitalization was the most common, occurring in 50% of cases.

Table IX: Distribution according to preparation techniques

Preparation techniques	Staff	Percentage (%)
Comparison	26	56.5
Penetration	10	21.7
Penetration/comparison	9	19.5
Silicone guide	1	2.2
Total	46	100.0

The comparison technique was the most frequently used, with 56.5% of cases.

Table X: Ventilation by preparation limits

Boundaries	Staff	Percentage (%)
Intrasulcular	14	30.4
Adjacent gum	8	17.4
Juxta gingival / Intrasulcular	9	19.6
Supragingival	4	8.7
Supragingival/ Intrasulcular	3	6.5
Supra gingival / juxta gingival	8	17.4
Total	46	100.0

Intrasulcular limit was the most performed at 30.4% for aesthetic reasons.

Table XI: Distribution according to impression techniques

impression techniques	Staff	Percentage (%)
Global	42	91.3
Global/sectoral	3	6.5
Sectoral	1	2.2
Total	46	100.0

The overall impression was the most common, performed in 91.3% of cases by practitioners.

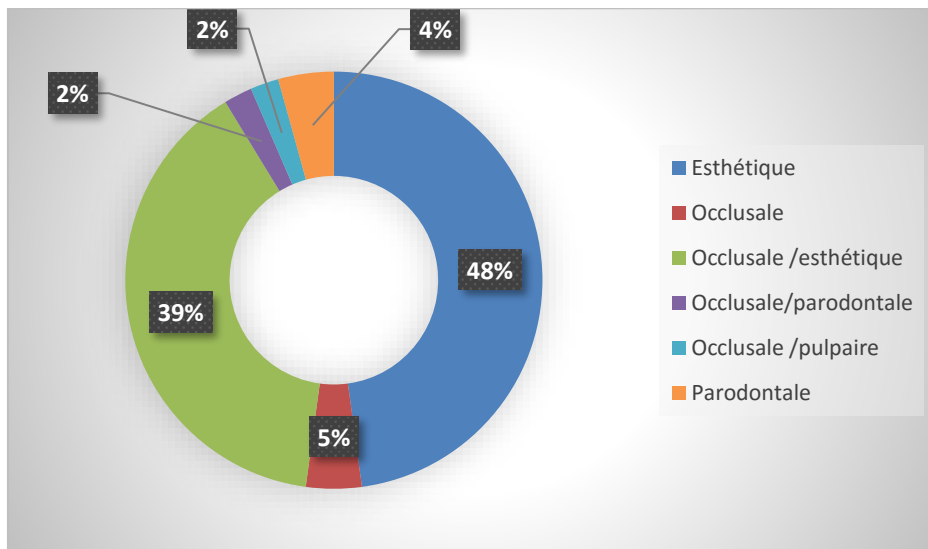


Figure 5: Distribution according to patient complaints

Aesthetics was the most requested factor in 48% of cases.

Table XII: Distribution according to implementation difficulties

Variables	Staff	Percentage (%)
None	4	8.7
Patient motivation and complaints	6	13.0
Preparation of the abutment teeth	4	8.7
Preparation of abutment teeth/temporary prosthesis/shade selection	1	2.2
Preparation of abutment teeth/impression/shade selection	1	2.2
Preparation of abutment teeth/temporary prosthesis/shade selection	1	2.2
Preparation of abutment teeth / prosthetic follow-up / impression	1	2.2
Preparation of abutment teeth / prosthetic follow-up / patient motivation and complaints	17	37.0
Prosthetic follow-up	2	4.3
Prosthetic follow-up / shade selection	5	10.9
Prosthetic follow-up/impression	1	2.2
/Prosthetic follow-up /patient motivation and complaints /impression	3	6.5

Preparation of abutment teeth, prosthetic follow-up, patient motivation and complaints were the most present with 37% of cases.

Table XIII: Distribution according to causes of failure

Causes of failure	Staff	Percentage (%)
None	6	13.0
Choosing the shade	1	2.2
Shade/print selection	1	2.2
Shade selection/impression/clinical examination	3	6.5
Prosthetic Impression/Follow-up	3	6.5
Imprint/ Shade selection	1	2.2
Patient motivation and complaints	3	6.5
Preparation of the abutment teeth	2	4.3
Preparation of abutment teeth / clinical examination / impression / CT scan / shade selection	4	8.7
Preparation of abutment teeth / impression / shade selection	1	2.2
Preparation of abutment teeth / Prosthetic follow-up	16	34.8
Preparation of abutment teeth / Prosthetic follow-up / Clinical examination / Impression	2	4.3
Prosthetic follow-up	1	2.2
Prosthetic follow-up / patient motivation and complaints	2	4.3

In 34.8% of cases the most common causes were the preparation of the abutment teeth and prosthetic follow-up.

DISCUSSION

demographic data

❖ Sex

In our study, 46 of the surveyed dentists participated, with a male predominance (78%) and 22% being women. This result is similar to that of Al-Shamiri in Saudi Arabia, with 57.2% men and 19.4% women [5]. This could be explained by the socio-cultural and religious levels of the country, which lead to males being much more inclined to pursue higher education than females, even in terms of their school enrollment.

❖ Age

In our study, the population was characterized by its youth, with a mean age of 34 years and a standard deviation of 7 years; the extremes were 26 and 56 years. The 25-35 age group represented 71.7%. This result is similar to a study conducted in Mali by Agbetohozou on the Knowledge, attitudes and practices of dental practitioners regarding tooth mobility [6], in which the 25-39 age group was the most represented at 69.1%. This result could be explained by the fact that the faculty of medicine and dentistry is attended by a young population, which could be due to the early enrollment of children in school.

❖ Business sector

In our study, private practice dentists were heavily represented at 70%, compared to 28% in the public sector, with the remaining 2% practicing in both private and public settings. This result is comparable to that of Fall *et al*, based on the practice of fixed prosthodontics [3] in Burkina Faso, where 60.6% of practitioners worked in the private sector. This difference could be attributed to the large number of new dentists

graduating and a lower quota of recruits in the public sector compared to the number of dentists trained annually.

❖ Level of continuing education for dental surgeons

In our study, among the participating dentists, 89% were non-specialists, 7% held a university diploma in orthodontics and implants, and only 4% had a certificate of advanced studies in fixed prosthodontics. This result is similar to a study conducted in Ivory Coast by Kamagate *et al.*, in their study "Needs and Access to Continuing Education for Ivorian Dentists" [8], found that 86% of the dentists surveyed were general practitioners, 2% specialized in orthodontics, and 12% in other fields. Initial training alone is insufficient for a practitioner's knowledge of fixed prosthetics. It only provides the basics, and practitioners must refine and update their skills over time. Many of our practitioners relied solely on their initial level of training when fabricating fixed prostheses. This could be explained by a lack of postgraduate continuing education opportunities and financial resources, all while facing a significant need for fixed prostheses.

Attitude in fixed prosthesis

❖ Based on the number of years of practice

In our study, children under 5 and those between 5 and 10 years old were the most represented, accounting for 41.3% of cases each. This result is similar to that of Sghir *et al.*, [9] in Tunisia on the risk factors of musculoskeletal disorders in a population of Tunisian dentists in which the mean age was 33 years. The mean professional seniority was 7 years. This could be explained by the early practice of new dental surgeons graduating from medical and dental school each year.

❖ Performing the X-ray

Radiography remains an essential step in the practice of dentists, particularly in the fabrication of

fixed prostheses. Of the 46 dentists surveyed, only 28.3% performed additional pre-prosthetic examinations, and the remaining 71.7% did not perform any additional examinations. This result differs from a study conducted in Senegal on radiation protection, in which 91.14% of dentists reported having an X-ray machine, and 64% of them routinely took X-rays during the initial consultation. [10] This could be explained not only by the lack of X-ray equipment in both private and public dental practices, but also, over time, by the development of poor habits among our practitioners, coupled with a lack of awareness of the importance of radiography in modern dentistry.

❖ Management of partial edentulism

Faced with small or large embedded edentulous spaces, practitioners have numerous treatment options. Regardless of the area involved, treatment possibilities are many: implant-supported prostheses, bonded bridges, conventional bridges, removable prostheses, or even orthodontic treatment. In our study on the management of partial edentulism, the most frequently proposed solution by dentists was a removable prosthesis (26.1% of cases), followed by a fixed, tooth-supported prosthesis (23.9% of cases). 21.7% of our practitioners indicated a combination of a removable and tooth-supported prosthesis. However, five others mentioned implants as a solution. Implant-supported solutions are often a desirable treatment option, in some situations, medical, anatomical, or financial constraints do not always allow us to consider this therapeutic choice. A conventional and/or bonded bridge then represents a suitable alternative that meets functional, aesthetic, and biological requirements. [11] For therapeutic choice, the relevance of the various therapeutic solutions in a given clinical situation must be analyzed. This relevance is assessed through the benefit/cost/safety ratio, taking into account the feasibility of the treatments considered. After the development and analysis of the study models, therapeutic decisions are made, along with their financial implications (cost estimates), and the different therapeutic options are then proposed and explained to the patient, emphasizing the advantages, disadvantages, and limitations. [12]

❖ Selection criteria for fixed prostheses

In our study, the majority of dentists surveyed (30.4%) had patient-related parameters, financial dimension and the expected result in terms of comfort as their choices. After demonstrating the feasibility of the fixed prosthesis through clinical and supplementary examinations, practitioners must consider certain parameters before proceeding with the fabrication of their prosthetic element. They must have a thorough understanding of each patient's situation before choosing the optimal prosthetic solution. Before beginning treatment, the dentist must take into account the following conditions: the patient's age, local conditions, economic conditions, social circumstances, and the dentist-patient relationship [13]. In this regard, most of

our practitioners focused on patient-related parameters. The aim was to gain insight into the patient's psychological state and whether it was their first time using a prosthesis or if they were already familiar with it. Studying this parameter allowed practitioners to anticipate how the patient would perceive the new prosthesis. They also considered the financial aspect, aiming to offer a functional and aesthetically pleasing prosthetic device within their budget. However, for most of our practitioners, this last consideration—the expected outcome in terms of comfort—is the most important of all, as its absence can lead to failure and ultimately, the patient's rejection of the prosthesis.

❖ Fingerprint decontamination

Dental impressions are considered high-risk material that must be decontaminated in the dental office before being transferred to the laboratory. [14] In this regard, we note that 91% of our surveyed practitioners had the good practice of decontaminating impressions after placement, as prosthetic impressions are a vector of contamination due to contact with mucus and serous fluids in the oral cavity. However, 9% of our surveyed practitioners did not decontaminate their impressions after placement. For decontamination, 45.7% of our practitioners used sodium hypochlorite, 23.9% used sodium hypochlorite and rinsing (water), and 17.7% used rinsing alone. This result differs from that of the study conducted in Mali by Diarra on the decontamination of impressions in dental practices and dental laboratories in Bamako [7], in which water rinsing as a decontamination method was used in 42% of cases. Sodium hypochlorite was used as a disinfectant in 25% of cases.

Prosthetic Practices

❖ Fabrication of the fixed prosthesis

The fabrication of fixed prostheses was affordable for 50% of the surveyed practitioners, easy for 21.7%, and difficult for 26.1%. This result could be explained by the practitioners' early adoption of fixed prostheses. This result is comparable to that of Fall *et al.*, [3] in Burkina Faso, in which the fabrication of fixed prostheses appears affordable for 54.5% of practitioners and easy for 27.3%. It remains difficult for 18.2% of clinicians. Many practitioners fear fixed prosthetic treatment because of its complexity linked to the specificity of each patient and the technicality of its execution.

❖ Preservation of the vitality of abutment teeth

In our study, 50% of the practitioners surveyed performed routine root canal treatment. This result is similar to a study conducted in Burkina Faso by Fall. [15], during this study For When performing the fixed prosthesis, 51.92% of practitioners systematically perform the devitalization of the tooth to be crowned. Dentists seem to initially opt for root canal treatment of abutment teeth due to the delicate nature of preparing a living abutment. Certainly, during preparation and shaping, various factors can cause inflammation that may

lead to pulp necrosis, but the irreversible decision to perform root canal treatment on abutment teeth should only be made if the preparation, by its very nature, is compromised. Volume endangers the dentin -pulp complex. Pulp removal induces profound changes in the biological organization and physiology of the tooth. A non-vital tooth presents a significant potential for infection. Prerequisites for its use as an abutment tooth include adherence to the objectives of the endodontic treatment, clinical healing, and the achievement of effective coronal sealing. [15]

❖ **The preparation techniques used**

Various preparation errors are frequently observed, such as insufficiently prepared areas or preparations with angulation defects. This is particularly the case when the practitioner has not used silicone keys made on the provisional elements or on the prosthetic plans to assess the required space. [16] Therefore, in our study, the comparison technique with collateral teeth was the most frequently used by our surveyed practitioners (56.5%), followed by controlled penetration (21.7%). These two previous techniques were used by 19.5% of our practitioners, and only 2.2% used silicone guides. This result could explain that the preparation of abutment teeth was not only linked to practical requirements but also to the technical skill and dexterity of the practitioners in carrying it out, largely due to their professional experience. Thus, it appears even more difficult for our young practitioners. [3]

❖ **Types of boundaries achieved**

The cervical margin is a meeting point and area of interaction for dental tissue, gingival tissue, epithelial attachment, and prosthetic material. Bathed by gingival fluid and regularly colonized by dental plaque, the cervical margin is undoubtedly the most sensitive area of a prosthetically restored tooth. It is at this point that the practitioner will determine the success or failure of the prosthetic restoration from both an aesthetic and periodontal perspective. [17] In our study, the intrasulcular border was the most frequently used in 30.4% of cases for our surveyed practitioners, for aesthetic reasons. It was followed by the juxta gingival/ intrasulcular border with 19.6% of cases, and then by juxta gingival and supra gingival/juxta gingival borders, each with 17.4% of cases. This result could be explained by the diversity of possible margin types; the choice of margin for a preparation was a compromise between the parameters characterizing the clinical situation, the type of restoration envisaged, and the aesthetic requirements; this explains the diversity in terms of margin.

❖ **Types of impressions taken**

During this study, 91.3% of our surveyed practitioners took global impressions, (3) of our practitioners took sectoral and global impressions, only (1) took sectoral impressions and none of our practitioners took optical impressions. This result could be explained by the simplicity of taking the overall

impression and its result which allows for a model of the complete mouth and its ease of use in the laboratory. Optical impression, little known to our practitioners, is a new impression-taking method. It is fast, painless, harmless, and reliable. It simplifies impression-taking for the practitioner and provides undeniable comfort for the patient. Using orthotic design software connected to a CNC machine tool, it allows for the creation of a "corrected positive" for the fabrication of corsets. This method also allows for the measurement and, if necessary, modification of the three-dimensional image of the trunk in order to correct the patient's "virtual trunk." [4]

❖ **Main patient complaints**

For our practitioners, 48% of complaints were aesthetic, followed by occlusal and associated aesthetic complaints at 39%, occlusal 5%, and periodontal 4%. These results differ from an Ivorian study in which the main complaints expressed by patients were periodontal (19.7%), occlusal (34%), aesthetic (19.7%), and pulpal (11.6%).[18] The treatments performed must meet the patients' demands, which are primarily aesthetic or functional and are very often linked to socio-cultural factors. However, fully meeting the patient's demands can lead to therapeutic failure because the patient may not be able to express their wishes precisely. Therefore, it is essential to establish genuine communication by analyzing with the patient the reasons and true motive for their consultation, the ultimate goal being to fully understand all of the patient's expectations.[3]

❖ **Difficulty in making the fixed prosthesis**

The preparation of abutment teeth, prosthetic follow-up and patient motivation and complaints were the most difficult steps for our practitioners in 37% of cases, only 4 of our practitioners had no difficulty during this step. This result could be explained by the lack of experience of our young practitioners and for the older ones the non-strict respect of the different preparation techniques and often the lack of mastery of these techniques; the non-respect of appointments by patients and often also with complaints which do not go with the rules of the art.

❖ **Causes of failure**

The preparation of abutment teeth and prosthetic follow-up were the most frequent causes of failure, accounting for 34.8% of cases for our surveyed practitioners. This result is comparable to that of a study conducted in Burkina Faso in which the preparation of abutment teeth is the second most common difficulty encountered by practitioners in their daily practice (39.4%) but above all the leading cause of failure of fixed prosthetic restorations (54.5%).[3] Failures in fixed prosthodontics are based on patient complaints and the duration of the tooth-supported prosthesis in the mouth. According to Backer, for tooth-supported prostheses, the most frequent biological complications are caries involvement and loss of pulp vitality. The most frequent

technical complication is loss of retention, which is mainly caused by inadequate preparation of the abutments, failure of cementation, and poor design of the prosthetic appliance. [3]

CONCLUSION

This study allowed us to focus in general on the state of affairs with regard to the knowledge, attitudes and practices of dental surgeons in the Bamako district with regard to the production of fixed prostheses. Our study concludes that dental surgeons need continuing education, especially in fixed prosthodontics. Despite their motivations, it turned out that they were not all at the same level of information, and the majority lacked sufficient knowledge, attitudes, and practical experience in carrying out the procedure. This resulted in some difficulties in providing prosthetic care to patients, and it varied from one practitioner to another. This is why it is important to strengthen the scientific and technical capacities of practitioners by emphasizing knowledge, attitudes and practices in fixed prosthetics during university studies and especially to promote continuing post-university training in the field of fixed prosthetics in order to offer patients quality work.

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