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*Artículos científicos*

## **Competencias administrativas y de gestión en la práctica odontológica**

*Administrative and management skills in dental practice*

*Habilidades administrativas e gerenciais na prática odontológica*

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## Resumen

La práctica odontológica actual requiere de profesionales con competencias administrativas y gerenciales que le permitan otorgar un mejor servicio. La atención odontológica no solo es un proceso de asistencia médica, sino que hay una relación entre un prestador de servicios profesionales y un usuario, y en dicha interrelación existe una secuencia de hechos congruentes entre una necesidad y un satisfactor, lo cual incluye diversos factores, como insumos, infraestructura y personal para que dicho proceso sea efectivo. **Objetivo:** Identificar las competencias administrativas y de gestión que posee el profesional de la odontología. Metodología: Estudio exploratorio, descriptivo y transversal en un grupo de profesionales activos. El tamaño muestral fue de 275 entrevistados. Resultados: Se determinó la importancia del trabajo en equipo, lo cual fue considerado como esencial por el 35.6 % para alcanzar los objetivos y metas. En relación con el conocimiento de aspectos administrativos, el 54.2 % opinó que no tiene ningún conocimiento relacionado con esta área. Solo el 10.18 % establece la planeación en los procesos de promoción y difusión de servicios. Conclusiones: El ejercicio profesional implica que el odontólogo requiere de conocimientos básicos de administración que le faciliten maximizar sus procesos y lograr un mejor desempeño en el ejercicio de su profesión, ser competitivo, innovador y emprendedor, por lo que es preciso establecer estrategias dirigidas a capacitar con conocimiento administrativo al profesional de la odontología para fortalecer su actividad profesional y brindar servicios de calidad y eficiencia.

**Palabras claves:** desarrollo empresarial, emprendimiento, gerencia en servicios de salud, liderazgo en salud, *marketing* odontológico.

## Abstract

The current dental practice requires professionals with administrative and managerial skills that allow them to provide a better service. Dental care is not only a medical care process, but there is a relationship between a professional service provider and a user, and in said interrelationship there is a sequence of consistent events between a need and a satisfyer where many factors depend. such as inputs, infrastructure and personnel, for said process to be effective. Objective: To identify the administrative and management skills that the dental professional possesses. Methodology: Exploratory, descriptive and cross-sectional study in a group of active professionals, establishing a sample size of 275 interviewees.



Results: The importance of teamwork was determined by 35.6%, I consider that it is essential to achieve the objectives and goals. Regarding the knowledge of administrative aspects, 54.2% believe that they do not have any knowledge related to this area. only 10.18% establish planning in the processes of promotion and dissemination of services.

Conclusions: The professional exercise implies that the dentist requires basic knowledge of administration to be able to streamline their processes and achieve a better performance in the exercise of their profession, to be competitive, innovative and entrepreneurial, so it is necessary to establish strategies aimed at training or train the dental professional with administrative knowledge, to strengthen their professional activity by providing quality and efficient services.

**Keywords:** business development, entrepreneurship, health services management, health leadership, dental marketing.

## Resumo

A prática odontológica atual exige profissionais com competências administrativas e gerenciais que lhes permitam prestar um melhor atendimento. O atendimento odontológico não é apenas um processo de atendimento médico, mas existe uma relação entre um profissional prestador de serviço e um usuário, e nessa inter-relação há uma sequência de eventos consistentes entre uma necessidade e uma satisfação da qual dependem muitos fatores. como insumos, infraestrutura e pessoal, para que esse processo seja eficaz. Objetivo: Identificar as competências administrativas e gerenciais que o profissional odontológico possui. Metodologia: Estudo exploratório, descritivo e transversal num grupo de profissionais em atividade, estabelecendo uma amostra de 275 entrevistados. Resultados: A importância do trabalho em equipe foi determinada por 35,6%, considero que é essencial para atingir os objetivos e metas. Quanto ao conhecimento dos aspectos administrativos, 54,2% acreditam não possuir nenhum conhecimento relacionado a esta área. apenas 10,18% estabelecem planejamento nos processos de promoção e divulgação de serviços. Conclusões: O exercício profissional implica que o médico dentista necessita de conhecimentos básicos de administração para poder agilizar os seus processos e alcançar um melhor desempenho no exercício da sua profissão, para ser competitivo, inovador e empreendedor, pelo que é necessário estabelecer estratégias que visem formar ou capacitar

o profissional de odontologia com conhecimentos administrativos, para fortalecer sua atividade profissional prestando serviços de qualidade e eficientes.

**Palavras-chave:** desenvolvimento de negócios, empreendedorismo, gestão de serviços de saúde, liderança em saúde, marketing odontológico.

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## Introduction

Dental practice is one of the medical disciplines that has undergone constant evolution over the years. From its origins as a trade related to barbering, based on empiricism and the method of trial and error, it has advanced to gain recognition and acceptance in the field of health, hence it is considered today an integral branch of medicine.

Given that it is a complex and highly practical discipline, the professional development of a dental surgeon can occur both institutionally and independently, which is why it is essential that these professionals acquire basic knowledge in administration. Throughout their career, whether in a public health institution or in private practice, they will have to effectively manage material, financial, and sometimes human resources. Therefore, it is essential that your professional training includes subjects with an administrative and health management focus in the study plans and programs.

Although there is evidence of organizational and administrative practices dating back to 400 years BC. C., according to texts from places such as Egypt, Babylon, Jerusalem and China, its consolidation as an integral part of dentistry was largely due to the movements of the Industrial Revolution (Spinelli, 2017).

Contemporary dental practice demands professionals with solid knowledge and skills in administration and management. This is necessary to provide high quality service to the population in a highly competitive environment. From an administrative perspective, dental care is not simply a medical process, but rather an interaction between a healthcare provider and a user. In this relationship, a series of factors—such as supplies, infrastructure, personnel, and financial resources—influence the effectiveness of the process. In this sense, it is essential that the dentist, regardless of his specialization, establishes criteria for an efficient distribution of the resources necessary to offer a service that not only satisfies health needs, but also optimizes efforts.

It is common for dental surgeons to lack training in entrepreneurial, business and administrative aspects, which often makes it difficult to effectively manage material and human resources in an organization. Therefore, it is essential that these professionals acquire skills in health services administration and management. This will allow them to not only better distribute their resources, but also thrive in a highly competitive environment.

Typically, the general practice dental surgeon starts out as an entrepreneur with minimal knowledge in administration, which is because, in institutions and hospitals, the emphasis is generally placed on dentists with specialized training. This reality, however, requires the implementation of strategies to evaluate their strengths and weaknesses with the aim of achieving a balance in their professional, work and emotional life in the field of dentistry (Colunga et al., 2017).

Today, we are immersed in an era marked by technological advances, scientific achievements and economic progress in a dynamic social and cultural context. This environment offers numerous opportunities for both personal and professional development, which is why it is crucial to acquire solid competencies and skills, since an adequate vision leads us to rethink the profile of the modern professional, which requires a solid scientific foundation and a broad set of skills.

Fortunately, in recent years, organizational models and their approach to management have undergone notable changes, especially in the field of dentistry. This has led to the creation of laws, regulations and standards, as well as the definition of a charter of rights that is essential to know to guarantee ethical and professional behavior (Medrano, 2015).

In this context, job skills have become a fundamental objective to carry out technical and scientific tasks. These competencies are defined as the set of knowledge and skills necessary to address specific situations, and have become the basis of the professional profile of graduates, regardless of their beliefs and customs. Currently, these competencies enrich knowledge, skills and professional practices, and are considered essential in the development of a professional career, as has been recognized in numerous countries.

Within the taxonomy of competencies in dental education, the need to include the administrative component as an integral part of the training process of the dental surgeon arises. Although it has traditionally been considered that this component has been present in the development and growth of oral health services, it is essential to recognize that

management and administration are essential pillars for service planning, organization of resources, direction and control, and decision making.

The restructuring of study plans in higher education institutions, which includes subjects aimed at strengthening administrative skills, has been a response to observations issued by certifying bodies, accrediting entities, as well as health organizations and institutions at both the national and international.

Contemporary paradigms of teaching in dentistry establish new objectives focused on the theoretical-scientific base that supports the characteristic practice of the degree in dentistry. This implies a move away from practices based solely on empirical experience and towards a more evidence-based approach (Gispert Abreu, 2022).

Thanks to current technology, dental teaching has evolved, incorporating new learning theories that have impacted the profile of the graduate. These theories emphasize the importance of preventive and predictive aspects, as well as a comprehensive understanding of oral and individual health. Emphasis is placed on the identification of risk factors and their intervention in the promotion of healthy lifestyles. In addition, the aim is to train dental professionals capable of carrying out minimally invasive practices (Calatrava Oramas, 2022).

In the new educational models, these concepts related to problem solving are applied under the term *competence*, which is considered as a set of attitudes derived from the integration of knowledge, skills and qualities of a person. In the case of dentistry, competence is defined as the set of behaviors expected of a professional, based on essential skills. These skills depend on their application and the changes that can be achieved through critical thinking, professionalism and communication (Calatrava Oramas, 2022).

In a general sense, competencies mean “knowing how to do something with certain attitudes.” Basically, they refer to the set of actions carried out by a person who has the theoretical and practical foundations, that is, the knowledge necessary to resolve a situation for which they have been trained or trained. Competence determines professional performance and places the person at a level of experience in a specific activity or action (Salas Perea *et al.*, 2016).

Training based on professional competence is based on the following principles:

- Training for work.
- Integration of multidisciplinary teams.
- Innovation and creativity.



- Critical and reflective thinking.
- Ability to adapt to change.
- Willingness for continuous learning.

A fundamental aspect constitutes the alignment of the curricular contents in the training study programs, in accordance with the contexts and environments of the student in training, since the precise definition of these competencies will contribute to the development of the profile of the new professional.

Currently, training requires professionals capable of not only solving problems efficiently, but also performing ethically and responsibly. In this sense, dentistry is a profession that demands intellectual and technical skills, and depends on significant education (Romero, 2022).

Validation of the development of these competencies must be carried out in practice through compliance with clearly defined performance criteria. For this reason, continuous evaluation of study programs is essential to ensure that the development of competencies remains up to date in response to social, economic, political and demographic needs. This is essential so that professionals can function in environments that require problem-solving skills (Gispert Abreu, 2022).

**Table 1 . Professional skills**

|                           |  |               |
|---------------------------|--|---------------|
| Technical competence      | There is mastery and skill in the assigned tasks   | Cognitive     |
| Methodological competence | Develops tasks within a planned scheme, using their skills   | Procedural    |
| Social competence         | Emotional communication is established and collaborative and comprehensive work is promoted  | Affective     |
| Participatory competition | Gets involved in the processes and establishes leadership in an organization. Develops initiatives, administrative and management skills | Collaborative |

Source: own elaboration

### **Administrative competence**

Administration as a discipline consists of the planning, organization, execution and control of actions to achieve the objectives of an institution; Furthermore, it has characteristics of universality, specificity, temporal unity and hierarchical unity. In this context, Competencies and skills in administration in a health system are essential for the correct planning of resources, times, services and management, which will contribute to the achievement of the stated objectives (Manrique, 2018). This means that a health administrator must have a holistic and comprehensive vision to be able to design, develop,





evaluate and update each of the work plans and programs (Cedeño Ugalde *et al.*, 2018). These competencies not only refer to the technical, professional or work practice of the individual, as they also contemplate basic aspects such as mastery of language and being able to assume commitments and respond to duties (Ariza, 2017).

### **Managerial aspects in dental practice**

A dentist, dental surgeon or stomatologist is a professional who is trained to diagnose, treat and prevent diseases and ailments that affect the teeth and the stomatognathic apparatus in general. In addition, it is responsible for the diagnosis, treatment, promotion and prevention of oral health (Medrano, 2015).

The dentist's objective is to maintain oral health through the knowledge acquired during his training process. To do this, it establishes strategies to promote dietary and hygienic habits within a family and social context, aspects that are regulated by the regulations of each population (Fallas Morales and Fernández Chaves, 2023).

Until a few years ago, dental practice was considered very limited in conceptual and procedural aspects, with a tendency towards technical practice, which is accentuated as the professional segments his knowledge through specialization, forgetting about basic health strategies. , such as health promotion, dissemination and education.

This is one of the aspects that generates different opinions, since the same happens with the development of complementary skills that the professional requires. Some of them may be administrative, managerial and the management of organizations within a health system, among others.

If it is considered that the health administrator has the training to lead the organization efficiently, through the implementation of strategies that support each area for better organizational performance, this need also becomes another challenge for the health professional, since must be able to develop and strengthen skills in administrative areas ( Lopera -Medina , 2022).

The curriculum, therefore, must be oriented towards the training of a professional with multiple competencies independent of those inherent to the discipline. In addition, you must ensure knowledge that strengthens your professional development in the fields of innovation , technology, entrepreneurship and management. Likewise, it must consider the dynamic environment, which requires being trained according to the needs of society to apply appropriate strategies that satisfy such demands ( Escandell -Poveda , 2023).

As in other professions, in the field of dental professionals, managing an organization includes different factors such as decision making, creativity and teamwork in order to develop it in a correct, effective, fast and productive way to manage and optimize resources.

Teamwork, therefore, is another of the competencies considered within the workplace, since it allows the exchange of information typical of a process and the collective management of knowledge, skills, values and attitudes. The advantage of teamwork is that it allows the assignment of tasks with a common objective, although its complexity can be attributed to the lack of interest in teamwork and its consolidation time (Ruiz and Sánchez, 2021).

In short, professional dental practice presents a new vision that goes from the paradigm shift, where the difference is established between the patient and what is defined today as a user of health services, to a culture of quality in service, administrative management and social marketing strategies, as well as the administration and management of resources.

These topics were not previously reviewed because they were associated with other disciplines, since it was believed that the dental surgeon only focused on curative care. However, today training programs have a component aimed at the dentist being entrepreneurial and innovative and getting involved in the administration of their own office. Likewise, the need of employers is considered, requiring personnel trained in areas of health sciences with skills in the administrative area (Simón, 2020).

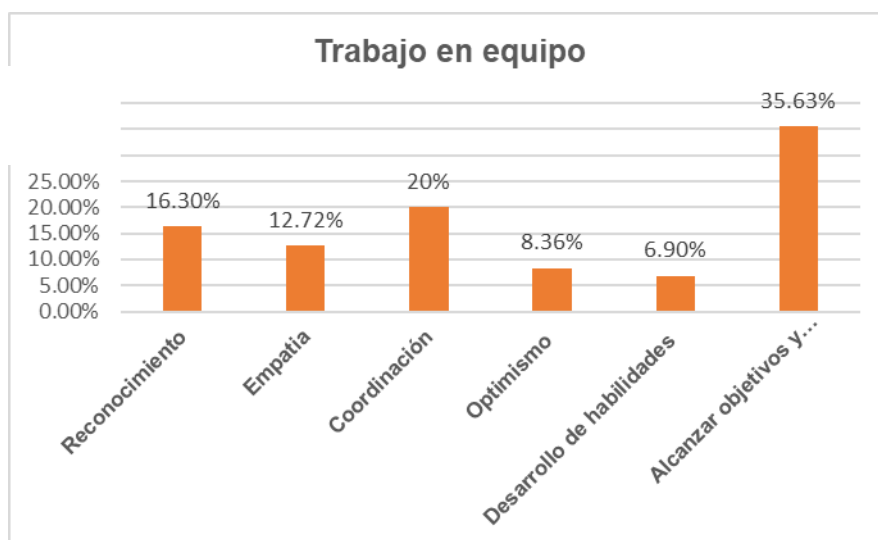
## Methodology

An exploratory, descriptive and transversal research was carried out to identify the administrative and management skills possessed by the dental professional. The sample was made up of 275 active professionals attending the dental research and updating center for a period of three months. The instrument was made up of three sections corresponding to the study variables: teamwork, organization and management in the office, and administration in the dental practice. The instrument consisted of 15 questions, which was previously piloted and validated using the Cronbach index, with 0.80 reliability. The research process was carried out during the months of September and November 2022. The participants were informed regarding the objective of the survey and the research project.

## Results

In relation to the variable *competence to work in a team* , 35.6% consider that it allows achieving objectives and goals, while a smaller percentage believes that teamwork develops skills. Additionally, 20% believe that coordination is required.

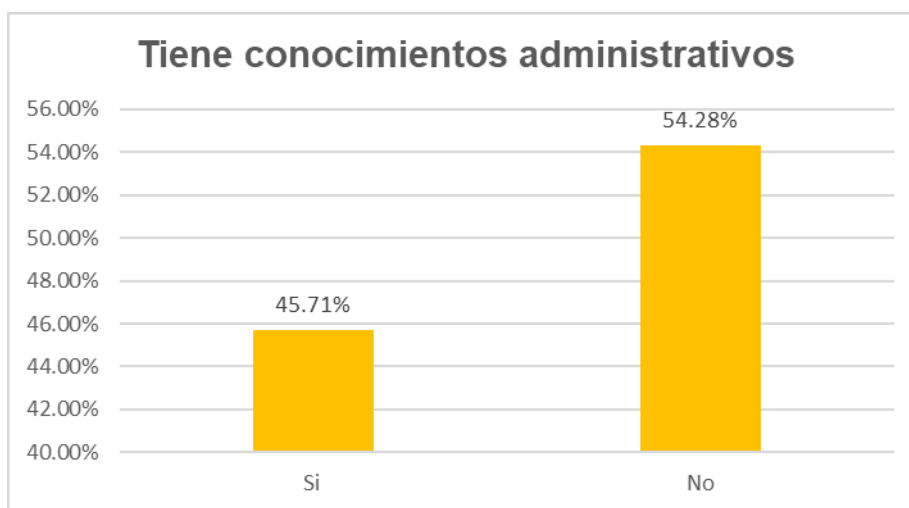
**Figure 1.** Perception of teamwork



Source: own elaboration

In relation to administrative aspects, the majority believes that they do not have any knowledge in this area; However, 45.7% of the population believes that they do master some administrative concepts.

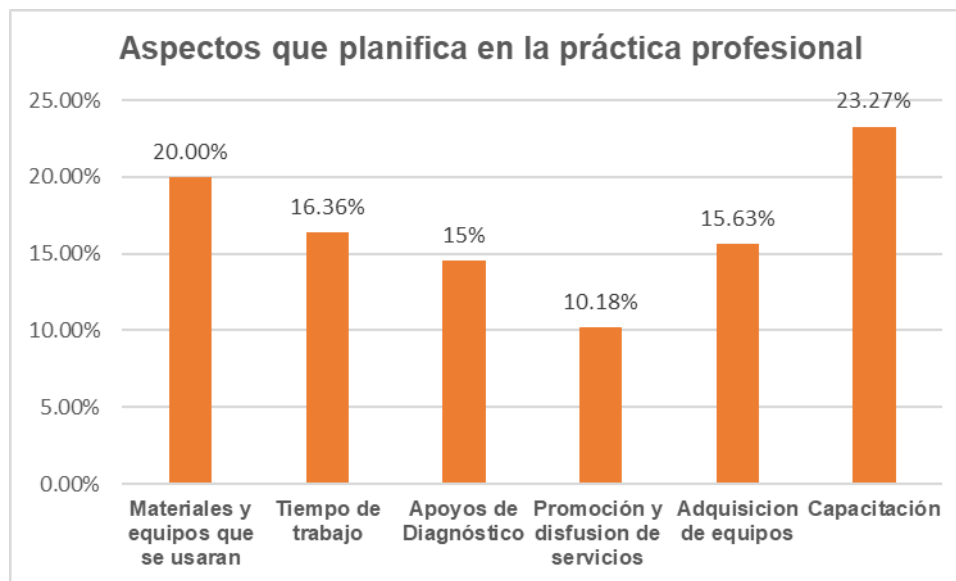
**Figure 2.** Administrative knowledge



Source: own elaboration

With respect to the planning of some processes, respondents highlight what is related to training and the purchase of materials and equipment they use for professional practice. To a lesser extent, they consider work time, and 10.18% consider planning in the processes of promotion and dissemination of services.

**Figure 3. Planning**



Source: own elaboration

Regarding the administrative assistants that the respondents use in their offices and/or clinics, a trend is established towards business consultancies; In addition, a significant percentage also expressed the use of administrative *software*, while a smaller percentage considers practices based on experience. Finally, 10.1% mention that they do not have any tools or administrative assistants for their professional development and practice.

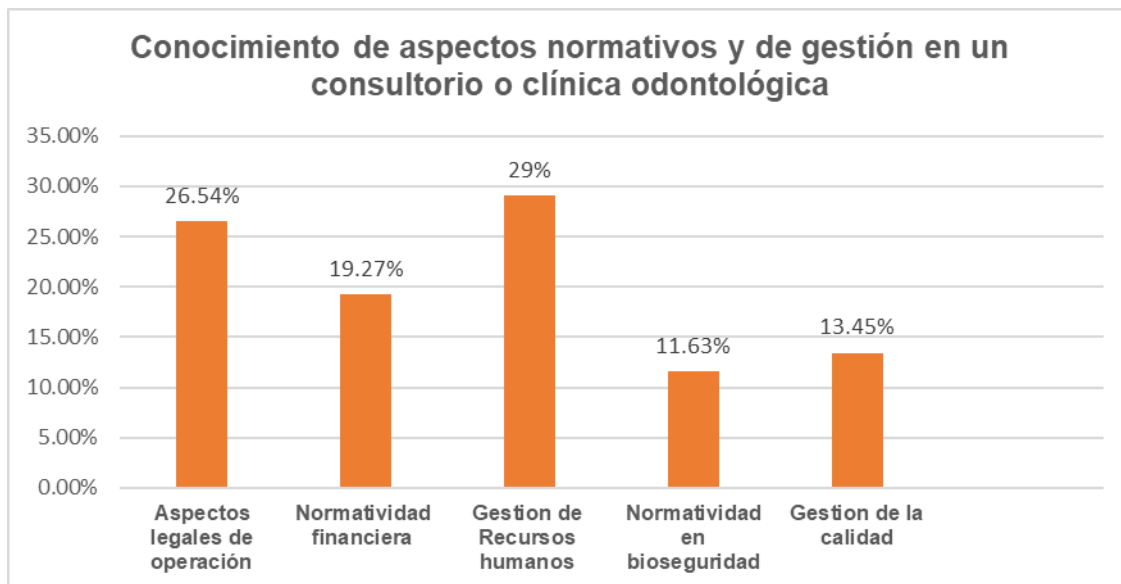
**Figure 4.** Administrative assistants in dental practice



Source: own elaboration

Regarding knowledge of regulatory and management aspects in a dental office or clinic, a significant percentage (29%) mentions human resources management and the legal foundations of operation; Another smaller number is aware of financial regulations and principles related to quality management, while only 11.63% are aware of biosafety and health regulation aspects for the operation of establishments related to health care activities.

**Figure 5.** Knowledge of regulations



Source: own elaboration

## Discussion

The findings underline the importance of administrative knowledge that the dental professional must possess. This discipline has become a prevailing need, largely due to economic, political and social dynamics, as well as constantly changing regulations in the field of health service delivery.

Along these lines, one of the initial actions should be the promotion of teamwork, which can contribute significantly to better organizational performance. Indeed, in a work team, members interact in a coordinated and complementary manner to achieve a shared objective. In this sense, the individual strengths of each collaborator enhance joint work, which leads to a final result that is the sum of individual contributions (Zabala Cepeda, 2020). Furthermore, teamwork improves efficiency and optimizes the use of resources (Trejos Parra and Cardona Triana, 2020).

Regarding the administrative knowledge of the dental professional, it is observed that it is deficient. This is due, first of all, to the fact that most dental surgeon study programs do not include subjects related to administrative or management processes, so they focus on purely clinical aspects ( Manrique, 2018). This agrees with the results found, where 54.2% stated that they did not have basic knowledge in this discipline.

Likewise, it is essential to highlight that administrative activities in the dental care team contribute to the development of competencies necessary to strengthen organizational processes (Tejada *et al .*, 2018). In this context, the importance of dental professionals acquiring the administrative and management concepts essential for decision-making is emphasized. As a result of the findings of this study, it is concluded that there is a lack in the training of professionals in administrative areas, which need to be strengthened to efficiently manage dental offices or clinics.

Regarding the determination of priorities in the operational context, it was observed that 23% prioritize training and the acquisition of equipment, materials and instruments, while a small percentage invests in the promotion and dissemination of dental services. A similar study establishes that, since 2020, social *marketing* has gained greater importance as a service promotion strategy, in response to the crisis triggered by the covid-19 pandemic (Barragán and Vasco, 2022).

Consequently, dental professionals have increased their search for advice from companies that offer business services or consultancies (40%) and have experienced



significant growth in the computerization and automation of administrative processes through software for clinical and business management (Moncada *et al.* , 2021).

Regarding knowledge of the regulatory aspects, which cover legal, organizational and biosafety foundations, it is evident that there is a deficit in the understanding of the financial aspects. Therefore, it is considered imperative that the dental surgeon is properly informed to comply with all these requirements, which ultimately seek to guarantee reliable, ethical and responsible services. This requires that the professional have a clear awareness of their own limits and scope in their practice (Ramírez -Osorio *et al.* , 2022).

In this sense, it is essential that dentists operate within a framework of human values that include respect and knowledge of professional standards in three dimensions: moral, intellectual and organizational. Therefore, it is necessary to implement strategies aimed at providing management training to dental professionals. This will allow them to obtain greater performance in their profession and enter the business field more competently, providing quality and efficient services.

Furthermore, it is vitally important to promote research in administrative, management, innovation and entrepreneurship areas. These investigations can serve as a theoretical, methodological and epistemological basis for health educational institutions, promoting the inclusion of subjects aimed at training professionals aware of the need to design their own strategies for insertion into society, instead of depending solely on institutions. public after graduation.

## Conclusions

The changing dynamics of professional practice require dentists to possess fundamental management knowledge to optimize their resources and perform effectively in their field, so that they can remain competitive in a dynamic market, aspects that equip them with skills to foster innovation and spirit. entrepreneur. Therefore, the development of administrative skills during professional training is essential to achieve these objectives. Alternatively, strategies can be implemented to acquire this knowledge throughout the career.

Researching markets, processes and strategies, using administrative approaches, can have a profound impact on decision making. This research can enhance leadership, foster effective teamwork, and support appropriate planning in patient care.

In summary, contemporary challenges in the field of health, economic fluctuations, demographic growth and changing demands require that dental professionals be at the forefront of knowledge not only of technical and scientific aspects of oral health, but also in administrative and managerial skills.

### **Future lines of research**

The contributions of this study focused mainly on the identification of the training needs of the new dental professional in administrative aspects, an area that should be included in the study programs. This work also constitutes theoretical, critical and reflective evidence from the point of view of research in administration, where themes are established that could be transformed into lines of research such as the quality of services, social marketing, entrepreneurship, innovation. and process administration in the dental area. Therefore, future lines of research could strengthen the generation of knowledge in these areas, and contribute to better performance and participation of the dental professional in a work context with theoretical and practical knowledge.

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