

Leadership Practices and Perceptions in Oral Healthcare: A Scoping Review

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Abstract

Background: Leadership represents a mixture of traits, qualities and behaviors that enable the participation, development, and commitment of the followers in the organization. Dental practitioners, due to the nature of their practice, are expected to have knowledge of practice management and to become effective leaders of their teams. **Purpose:** This research aims to provide an overview of the research documenting leadership perceptions, behaviors and practices in oral healthcare. Moreover, it is also aimed to document potential barriers leadership imposes to dentists, and the types of leadership training offered in dental education. **Methodology:** Three databases (PubMed, ScienceDirect and Scopus) were searched by using the syntax: (leadership AND dentistry) OR (leadership AND dentists) OR (leadership AND dental practice) OR (leadership AND oral health). 880 articles were initially identified. 260 articles remained after applying the inclusion criteria: (1) research documenting leadership in dentistry, (2) written in English, (3) published in peer-reviewed journals, (4) access to full electronic text, (5) full text available. 199 articles remained after scanning for duplicates, out of which 123 were original research. After scanning them by the title, abstract and keywords, 11 articles were found relevant, and were included for the final analysis. **Results:** Leadership was studied from the perspectives of dental practitioners, dental academia, dental leaders and dental students. Leadership and leadership training were perceived important across all groups. Perceived indicators of leadership included being recognized as an expert, teaching and research activities, and being involved in policy. Clinical, transformational, and entrepreneurial leadership definitions were given. Leadership practices were related to practice management, dental organizations and activities in the community. Leadership behaviors included teamwork, conflict management, shared decision-making processes and staff engagement. The main barriers to leadership for dentists were lack of training, money, time constraints, family obligations, and government reforms. All groups advocated for incorporating leadership training in dental education. **Discussion:** To the best of the researcher's knowledge, this is the first systematic review on leadership in dentistry. Different dimensions of leadership occur at each stage of professional development. Dentists need to be aware of leadership practices and behaviors so that they could effectively manage their practice, and achieve high quality care for their patients. However, all dental professionals agreed that leadership was important in dentistry and that training can help dentists become effective leaders.

Key Words: Leadership, Oral healthcare, Practices, Perceptions, Scoping review

Introduction

Leadership is a “process whereby an individual influences a group of individuals to achieve a common goal” [1]. Leadership represents a mixture of traits, qualities and behaviors that a leader has, which enable the participation, development, and commitment of the followers in the organization [2]. Leadership should not be confounded with management, though. Leadership occurs at a strategic level and focuses on enhancing effectiveness, while management is found at the operational level and concentrates on improving efficiency [3]. Roughly translated, leadership means “doing the right things”, while management focuses on “doing the things right” [1,3].

Effective leadership is characterized by three main components: quality, innovation and the business culture, which require different sets of skills [3]. Therefore, effective leadership involves combining leadership, management and entrepreneurship skills so as to the achieve goals and objectives of the organization [3]. Thus, a leader has ability in strategic thinking, problem solving, project management, people management, partnership building, and customer service [2]. A leader also demonstrates good communication skills, innovation and creativity in managing an organization [2].

Leadership is an enabler of service improvement across healthcare organizations [4]. Leadership is linked with health performance outcomes, which can be classified in three main

categories: (a) patient-related, (b) staff-related, and (c) management related [5]. Correlations have been found between leadership styles and key indicators of quality of care and enhanced patient outcomes [6]. Research has also found positive associations between people-oriented leadership and higher job satisfaction, retention and commitment towards the organization, reduced stress, higher self-efficacy and empowerment over decisions [7].

People-oriented leadership is also associated with increased productivity, effectiveness and staff commitment to achieve organizational goals [7]. Moreover, people-oriented leadership styles are also linked with interdisciplinary teamwork, collaboration, innovation and the use of evidence-based practices [8]. Additionally, leadership effectiveness in healthcare organizations has been linked with leader's traits and characteristics, leader behavior and practices, and context and practice settings [8].

Research has identified four core competencies for effective leadership necessary for successfully managing healthcare organizations: (a) knowledge of the healthcare system and the environment which healthcare organizations work, (b) technical skills, demonstrated by the ability to apply management principles in healthcare, (c) analytic and conceptual skills, mainly connected to strategic thinking and problem-solving, and (d) interpersonal and communication skills [8].

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Healthcare organizations are complex in their nature, and leadership faces specific challenges deriving from a combination of environmental and organizational factors [9]. From an environmental point of view, challenges include having to deliver high quality healthcare services with insufficient funding [9]. From an organizational perspective, public healthcare organizations are characterized by multiple hierarchies of professionals, both clinical and non-clinical. This ranking hampers the organization and management of work in healthcare [9]. Thus, in this context, the leadership role performed by medical hybrids in enabling change in healthcare organizations has received special attention [10]. “Hybrids” represent clinicians that assumed managerial duties, while maintaining their clinical practice in order to preserve professional integrity [4]. From this sense, dentists can be considered medical hybrids, as they are confronted with a duality of being a clinician and a leader who manages the practice.

Leadership in healthcare organizations has been studied especially in the context of nurses and physicians, but also from the perspective of dental practitioners [7,8,11]. Dental practitioners, due to the nature of their practice, are expected to have knowledge of practice management and to become effective leaders of their oral health team [11]. A successful leader in dental practice is capable of recruiting and retaining expert staff, but can also create an environment in which high quality care and patient satisfaction are esteemed [11]. A study found that dentists placed great value on being good leaders in their practices and on being recognized by patients as being good leaders [12]. The same study found that dentists perceived being recognized by patients, staff, and other dentists as experts in oral health as indicators for leadership [12].

A study done in Finland found that lead dentists perceived themselves as good leaders, while less than half of their subordinates agreed [13]. However, the lead dentists were also perceived as people-oriented leaders by their subordinates [13]. Another study found that female lead dentists perceived both their position as superior or as subordinate weaker than their male counterparts [14]. Nonetheless, dentists working in the public dental service perceived female superiors as better goal-oriented managers and people-oriented leaders than male superiors [14].

Dental professionals are increasingly challenged to meet their patients’ needs and to provide them with the best quality treatment [15]. Dentists need to be prepared to efficiently manage their practice and their staffing issues, while preparing for the profession’s future [16]. Therefore, it is essential for dental professionals to develop strong leadership skills, to further advance dentistry. Leadership in dentistry has increasingly received attention, evidence being the growing number of leadership programs for dental professionals [17].

Aim

Taking into account the importance leadership has in dentistry, the present systematic review aims to provide an overview of

the research documenting leadership perceptions, behaviors and practices in dentistry and oral healthcare. Moreover, it is also aimed to document potential barriers leadership imposes to dentists, and the types of leadership training offered in dental education.

Methodology

The review focuses on documenting leadership in dentistry, as no review was identified on this topic. For the first methodological step, a search was performed in June 2016 on four databases: PubMed, ScienceDirect, SCOPUS and Cochrane Reviews. The latter was excluded from the search databases as the initial search yielded no results related to the research question.

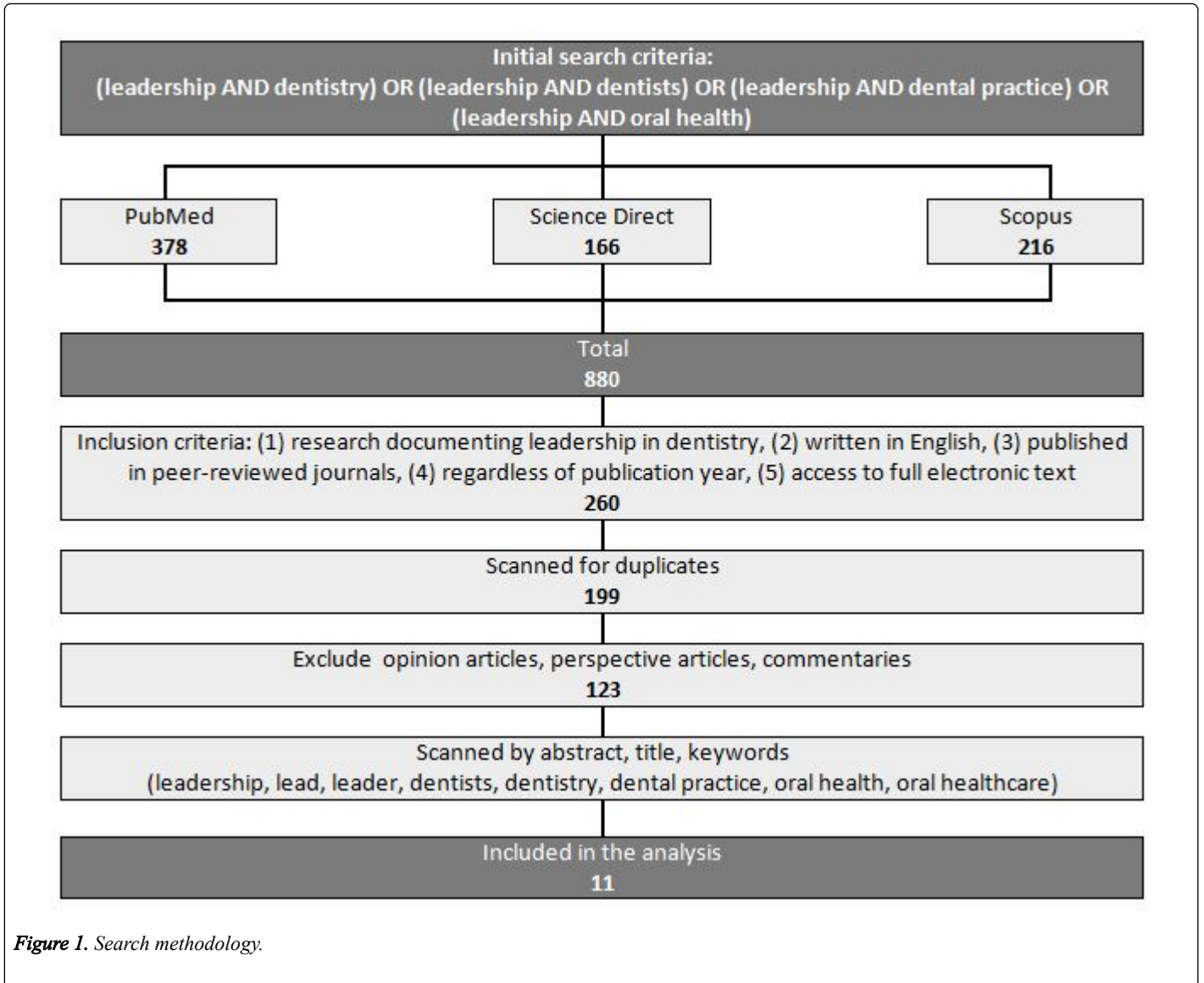
In the remaining databases, the search was performed by using the term “leadership” in combination with one of the terms “dentistry”, “dentists”, “dental practice”, or “oral health”. Therefore, the search syntax was (leadership AND dentistry) OR (leadership AND dentists) OR (leadership AND dental practice) OR (leadership AND oral health). Consequently, the articles retrieved were assessed according to the inclusion criteria: (I) research documenting leadership in dentistry, (II) written in English, (III) published in peer-reviewed journals, (IV) regardless of publication year, and (V) access to full electronic text. When full electronic text was not available, access was sought through the University of Iowa Libraries. Therefore, they were introduced in a reference manager, Mendeley Desktop. Moreover, it was decided at this step to exclude from the review opinion articles, perspective articles, or commentaries.

In the second methodological step, the relevance of the identified articles was tested by scanning the title, abstract and keywords. At this stage, it was observed that leadership in dentistry was studied from the perspectives of different stakeholders. Therefore, it was decided to include in the review research on leadership in dentistry from the perspectives of dentists, as well as dental students, dental leaders, and dental academia.

The last step involved assessing all articles identified in the previous steps, which remained after applying the inclusion criteria. The review was performed by using QSR NVivo 10, by conducting thematic analysis of the articles.

Results

The search process yielded 11 articles relevant for the purpose of the study, which were used in the analysis; consequently, all the results refer to the total of 11 articles (*Figure 1*). The analysis is structured in six main sections, to enable a more comprehensive understanding of the subject. Each section is presented comparatively from the perspectives of the dental stakeholders identified.



Leadership types

Leadership definitions varied across studies (Table 1). While some dentists thought of leadership in relationship to their practice, others thought of leadership within the profession [12]. Leadership was referred to both ‘as the individual’ and ‘as a relationship’ [18]. Dentists from the UK referred to leadership as pertaining to the individual, while dentists in Japan described leadership in terms of a relationship, in line with their collectivist culture [18].

Clinical, transformational, and entrepreneurial leadership definitions were more common. Dentists and dental students were more likely to give leadership definitions consistent with transformational leadership and believed leadership could be learned [16-18]. Dentists from Japan were more likely to refer to leadership as clinical leadership at a practice level, and to highlight the importance of effective diagnosis and treatment [18]. Clinical leadership was also mentioned in terms of managing services and working with others. They also mentioned providing the direction for the dental team,

involvement in treatment planning, and monitoring less experienced staff [18].

Entrepreneurial leadership was also mentioned, as dentists expressed tensions between having to manage the business, being a leader for their staff and providing clinical care for their patients [18]. Dentists and dental student also provided definitions for leadership in line with the charismatic and servant leadership characteristics [17,18]. Shared leadership was also mentioned by dental leaders, as essential for obtaining a vision and direction for the dental profession [16,18].

While the majority of dentists from the studies identified democratic leadership styles, some dentists identified themselves as autocratic leaders in their practices [19]. The most mentioned qualities of a leader given by both dentists and dental students were being a role model for the team, providing the vision and strategy for the organization, providing direction for the clinical team, and working with others [12,17]. Moreover, some dentists identified themselves

with a laissez-faire leadership style, being team-oriented and engaging in participative-decision making processes [12].

Table 1. Leadership types.

Leadership types	Clinical (working with others, managing and improving services, setting direction) [18].
	Transformational (shared vision, conflict management skills, motivate team-members) [16-18].
	Entrepreneurial (problem-solving, decision-making, strategic thinking) [18].
	Charismatic (inspire and motivate team-members, focus on themselves) [17,18].
	Servant (integrity, lead by example, puts needs of others first) [17,18].
	Shared (shared power among team-members) [16].

Leadership perceptions

Both practicing dentists [12,18] and dental students [17,20,21] rated leadership as being important and very important. However, results from a study on academic deans found that dental academia did not perceive dental students regarded leadership development as important [22].

When talking about leadership perceptions, dentists and dental students, referred to two dimensions: leadership at a local and national level, and leadership in the practice and in the profession. Regarding their role in the clinical team, some dentists perceived themselves as either separate from the team, being at the top of the hierarchy [18,19], or as team-oriented, being team-members and “managers of talents and resources”.

One study found that the majority of dental students perceived they had potential to be good leaders in the future [17]. Another study found that although dental students were perceived as leaders of the team by the other students, dental students did not feel confident in this role, due to their lack of practical experience [23].

Differences were observed between males and females. Females had greater scores on the perceived importance of leadership than their male counterparts, even though neither gender differed in how effective they saw themselves as leaders [12]. Moreover, female practitioners rated their leadership-related experiences more positively than males [24]. However, some dentists from Japan perceived there was a lack of female role models in dentistry [18].

Leadership behaviors

Different leadership behaviors were noted across studies (Table 2). Good teamwork skills and communication skills

Table 2. Leadership behaviors.

Leadership behaviors	Empowering employees
	Shared-decision making processes
	Encouraging team members
	Motivating the staff
	Continual training for staff members
	Searching for training opportunities for employees

[17,18,23] for leaders were noted by dental students and dentists as essential for ensuring quality care for patients. Shared decision-making [16,18], trusting and empowering employees were mentioned by key informants as important leadership behaviors for dentists [16].

Continuing education, especially continual training for staff members and searching for opportunities for them to advance their professional skills was noted as a leadership behavior [18,19]. This resulted in higher staff retention, as it cultivated a relationship between employees and the leader. Moreover, staff members felt more empowered and responsible for the practice [19].

Participative-decision making processes were also mentioned as leadership behavior, as they contributed towards creating a sense of team identity that included the dentist. Employees also felt their input and opinions were valued, and felt empowered as a result [19]. Conflict-management techniques and ensuring an environment of open communication in the practice were also considered leadership behaviors, which helped at ensuring a team environment in the dental practice [19].

Key informants noted several leadership behaviors for a dentist, in line with what dentists said. These included working in partnership with the staff, instead of being a “one-man” team, encouraging team members to feel confident, being supportive of team members and being able to motivate them. Thus, they expressed the need for a shift from vertical leadership to a more participative-leadership style [16].

Leadership practices

Leadership practices were related to practice management, dental organizations and activities in the community. Dental students also said they expected to participate in volunteerism in dentistry, holding leadership roles in dental associations, in academic dentistry, or in military dentistry [17].

Indicators of leadership varied across groups and studies. Regarding leadership practices, dentists referred to former experience and activities related to leadership in dental organizations and in the community [12]. Both dentists and dental students also referred to leadership in their profession and in their own practice [12,17].

Dentists referred to practices related to organized dentistry, such as volunteering dental services in the community, holding local and national positions in organized dentistry, being involved in dentistry-related politics or legislation, teaching and research activities [12].

Leadership training

Dentists from one study declared that their pre-doctoral education did not prepare them to run an effective practice or to be a good leader for their team. However, they expressed positive post-doctoral leadership experiences [24]. This view was also shared by dental leaders, who thought the training they received did not benefit their practice, and wished it had been more dentistry-specific [16].

Dentists from Japan perceived leadership training as important, stating they learned from their role models and that they were involved in mentoring activities for their students. This was also an indicator for the Japanese collective community sense and the Senpai culture. However, dentists from the UK stated they were more autodidacts and did not receive any formal training. They believed leadership could not be taught through education, but it can only make students aware of the qualities of a good leader [18].

Table 3. Leadership barriers.

Leadership barriers	Individual level	Lack of enthusiasm towards leadership issues
		Lack of confidence in their personal skills
		Time constraints
		Family obligations
		Lack of communication skills
	Organizational level	Dental practice obligations
		Lack of opportunities for leadership development
		Lack of funding
		Lack of institutional support
		Time constraints
	Environmental level	Changes in the national health care environment
		Funding issues from national governments

At the organizational level, the barriers dentists identified for engaging in leadership were dental practice obligations [12]. Time constraints, the lack of funding and lack of

Dental leaders believed leadership training would equip future professionals with essential skills to lead their practice, but also to discover their innate leadership abilities [16], and to encourage them to become dental leaders [16,21]. Thus, dentists and dental students expressed the need for an effective leadership program that would provide training in team communication [12,21], organizational skills [17], as well as enhance their assertiveness and ability to influence others [17].

Representatives of the dental academia stated their schools offered leadership training in terms of leading the dental team, community leadership, practice management, leading the profession, and organized dentistry [22].

Dental students expressed their interest in leadership training [20,21], and believed leadership skills were crucial for obtaining success as a future practitioner [20]. Professionals view leadership programs as a way to enhance and shape dentistry at all levels [21], and to increase collaboration within the profession [21]. The lack of training was viewed as a determining factor for dentists leaving the profession [16], and could also result in poor productivity, low employee satisfaction, and low patient outcomes [22].

Barriers to leadership

The identified barriers for leadership pertained to three levels: individual, organizational and environmental (*Table 3*). The individual barriers were mostly connected to the dentists' lack of enthusiasm towards leadership issues [12], lack of confidence in their personal skills, driven from their personality type [18], time constraints and family obligations [12]. Dental students felt their lack of communication skills with other dental professionals were a barrier for leadership [23].

institutional support for creating leadership programs were also named barriers by dental deans [21]. They also faced barriers in developing and growing new leaders, which

ultimately led to the lack of opportunities for leaders' development [21].

At the environmental level, changes in the national health care environment were mentioned [21], as well funding issues, which ultimately led to reduction in staffing levels [16]. This leads to challenges for leaders who have to ensure quality services for patients with fewer personnel [16].

Discussion

The studies included in the analysis were both quantitative and qualitative. The quantitative studies were performed by sending questionnaires to national samples of dentists; however, they had a low response rate. Some authors speculated that this low response rate might be attributed to the low interest in the matter, while others attributed this to their research design (online or post questionnaires). The qualitative studies were performed by conducting focus groups on small samples of dentists, dental students, or dental academia from different dental universities from the US, UK and Japan. This is also a sign of the increasing attention that leadership is getting in dentistry, as more and more dental universities have started to include leadership trainings or courses in their curriculum.

Leadership in dentistry is essential, as it is one of the quality management principles from the ISO 9000 standards. Dentists need to be aware of leadership practices and behaviors so that they could effectively manage their practice, and achieve high quality care for their patients. Furthermore, this knowledge can also help them achieve performance in leadership positions in organized dentistry, and to bring dentistry forward. Dentists were ranked on the fifth position out of twenty-two professions as the most trusted and honest professionals in 2012 [25].

The various definitions given for leadership, as well as the different leadership perceptions and practices mentioned by dental professionals are a sign of the variability of dental education across regions. This is also a sign of the dentists' diverse experiences as professionals, which can also be shaped by the political and organizational environment. There is a need for achieving consensus on how actually leadership is represented in dentistry, in order to increase collaboration between dental professionals across different countries. This consensus is also necessary across dental universities, for building effective leadership training programs which emphasize on the same aspects. This in turn will help at developing effective leaders in the dental profession, who are capable of advancing dentistry and achieve the highest quality.

To the best of the researchers' knowledge, this is the first systematic review that tackles the aspects of leadership in dentistry. The present review aims to highlight the most important aspects of leadership in dentistry pointed out by current research from the field. It is aimed to become a starting point for more research in this field, in order to have a more comprehensive image of the subject.

Limitations

A limitation of this study is represented by the low number of articles identified to be included in the review. This can be

due to the inclusion criteria, as only articles written in English were included in the analysis. Thus, relevant information may have been skipped due to this search criterion, as there may be important articles written in other languages on the subject. However, this is also a sign of the little research done in the field, as it is in its incipient phase. Another limitation is the unavailability of full text for all articles identified initially.

Conclusion

To conclude, leadership in dentistry has many dimensions and can be culturally bound. Moreover, different dimensions of leadership occur at each stage of professional development. However, all dental professionals agreed that leadership was important in dentistry and that there is a need for training dentists to become effective leaders. Future research is needed in the field, in order to get a more comprehensive image of leadership in dentistry. However, this present review also highlights the potential of incorporating leadership training in dental education, as it can prepare dentists to meet the current demands in oral healthcare, and to further advance the profession.

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