# **Patient-centered Care in Dentistry**

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# Abstract:

Patient-centered care (PCC) in dentistry is a holistic approach that considers not just the dental condition but also the patient's individual preferences, needs, and values (Kristensen et al., 2023). It aims to ensure that patient values guide all clinical decisions, fostering a collaborative and respectful patient-dentist relationship. It tries to make sure patients' values determine clinical decisions so that an interaction involving both the dentist and a patient-centered approach with respect will result. This interconnection in dentistry goes further because psychosocial factors, such as experiencing dental phobia and one's economic class, affect oral health significantly. Dental phobia, which can create treatment avoidance, accentuates the necessity of comprehending and addressing such issues to provide effective and patient-centered care (Kristensen et al., 2023). Another issue is economics, which can hinder getting

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Integrating objective data into treatment strategies is essential for effectively implementing PCC in dentistry. Objective data, for instance, clinical parameters that can be quantified, serve as a research basis that completes the information patients can provide regarding their subjective experiences (DrKumo, 2023). Integration of the two of them provides a broader picture of the patient's current oral health status and the potential available treatments. For example, tracking a patient's hard data figures of probable oral wellness indicators like gingivitis and tooth damage alongside their subjective details, such as reported symptoms or concerns, can aid in recognizing patterns and customizing treatment plans to achieve better results by offering optimized services to the patients (DrKumo, 2023). However, despite the bright side of PCC, there are also some difficulties that persist; among them, one can highlight the absence of a uniform definition and detailed recommendations for its application in dentistry. Reasonable attempts are being made to tackle them by virtue of a theory-based PCC model created with the dental setting as its core area of application. However, additional research that would entail empirical testing of the model and its practicality is needed to realize the potential for developing patient-centered care in dentistry, indicating the rising importance of this model and its timely implementation in dentistry.

#### **Historical Context of Dentistry in Europe**

The development of dentistry's role in medicine as a healthcare profession in Europe started in the Middle Ages. Back then, barber surgeons dominated oral healthcare and other medical services. The history of dentistry goes back even to ancient civilizations. Still, it was not recognized as a unique profession until the early eighteenth century. Perhaps the most important contribution was the textbook "The Factures of Dentistry" by Pierre Fauchard, which was published in 1728; it is often referred to as the basis of dentistry (Museum of Health Care, 2020). Pharmacology, or the nature of medicinal remedies, along with the anatomy and physiology of the oral cavity, was the subject matter that he explored extensively. In addition, he laid the foundations for various treatment methods. After that, the achievement of an ideal dental technology, such as porcelain teeth and the start of the use of nitrous oxide anesthesia, empowered dentistry even more. Dentistry began to spread in mid-eighteenth-century Canada when European dentists came to this new dominion and settlers apprenticed with them. The profession aimed to fight against abusive practices by banishing quackery and implementing professional associations and legislation to regulate the practice. They set off a trend of changes in dental education, which finally ended with the establishment of dental colleges and associations in the 19th century. This laid the foundation for the specialization and modernization in dentistry that took place throughout the 20th century.

European dental care is generally in constant development, and the milestones related to patient care throughout history keep evolving. The history of oral health can be traced as far back as 3700 BC, as papyrus from Ancient Egypt mentions dental pain and oral disease (Dental

Solutions, 2018). This shows that early people took measures to alleviate these two conditions. It is also evident from ancient Egyptian toothpaste and toothbrushes that used natural ingredients like mint and pepper grains around this particular time until 400 A.D., more specifically 500 BC to 400 AD, that attempts were made at oral hygiene (Dental Solutions, 2018). However, dentistry as a medical field only came into existence in the 19th century with the implementation of injections for oral operations and the opening of the first dental offices. The most remarkable personality in the history of dental medicine was Pierre Fauchard, who published the first modern book on dentistry, "The Surgeon Dentist," in 1728, and he has since ignited the profession. He made metal dental instruments with gold, silver, and copper alloys during the 17th century. He also studied dentistry education programs and contributed to shaping the future of dental care in Europe and beyond.

# **Understanding Patient-Centered Care**

Patient-centered care is defined as a holistic approach to healthcare wherein the patient at the center is treated with respect, and his/her choices, preferences, and needs are emphasized (Sharma et al., 2023). It essentially comprises empowering patients by involving them in decision-making, treating them with respect and care, and all of this is done with the utmost dignity while simultaneously accommodating their cultural values and freedoms. Picker's Eight Principles of Patient-Centered Care elaborate on the underlying aspects of this approach, and they include honoring patients' values and preferences, helping to coordinate and integrate care, sharing information and education, assuring physical comfort, providing emotional support, inviting the participation of family and friends, cooperation in the transition of care, and ensuring access to care (O'Neill, 2023). These principles are based on evidence, and they intend to tackle issues related to the provision of services by improving healthcare delivery in multiple ways.

Patient-oriented dentistry flourishes on the following attendant factors: the personalization of care services and the consideration of the needs and preferences of patients. Practical communication and listening, which are active, are essential as they help dentists understand and deal with patients (Seminars, 2023). Patient-centered treatment strategies and mutual decision-making improve treatment plans and make it possible to develop solutions targeting a unique patient's specific requirements to achieve their goals (Seminars, 2023). Teaching patients about their health state and providing oral care guidance gives them the power to decide about their oral health (Gustafsson et al., 2021, p. 1). Building trust and solid patient-dentist relationships are crucial to having a pleasant environment and engaging dental patients. Therefore, the last benefit that orthodontics can bring to dental offices is a higher level of patient care due to the integration of comprehensive services in one location. This makes the life of patients both more convenient and more satisfactory.

Adopting a patient-centered approach in healthcare offers several benefits for patients and care providers. Patients are made to feel more triumphant in the circle of support, which creates an open way to communicate using technology; this further empowers patients to participate more effectively with their healthcare providers (Sibal, 2023). On the one hand, health plans and treatments will be adjusted based on the personalized requirements and preferences of the patients (Sibal, 2023). This, in turn, will improve the quality of care, which is intended to meet each patient's requirements in return. Enabling patients is a fundamental aspect in decision-making for their health (Kuosmanen et al., 2021). It gives them the power to be independent and satisfies them with a better relationship with the healthcare system. The long-term health results will likely be better if we solve the demand for healthcare prevention instead of only curing illnesses. Consequently, the burden on the medical system will be reduced by the need for less urgent treatment.

# Integration of Objective Data in Patient Care

Objective data plays a crucial role in dentistry by providing valuable information for patient assessment and treatment planning. Accurate data refers to the characteristics of a patient that can be measured and recorded, such as vital signs, the intake and outtake of different substances by the patient, and measurements of height and weight (Toney-Butler, 2023). The

dentistry practice often employs objective data measured through radiographs, intraoral images, and looking closely at the teeth, the gums, and oral tissues (Toney-Butler, 2023). These are so critical in the dental diagnosis of oral health issues, the establishment of unique treatment plans, and when monitoring the effectiveness of the results. The collection of objective data during patient care is of utmost importance as it provides a total objective and evidence-based approach to dental treatment (Phonsuda et al., 2022, p. 101660). As a result, treatment outcomes and patient satisfaction improve. By objectively incorporating data into the assessment process, dentists can genuinely identify the oral health conditions, plan and organize the treatment plans for every individual, and check the progress of the interventions.

The integration of objective data into treatment strategies offers several advantages in patient care. The collected data offers a more complete and optimal perception of a patient's oral health status, thus allowing the dentist to form decisions based on evidence and adjust treatment plans to the patient's needs (Reissmann, 2021, p. 233). It aids the medical workers in monitoring disease development, assessing the therapeutic results, and detecting any complications or complicity occurrences. On the other hand, the application of objective data strengthens communication among dental professionals and subsequently improves patient comprehension and participation in their care (Lorié et al., 2021, p. 1581). A number of challenges and limitations are faced, such as the high cost of diagnostic tools, differences in data interpretation between specialists, and the necessity for constant training when handling objective data. However, despite these hurdles, the value of incorporating evidence-based data into treatment programs outweighs the downsides when it comes to bringing about better patient outcomes and care quality.

#### **Comprehensive Treatment Strategies**

Comprehensive dental treatment planning in terms of best patient treatment has to be the most critical aspect of quality healthcare provision (Martin & Mulligan, 2022, p. 26). It includes a comprehensive oral health exam of the patient, where the medical expert needs to examine the presence of existing dental problems, risk factors, and patient preferences. Instead of limited options, holistic approaches enable dentists to develop a comprehensive care plan that not only focuses on the current dental concerns, but the whole mouth health of the patient. Over the lifetime of the patient, this can save them money because this kind of approach first focuses on the interventions that are the most useful to the patient, which helps to ensure that the most urgent issues are addressed while ensuring the overall well-being of the patient. Comprehensive treatment plans help establish unanimous communication among dental team members who participate in providing the patient's care program, forming a unified and practical approach to the treatment.

Treatment plans in the dentistry field embrace several integral elements covering all sides of one's well-being to, generally speaking, guarantee the quality of medical care. Thus, it should begin with a wide-ranging examination of the patient's dental health, including subjective and objective data acquisition. The assessment evaluation is a method of determining what issues the patient has and what treatment goals he/she would like to achieve (Moore, 2023). In making a diagnosis, clinical judgment is employed in combination with the assessment conclusion, which aids in mapping out the patient care plan. Setting SMART goals, specific, measurable, attainable, realistic, and timely, are an integral part of planning (Ogbeiwi, 2021, p. 324). Implementation refers to the act of carrying out the nursing procedure outlined in the current care plan. At the same time, evaluation measures whether the desired results are attained or the care plan needs revision by utilizing newly collected assessment data. Ultimately, a comprehensive treatment plan in dentistry focuses on rendering personalized care that corresponds to the specific patient needs, and it involves advancing patient outcomes in general as well as the quality of provided care.

#### **Future Directions and Recommendations**

Trends in patient-oriented care, which have a lot in common with European dentistry, and data integration in healthcare delivery are shaping the future of oral healthcare delivery. A prevalent theme is the growing role of personalized

treatment plans with patient-doctor decisions, which means that dental care is customized to unique patient needs and wants (Larsen et al., 2022, p. 328). This approach is a bid both to ensure patient satisfaction and increase treatment outcomes. Another trend is the use of technology to facilitate patient-professional communication and collaboration. Telehealth services, remote patient monitoring, and digital platforms enable patients to access care conveniently, and they are also able to play a role in their care. On the other hand, public attention has moved to preventative care and condition maintenance as the focus shifts from oral problems to the level of severity (Giacaman et al., 2022). To take patient-centered care and data integration in European dentistry to the next level, future studies should look into and evaluate if these approaches have a positive effect on patient outcomes and if they are also able to reduce healthcare disparities. The research and development of such technology, as well as data analysis, will also be of great importance in improving the efficiency and effectiveness of dental treatments. In short, these trends and research areas, as well as those described above, will turn European dentistry on its head by introducing more patient-focused, thoroughly planned, and functional oral healthcare systems.

# Conclusion

The progress of dentistry in Europe has been full of momentous points, from the Indus Valley Civilization in its early practices by bead artisans and the establishment of professional dental care by Pierre Fauchard to the developments of dental technology in the nineteenth and twentieth centuries. Based on my own experience, the concept of physician-oriented treatment has been shifting over time to becoming a priority. From what has been perceived as a largely provider-centered approach, there has been a shift toward patient-centered care, where the provider values and addresses the patient's needs, desires, and preferences, among others. The implementation of data from objective outcomes in patients' treatments, where personalized treatment plans, shared decision-making, and preventive methods are now utilized, is carried out to further increase dental service provision (Schwendicke & Krois, 2022, p. 21). Going ahead, dentistry in Europe has an undeniably optimistic

attitude, with a recurring tendency to focus on patient care and data integration. Through the implementation of these principles and by utilizing technology and innovative solutions, dentistry in Europe will continue to improve the quality of comprehensive dental care for all patients by providing practical evaluations of patients.

# References

- 1. DENTAL SOLUTIONS (2018) *Throwback: The biggest milestones in the history of dentistry*. https://blog.edentalsolutions.com/thebiggest-milestones-in-the-history-of-dentistry.
- 2. DRKUMO (2023) Improving Patient Outcomes with Remote Patient Management: The Importance of Tracking Objective and Subjective Data. https://drkumo.com/importance-of-tracking-objective-and-subjective-data/.
- 3. GIACAMAN R A, FERNANDEZ C E, MUNOZ-SANDOVAL C, LEON S, GAR-CIA-MANRIQUEZ N, ECHEVERRIA C, VALDES S, CASTRO R J, GAMBET-TA-TESSINI K (2022) I am understanding dental caries as a non-communicable and behavioral disease: Management implications. Frontiers in Oral Health, 3, p.764479.
- 4. GUSTAFSSON A, SKOGSBERG J, REJ-NO A (2021) Oral health plays second fiddle in palliative care: an interview study with registered nurses in home healthcare. BMC palliative care, 20, pp.1-11.
- 5. KRISTENSEN C B, ASIMAKOPOULOU K, SCAMBLER S (2023) 'Enhancing patient-centered care in dentistry: a narrative review,' *British Medical Bulletin*, 148(1), pp. 79–88. https://doi.org/10.1093/bmb/ ldad026.
- 6. KUOSMANEM L, HUPLI M, AHTILUO-TO S, HAAVISTO E (2021) Patient participation in shared decision-making in palliative care–an integrative review. Journal of Clinical Nursing, 30(23-24), pp.3415-3428.
- LARSEN M, HOLDE G E, JOHNSEN J A K (2022) Challenging encounters in clinical dentistry: a qualitative study investigating online reviews of patient satisfaction with Norwegian dentists. Acta Odontologica Scandinavica, 80(5), pp.328-337.
- 8. LORIE E S, WILLEM-JAN W W, VAN-

VEENDAAL N R, VAN KEMPEN A A, LABRIE N H (2021) Parents' needs and perceived gaps in communication with healthcare professionals in the neonatal (intensive) care unit: A qualitative interview study. Patient education and counseling, 104(7), pp.1518-1525.

- 9. MARTIN N, MULLIGAN S (2022) Environmental sustainability through good-quality oral healthcare. international dental journal, 72(1), p.26.
- 10. MOORE C (2023) What is a treatment plan? 10 examples and software systems. https:// quenza.com/blog/treatment-plans/#:~:text=Key%20Elements&text=Progress%2C%20time%20frame%2C%20 and%20outcomes,details%2C%20such%20 as%20session%20length.
- 11. MUSEUM OF HEALTH CARE (2020) *The evolution of dentistry.* https://museumof-healthcare.blog/the-evolution-of-dentistry/.
- O'NEIL N (2023) The Eight Principles of Patient-Centered Care - OneView Healthcare. https://www.oneviewhealthcare.com/ blog/the-eight-principles-of-patient-centered-care/.
- OGBEIWI O (2021) General concepts of goals and goal-setting in healthcare: A narrative review. Journal of Management & Organization, 27(2), pp.324-341.
- 14. PHONSUDA CHANTHAVISOUK RDH, M D T, PATTANAIK S, WAREN C E, BRICKLE C, SELF K (2022) Dental therapy and dental patient-reported outcomes (dPROs). Journal of Evidence-Based Dental Practice, 22(1), p.101660.
- 15. REISMANN D R (2021) Methodological considerations when measuring oral health-related quality of life. Journal of oral rehabilitation, 48(3), pp.233-245.
- SCHWENDICKE F, KROIS, J (2022) Data dentistry: how data are changing clinical care and research. Journal of dental research, 101(1), pp.21-29.
- 17. SEMINARS S O (2023) 5 Key Elements of Patient-Centric Dentistry | Synergy Orthodontic Seminars. https://synergyorthodonticseminars.com/5-key-elements-of-patient-centric-dentistry/.
- SHARMA D, SINGH AUJLA G, BAJAJ R (2023) Evolution from ancient medication to

human-centered Healthcare 4.0: A review on health care recommender systems. International Journal of Communication Systems, 36(12), p.e4058.

- 19. SIBAL R (2023) *The importance of adopting a patient-centered approach in healthcare.* https://www.linkedin.com/pulse/ importance-adopting-patient-centered-approach-healthcare-rajeev-sibal/.
- 20. TONEY-BUTLER T J (2023) Nursing process. https://www.ncbi.nlm.nih.gov/ books/NBK499937/#:~:text=Objective%20 data%20is%20measurable%2C%20tangible,be%20direct%20relation%20family%20 members.