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IP Annals of Prosthodontics and Restorative Dentistry

Journal homepage: https://www.aprd.in/

Editorial

Curriculum revitalization: Enhancing relevance and rigor

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ARTICLE INFO

Article history:
Received 20-06-2024
Accepted 15-07-2024
Available online 16-08-2024

Keywords:
Curriculum
Digital dentistry
Geriatrics
Forensic odontology
Teaching methods
Interdisciplinary approach

ABSTRACT

This paper explores the critical need for revising the MDS Prosthodontics curriculum and teaching methods to better align with contemporary advances in dental practice and education. It advocates for a comprehensive overhaul that incorporates cutting-edge technologies, such as digital dentistry and addresses specialized areas including geriatrics and forensic odontology. The paper highlights the importance of integrating advanced pedagogical techniques, such as simulation-based learning, flipped classrooms and interdisciplinary collaboration, to enhance the practical and theoretical understanding of students. It also underscores the role of continuous professional development (CPD) in ensuring that Prosthodontists remain adept and up-to-date with emerging trends and best practices. By proposing structured updates across curriculum content, teaching methodologies, and professional growth opportunities, this paper aims to foster a dynamic and robust educational framework that better prepares future Prosthodontists to deliver high-quality, evidence-based care, and excel in an evolving healthcare landscape.

1. Introduction

Prosthodontics, a dynamic field that encompasses the restoration and replacement of teeth, It must always adapt to new developments in technology and patient needs. Examining and enhancing educational frameworks is essential as the area develops to ensure that the next generation practitioners are well-prepared. This editorial delves into the challenges faced in Prosthodontic education and proposes strategies for preparing students for the future.

2. Discussion

Modern day Prosthodontics demands proficiency in various advanced technologies. To meet this demand, educational institutions must integrate the following components into their curricula:

2.1. Digital dentistry integration

It is essential that digital dentistry training be included in the MDS Prosthodontics curriculum in order to prepare future Prosthodontists to use cutting-edge dental technologies. Courses and hands-on training in digital imaging, intraoral scanning, digital workflow management, computer-aided design and manufacturing (CAD/CAM) and 3D printing should be included in this integration. Students can obtain practical experience with the newest digital equipment and software by including topics like Advanced 3D Printing methods, CAD/CAM in Prosthodontics, and Digital Dental Imaging.[1–3] Lab exercises and real-world case studies can highlight clinical uses of digital dentistry, such as the creation of precise and accurate prostheses and implants. With this all-encompassing approach, graduates are guaranteed to be proficient in using digital technologies to improve patient outcomes, efficiency and accuracy in Prosthodontic practice.[4–7]

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https://doi.org/10.18231/j.aprd.2024.033

2.2. Interdisciplinary training

In Prosthodontics, collaborative management with allied dental and medical professionals is essential for complete patient care. Prosthodontists, together with other dental specialists like Periodontists, Orthodontists, and Oral Surgeons, as well as medical specialists including Geriatricians, Endocrinologists, Oncologists, and Plastic surgeons, collaborate in this strategy. Through the promotion of interdisciplinary collaboration and communication, patients are provided with a comprehensive treatment plan that attends to every facet of their oral and general health. Collaborative management guarantees that difficult cases, like those involving systemic disorders or significant oral rehabilitation, are managed efficiently. It can involve cooperative case discussions, shared treatment planning and coordinated follow-up care. This integrated care strategy raises the bar for care, increases patient happiness, and improves treatment outcomes.[8]

2.3. Focus on geriatric prosthodontics

Focusing on geriatrics in the MDS Prosthodontics curriculum is essential to meet the specialized dental care needs of the aging population. This focus involves educating students about physiological changes, common oral health issues in older adults and the complexities of managing patients with multiple medical conditions and medications. The training program should include courses such as Geriatric Oral Health, Advanced Prosthetic Solutions for Elderly Patients and Interdisciplinary Geriatric Care. Clinical rotations in geriatric dental care provide hands-on experience, while interdisciplinary collaboration with geriatricians and other healthcare professionals ensures a comprehensive approach to patient management. Prosthodontists are better equipped to improve the quality of life for senior patients through individualized and efficient dental treatments when research on age-related dental disorders is prioritized.[9,10]

2.4. Integrating forensic odontology

Integrating forensic odontology into the MDS Prosthodontics curriculum can significantly enhance the expertise of future Prosthodontists, equipping them with vital skills for legal and criminal investigations. This integration involves introducing foundation principles of Forensic Oodontology, including dental identification, age estimation, bite mark analysis and mass disaster management. By incorporating hands-on workshops, case studies and interdisciplinary collaborations, students can gain practical experience in forensic techniques. Additionally, focusing on the legal and ethical aspects of forensic odontology ensures that students understand the broader implications of their work. Encouraging research in this field and facilitating participation in forensic odontology societies and conferences will keep students abreast of the latest advancements.

The advantages of this integration go beyond the classroom. Dental evidence can be used to solve criminal cases and identify victims of major disasters by Prosthodontists with Forensic odontology competence. With this particular knowledge, they can work in academic research, legal medicine and forensic science, which improves their job options. Prosthodontists can also make a significant contribution to public service and justice by helping with community services like catastrophic victim identification. Overall, adding forensic odontology to the MDS Prosthodontics program will enhance Prosthodontists' capacity to assist society in a variety of ways and expands their professional scope.[11–15]

2.5. Innovative teaching methods

Innovative teaching methods in the MDS Prosthodontics curriculum can significantly enhance the learning experience and better prepare students for advanced clinical practice. Simulation-based learning, through the use of virtual reality (VR) and augmented reality (AR), allows students to practice complex dental procedures in a risk-free, immersive environment. The flipped classroom model, where pre-recorded lectures are watched outside of class, enables in-class time to be dedicated to interactive discussions, case studies and problem-solving activities. Interdisciplinary collaboration, with joint sessions involving other dental and medical specialties, fosters a holistic approach to patient care and enhances teamwork skills. Digital and online learning platforms provide accessible e-learning modules and virtual clinic sessions for diagnosing cases online. A culture of innovation and evidence-based practice can be fostered by supporting mentored research projects and making use of innovation laboratories furnished with state-of-the-art equipment. Formative assessments and Objective Structured Clinical Examinations (OSCEs) are two examples of assessment techniques that guarantee thorough examination of students' competencies. These innovative methods will collectively create a dynamic and comprehensive educational environment, preparing future Prosthodontists to excel in their field.[16–19]

2.6. Continuous professional development

Continuous Professional Development (CPD) in the MDS Prosthodontics curriculum is essential to ensure that Prosthodontists remain updated with the latest advancements in their field and maintain a high standard of patient care. CPD can include a variety of activities such as attending professional conferences, workshops and seminars that cover latest research, technologies and innovative treatment techniques.[20,21] Participation in online

courses and webinars offers flexible learning opportunities that can be accessed anytime, allowing practitioners to stay updated with the latest trends and best practices.

Engagement in professional organizations and societies, provides valuable networking opportunities and access to specialized resources. Regularly publishing and reviewing research in peer-reviewed journals can also contribute to a Prosthodontist's professional development, fostering a deeper understanding of emerging scientific evidence. Moreover, structured peer review and mentorship programs within academic institutions encourage continuous learning and skill enhancement.

Incorporating reflective practice and self-assessment tools into CPD activities helps practitioners identify areas for improvement and set personal learning goals. Hands-on training and clinical workshops are particularly beneficial for mastering new Prosthodontic techniques and technologies. By integrating these activities into the MDS Prosthodontics curriculum, dental professionals can ensure they provide the highest quality of care throughout their careers, staying proficient and confident in their practice.

3. Conclusion

This is the time to expand our horizon, think out of the box and join hands with other specialities and artificial intelligence. Preparing future Prosthodontists requires a forward-thinking approach to education and training. By integrating modern technologies, fostering interdisciplinary collaboration and adopting innovative teaching methods, educational institutions can ensure that the next generation is well-equipped to meet the demands of the evolving field. Incorporating innovative teaching methods and continuous professional development into the MDS Prosthodontics curriculum can significantly enhance the educational experience and clinical expertise of future Prosthodontists. By integrating digital dentistry, geriatrics, forensic odontology and collaborative management with allied specialists, the curriculum can address the diverse and evolving needs of modern dental practice. Innovative methods such as simulation-based learning, flipped classroom and digital platforms, equip students with advanced skills and practical experience, while interdisciplinary collaboration fosters a holistic approach to patient care. Emphasizing CPD ensures that practitioners stay current with emerging technologies, research, and best practices throughout their careers. This comprehensive approach will not only prepare students to deliver high-quality, evidence-based care but will also support their professional growth and adaptability in a rapidly changing field, ultimately improving the patient outcomes and advancing the discipline of Prosthodontics.

4. Source of Funding

None.

5. Conflict of Interest

None.

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Cite this article: Prakash P, Gowda EM. Curriculum revitalization: Enhancing relevance and rigor. *IP Ann Prosthodont Restor Dent* 2024;10(3):169-172.