

A Pharmacist's Role in a Dental Clinic: Establishing a Collaborative and Interprofessional Education Site

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Abstract

In "A Pharmacist's Role in A Dental Clinic: Establishing a Collaborative and Interprofessional Education Site" written by Kalin L. Johnson, et al., the article discusses the importance of having pharmacists in non-traditional settings, such as a university dental clinic, and the benefits of incorporating them into an interprofessional team. Pharmacists are medication experts who can reduce the burden on dental staff by assisting in disease state and medication counseling, medication reconciliation, medication management services, and identification of medication-related problems in dental settings. From August 2014 to July 2018, a total of 2,773 interventions were made on behalf of the pharmacy team. Integrating a pharmacy team contributed to more robust dental care and overall healthcare for patients. Overall, pharmacists were accepted by the dentistry team and patients with very few repercussions.¹

The purpose of this commentary is to propose a solution towards multiple issues identified by the author during her experience as an interprofessional pharmacist. We propose telehealth to be the solution to these issues. Our telehealth system will consist of pharmacy residents to foster an engaging learning environment while ultimately keeping costs low. This telehealth system will not only advance the knowledge of pharmacy residents and dental students, but will allow more interventions to be made by the pharmacy team as they will be able to expand virtually.

Keywords: Pharmacist, Interprofessional, Dental, Interprofessional Education (IPE), Dental Clinic, Telehealth, Residency, Pharmacy, Dentistry

Introduction

Collaboration between dentists and pharmacists provides patient-benefitting opportunities and innovative ways for improving health outcomes related to dental medicine. A student-operated dental clinic at the Creighton University School of Dentistry allowed pharmacy students on their ambulatory care Advanced Pharmacy Practice Experience (APPE) rotation to provide pharmacy-related services during dental visits. The presence of pharmacists was largely accepted by the dentistry staff, faculty, students and patients. Pharmacists can play an essential role in the dental clinic, as they are medication experts that can facilitate thorough health and medication histories along with proper medication counseling to patients and providers. A study in the International Dental Journal demonstrated a reduction in the number of medication discrepancies and medication omissions with a pharmacist-led intervention in a dental practice; the mean number of medication discrepancies decreased by 37.5% ($P < 0.001$) and the frequency of undocumented medications was reduced by 41.3% ($P < 0.001$) between phase 1 and phase 2 of the study.²

We would like to expand upon the author's issues that were mentioned about the Creighton University dental clinic namely, physical space, access to patients, access to pharmacists, finding a method of tracking interventions, and perceived pharmacy-related "interruptions". We propose telehealth in dental school clinics to be the solution to all of these issues and even current emergency issues we are facing as a nation. Telehealth is defined as "remote health care that does not always involve clinical services" according to the American Telemedicine Association. "Videoconferencing, transmission of still images, e-health including patient portals, remote monitoring of vital signs, continuing medical education and nursing call centers are all considered part of telemedicine and telehealth".³ In this commentary we will discuss the five key issues Kalin Johnson mentions from her experience as an interprofessional pharmacist and the specifics of telehealth as the solution to these concerns.

Physical space

As mentioned in the article, physical space in the dental clinic facility was constrained due to inadequate infrastructure to accommodate the pharmacy team and their resources. Telehealth is a solution to these constraints as pharmacists can remotely connect to dental staff or patients from any location with just one computer. Telehealth will lessen costs of construction or renovation to clinics for this needed space mentioned. Pharmacy residents who partake in this telehealth service will have the ability to either work from a designated area or from home to perform all of their responsibilities.

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In the article, "Use of Telehealth Experiences to Facilitate Interprofessional Education" published by AJHP, Charrell Lipscomb and Jason Zupec mention that space requirements at the distant site must be considered in telehealth. Designated distant-site rooms should have adequate space for students to engage in the telehealth services. The room should also allow for patient privacy to discuss personal needs without violating HIPAA. The room must ensure that windows are covered and that the sound is kept at an appropriate volume that protects patient confidentiality. The pharmacy team must take needed technological equipment into account such as computers with video cameras and microphones, setup (desktop or laptop), and capability (options for patients with poor sight or hearing).⁴

Access to patients

It can be difficult for pharmacists to have access to patients in clinic due to dental evaluations, screenings in radiology, etc. With separate telehealth appointments, patients can focus on dental procedures in the clinic and not worry about making time for the pharmacy team during their dental appointments. This may be helpful for patients as they will have time to think of medication-related questions after procedures rather than feeling pressured during a brief in-clinic encounter. Johnson mentions that patients were typically lost to follow-up appointments. Telehealth can increase follow-up consultations as the patient does not necessarily need to come back to the clinic. According to a study from The American Journal of Managed Care, "Telemedicine visits may be used with established patients for follow-up care without a loss of patient satisfaction with communication with providers and with enhanced convenience and reduced travel time; a majority may be willing to pay standard copays or more for this convenience." The study found that 62.6% of patients and 59.0% of clinicians reported no difference in "the overall quality of the visit" when comparing virtual video visits (VVs) to office visits, and a majority (52.5%) of clinicians reported higher efficiency of a VV appointment.⁵

Access to pharmacists

Johnson mentions in her article that the dental clinic had "numerous dental cubicles operating simultaneously and only one pharmacist," leading to only select patient cases chosen for pharmacist interventions. Telehealth will allow for more pharmacist interaction with patients, which can in turn lead to more medication interventions made. This pharmacist interaction can be easy to access and use a scheduling system convenient for patients and dental staff. Ambulatory care residents are a cost-effective addition to the pharmacy team via telehealth to increase pharmacist access in a dental school setting. This is a great way to introduce pharmacists into a non-traditional field while promoting interprofessional education between pharmacy residents and dental students. Telehealth is an effective way for residents to meet ASHP-required competency areas related to interprofessional practice.^{6,7}

Tracking system for pharmacist interventions

Telehealth services can come programmed with an organized tracking system specifically for pharmacist interventions. Pharmacists will be able to record all encounters rather than relying on a general electronic health record (EHR) software to create their own form. This specific pharmacy tracking system would be a helpful resource as Johnson mentions the lack of a pharmacy-related consultation form in their dental clinic to record multiple different interventions made. This form can be customized based on the dental clinic's needs and expectations for the telehealth pharmacist. This will also provide pharmacy residents with a clear understanding of their roles and responsibilities while working in this interprofessional setting. It is imperative that the platform used for telehealth is HIPAA-compliant, secure, user-friendly, and able to support a variety of device types.⁴

Pharmacy-related "interruptions"

Although the use of pharmacists directly in dental clinics can be beneficial, the in-clinic availability of pharmacy residents may be limited due to meetings or other APPE rotation responsibilities. Dental students and staff may feel rushed to reach out to the pharmacist knowing they are only available in person for a short amount of time. With telehealth, the dentist or dental student has more flexibility to call the pharmacist on his or her own time rather than interrupting in-clinic services with the patient. This will allow more opportunity for valuable pharmacy intervention with patients and providers. Telehealth can also reduce provider burnout since pharmacy residents will be able to complete all required duties away from the clinic with additional time saved from previous possible commutes.

Conclusion

Overall, the dental staff and patients appreciated the presence of a pharmacist at the Creighton University School of Dentistry. Telehealth can be utilized as the single solution to many different issues that arose in this article. The implementation of telehealth is starting to become the standard of healthcare, especially in a time such as this as the world is currently experiencing a pandemic.

Practitioners will soon be expected to be familiar with this novel healthcare model as they train their students and staff to prepare for a new approach to treat patients remotely. As student pharmacists, we look forward to seeing and contributing to the advances in telehealth pharmacy in the years to come.

Conflicts of Interest: We declare no conflicts of interest or financial interests that the authors or members of their immediate families have in any product or service discussed in the manuscript, including grants (pending or received), employment, gifts, stock holdings or options, honoraria, consultancies, expert testimony, patents and royalties.

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