



EXPLORING DERMATOLOGISTS' PERSPECTIVES ON VACCINES IN DERMATOLOGY: A QUALITATIVE STUDY

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ABSTRACT Vaccination rates among adults including dermatology patients, remain suboptimal. Previous research has concluded that outpatient specialty offices often have administrative and patient-related barriers to administering vaccines in their clinics, however, this has never been examined specifically in dermatology. This study aims to examine dermatologists' perspectives on vaccine education in dermatology clinics, identify facilitators and barriers to vaccine administration in dermatology clinics, and explore strategies to improve vaccination rates in dermatology patients. Virtual, semi-structured interviews were conducted with board-certified dermatologists to explore their perspectives on vaccines in dermatology clinic. The Consolidated Framework for Implementation Research was used to analyze the data. Participating dermatologists were 60% female (n = 9) and 40% male (n = 6) and had a median of 7 years of clinic experience (min-max: 3-39 years). Vaccine education emerged as one of the prominent themes during the interview with dermatologists, who emphasized the importance of comprehensive vaccine education for both healthcare providers and patients. Barriers identified encompassed patient hesitancy, lack of provider knowledge, resource limitations, and logistical challenges. Dermatologists proposed solutions such as standardized protocols, improved patient communication, enhanced coordination with other healthcare providers, and increased clinic resources. These results emphasize that dermatologists can play a crucial role in advocating for and addressing preventative care through vaccine implementation and provide a high-level framework to think about implementation. Additionally, this study highlights the need for comprehensive vaccine education, systematic implementation strategies, and organizational support within dermatology clinics to improve vaccine administration for patients.

KEYWORDS : Vaccine, Implementation, Public health, Prevention, research, Implementation.**INTRODUCTION**

Adults in general, including dermatology patients, are not receiving age-appropriate vaccines as recommended [6]. According results of the National Health Interview Survey, in 2019, on 21.8% of adults had received all age-appropriate vaccines, including influenza vaccines as recommended [4]. Only 29.4% of adults 50 years of age and older had received the herpes zoster vaccine and 67.5% of adults 65 and older reported receiving pneumococcal vaccination. Previous research suggested that dermatology patients have lower rates of vaccination than adults in the general population, including those on immunosuppressive medications [9, 12]. Increasing the proportion of adults who receive these recommended vaccines has been identified as a high-priority public health issue and a goal of the Healthy People 2030 initiative [10]. Because preventative care including vaccinations is typically incorporated into primary care, vaccination counseling may not be a part of standard practices for dermatologists and other specialists. However, with the increasing availability of immunosuppressive and immune-modulatory therapies for dermatologic conditions, dermatologists have a unique opportunity to educate patients about the potential risks of infection associated with these treatments and facilitate vaccination for preventable diseases [1, 5].

MATERIAL AND METHODS**Study Design**

Virtual, semi-structured interviews were conducted with dermatologists, exploring the dermatologist perspective on (i) their current practices regarding patients' vaccine education, (ii) barriers to vaccine administration and, (iii) ways to improve vaccination rates in dermatology patients.

All participants provided verbal consent prior to participation.

Study Population

Purposeful sampling was used to identify 15 board-certified dermatologists with a range of practice experience (i.e., years in practice), practice setting (i.e., academic, private practice), and geography. Interviews continued until saturation of themes was achieved. Saturation was achieved once no new themes were identified in a batch of three interviews.

RESULTS

Participating dermatologists were 60% female (n = 9) and 40% male (n = 6) and had a median of 7 years of clinic experience (interquartile range 5-12 years, min-max: 3-39 years). The dermatologists interviewed were able to identify many different types of scenarios in which they currently engage with patients about vaccines and provide vaccine education to them in their standard dermatology practice.

Most of the dermatologists interviewed mentioned making general vaccine recommendations to patients, discussing COVID vaccination and discussing vaccines recommendations specific to prescribed medications. One participant said, "We talk about timing of vaccinations such as if we're going to start an immunosuppressive therapy, especially something like rituximab or mycophenolate." While benefits to administering vaccines in dermatology clinic, including convenience, providing comprehensive care, and ensuring patients receive recommended vaccines were expressed, participants were also able to identify many barriers that they or other dermatologists might face when administering vaccines in a dermatology clinic. Patient-related factors were described including patient resistance to vaccination in general and lack of perceived need among their patient population.

DISCUSSION

This qualitative study examined the dermatologists' perspective on current practices regarding patients' vaccine education, identified potential barriers to vaccine administration in dermatology clinics, and explored ways to improve overall vaccination rates in dermatology patients. All dermatologists described historical interactions they had with patients regarding vaccines, suggesting there is an opportunity for dermatologists to continue or to expand vaccine education and counseling. Barriers, including lack of patient interest, lack of provider time and knowledge, and logistical concerns around workflow may prevent dermatologists from being able practically administer vaccines in their own clinic. Standardized protocols and increased resources, including staff, may allow dermatologists to administer vaccines in their own clinics, while targeted communication with patients around vaccines and coordinated care with primary care physicians were potential ideas to improve vaccination rates outside of dermatology clinic. Finally, it is important to consider the organizational factors that may facilitate or hinder vaccine administration, as well as any financial and staffing resources needed to support a vaccine program. A cross-sectional survey of cardiology, pulmonology, and obstetrics/gynecology practices identified that barriers to administering the influenza vaccine included administrative factors, such as reimbursement and staffing/infrastructure, and patient factors, such as not seeing patients with need, or patients not wanting the vaccine [5]. In this study, increasing clinic staff for vaccine administration and reducing the financial burden associated with obtaining and storing vaccines in the clinic were highlighted amongst several respondents to improve the process. While this study provides important insights into the dermatologist perspective on their current practices regarding patients' vaccine education, identification of barriers, and ways to improve vaccination rates in dermatology patients, there are some limitations. There are a variety of practice

types within dermatology and with varied patient needs and resources, and one single strategy may not work for every dermatology practice and every patient. The perspective provided by dermatologists highlights the interest that dermatologists have in contributing to increasing vaccination rates in their patients and the challenges they face trying to do this in their current practice.

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