

**Commentary**

**Increasing medical student exposure to clinical dermatology through participation in volunteer clinics**

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**Abstract**

Over the previous decade, several innovative teaching methods have been introduced to overcome the decreasing allotment of time dedicated to dermatology in U.S. medical school curricula. We report our experience of increasing medical student exposure to clinical dermatology through involvement in an extracurricular, volunteer-driven dermatology clinic. The clinic was well received by students and faculty. Our experience demonstrates that volunteer-driven dermatology clinics may be an effective method of teaching and engendering a culture of community outreach among medical students and faculty.

**Keywords: Medical Education; Dermatology; Community Health Service**

**Introduction**

U.S. medical school curricula offer minimal exposure to clinical dermatology during the first three years of coursework [1]. It is typically not until the fourth year that medical students may participate in elective rotations that focus exclusively on dermatology. For students who do not enroll in such electives, formal exposure to dermatology may consist of only a single lecture for the entirety of medical school. However, providing medical students with hands-on experiences in clinical dermatology is important for two reasons. First, a majority of patients with cutaneous complaints are first seen by non-dermatologists [2]. Experiences in dermatology during medical school are vital to ensuring a working knowledge of basic dermatology among all future physicians. Second, exposure to dermatology may spark interest in this specialty and provide students with a formative experience ultimately leading to their decision to pursue dermatology as a career. This issue is critically important in dermatology given the current work-force shortage of dermatologists in the United States [3,4].

In recent years, several innovative teaching methods have been introduced around the U.S. to increase the exposure of medical students to dermatology. These include internet-based curricula, such as the American Academy of Dermatology (AAD) Basic Dermatology Curriculum, the use of 3-dimensional prosthetic mimics that resemble cutaneous eruptions, and the introduction of dermatology acting internships [5-7]. However, there have been no reports of extracurricular volunteer clinics dedicated to dermatology.

**Methods**

To address the scarcity of clinical dermatology opportunities, we implemented a volunteer-driven dermatology clinic (City Impact Dermatology Clinic) in San Francisco, California. The dermatology clinic was integrated into the non-profit San Francisco City Impact Health and Wellness Center, which offered an existing infrastructure for providing free medical care to the underserved population of inner San Francisco. The patient population was largely uninsured and lacked regular access to healthcare providers. City Impact provided the dermatology clinic with space to see patients and a recruitment mechanism to bring patients with dermatologic needs to the clinic. Basic supplies and medications, such as moisturizers, topical corticosteroids, topical and oral antibiotics, and liquid nitrogen, were either purchased by City Impact or donated by clinic volunteers. Given that the majority of patients were uninsured, we attempted to treat patients with medications that could be provided by the clinic, though prescriptions were written for patients who required more advanced therapies and who had medical insurance. A free electronic health record system, Practice Fusion ([www.practicefusion.com](http://www.practicefusion.com)), was used for patient charting.

## Results

The City Impact Dermatology Clinic was held every month for two and a half hours and served an average of ten patients at each session. A University of California, San Francisco (UCSF) Dermatology Department faculty member supervised each clinic session. Medical students independently interviewed and examined each patient and then presented their assessment to the supervising physician. Thus, medical students had the opportunity to describe lesions based on morphologic features and formulate a differential diagnosis. Typical conditions encountered in the clinic are listed in Table 1. Several of these conditions, such as wounds/ulcers, fungal infections, and psoriasis are topics that primary care residents have rated as inadequately taught during medical school [8]. In lieu of increasing curricular time devoted to dermatology, volunteer clinics offer a practical means of increasing medical student exposure to these important topics.

**Table 1.** Conditions typically encountered at the City Impact Dermatology Clinic (by decreasing frequency)

Conditions Encountered (By decreasing frequency)
Eczema
Contact Dermatitis
Psoriasis
Tinea corporis, pedis
Scabies/Lice
Seborrheic dermatitis
Wounds/Ulcers
Actinic keratosis, Basal cell carcinoma
Alopecia

Students participating in the City Impact Dermatology Clinic indicated that their participation added greatly to the overall value of their education. Comments included, “Volunteering at City Impact Clinic allowed me to explore my interest in dermatology in a clinical setting, which would not have otherwise been possible until fourth year electives,” and “I really enjoyed the opportunity to work at City Impact because it gave me exposure to dermatology and allowed me to simultaneously give back to my community.” Faculty members have been equally receptive to the City Impact Dermatology Clinic, welcoming the opportunity to volunteer in their community and mentor medical students interested in dermatology. Previous studies have shown that less than half of all physicians report volunteering within the past year, despite the fact that most physicians believe community service is an important role for the medical profession [9,10]. Volunteer clinics such as the one described in this report represent practical opportunities for dermatologists to be involved in community outreach.

## Conclusions

Implementation of a volunteer-driven dermatology clinic requires dedicated faculty, space to see patients, and the means to attract patients to the clinic. However, our experience demonstrates that these prerequisites are far outweighed by the benefits of the clinic. For patients, free clinics offer access to medical care that may be otherwise out of reach. Additionally, volunteer-driven dermatology clinic may be an effective method of increasing junior medical student exposure to clinical dermatology and engendering a culture of community outreach among medical students and faculty.

## References

1. McCleskey PE, Gilson RT, DeVillez RL. Medical Student Core Curriculum in Dermatology Survey. *Journal of the American Academy of Dermatology*. Jul 2009;61(1):30-35 e34. [PMID:19410336]
2. Ramsay DL, Fox AB. The ability of primary care physicians to recognize the common dermatoses. *Archives of dermatology*. Oct 1981;117(10):620-622. [PMID:7283454]
3. Kimball AB, Resneck JS, Jr. The US dermatology workforce: a specialty remains in shortage. *Journal of the American Academy of Dermatology*. Nov 2008;59(5):741-745. [PMID:18723242]
4. Resneck J, Jr., Kimball AB. The dermatology workforce shortage. *Journal of the American Academy of Dermatology*. Jan 2004;50(1):50-54. [PMID:14699364]
5. Cipriano SD, Dybbro E, Boscardin CK, Shinkai K, Berger TG. Online learning in a dermatology clerkship: piloting the new American Academy of Dermatology Medical Student Core Curriculum. *Journal of the American Academy of Dermatology*. Aug 2013;69(2):267-272. [PMID:23683728]
6. Stephens JB, Raimer SS, Wagner RF, Jr. The dermatology acting internship. *Dermatology online journal*. 2011;17(7):9. [PMID:21810394]
7. Wanat KA, Kist J, Jambusaria-Pahlajani A, et al. Improving students' ability to perform skin examinations and detect cutaneous malignancies using standardized patients and moulage. *Journal of the American Academy of Dermatology*. Nov 2013;69(5):816-817. [PMID:24124813]
8. Hansra NK, O'Sullivan P, Chen CL, Berger TG. Medical school dermatology curriculum: are we adequately preparing primary care physicians? *Journal of the American Academy of Dermatology*. Jul 2009;61(1):23-29 e21. [PMID:19409656]
9. Grande D, Armstrong K. Community volunteerism of US physicians. *Journal of general internal medicine*. Dec 2008;23(12):1987-1991. [PMID:18839260]
10. Gruen RL, Campbell EG, Blumenthal D. Public roles of US physicians: community participation, political involvement, and collective advocacy. *Jama*. Nov 22 2006;296(20):2467-2475. [PMID:17119143]