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Task Shifting in Dermatology:

A Call to Action

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Abstract

CLINICAL QUESTION—Can task shifting be used to improve the delivery of dermatologic care in resource-poor settings worldwide?

BOTTOM LINE—Task shifting is a means of redistributing available resources, whereby highly trained individuals train an available workforce to provide necessary care in low-resource settings. Limited evidence exists for task shifting in dermatology; however, studies from psychiatry demonstrate its efficacy. In the field of dermatology there is a need for high-quality evidence including randomized clinical trials to validate the implementation of task shifting in low-resource settings globally.

Introduction

Task shifting is a means of bridging treatment gaps through delegation of elements of health care to available personnel in resource-limited settings where access to care is limited by the lack of trained clinicians. The process has been called “task-sharing” because mentorship and guidance are provided even after the initial period of training.¹ Task shifting may be a means of providing care to millions of people with skin diseases.

Summary of Findings

Task shifting has been used to a limited extent in dermatology. Recently, US dermatologists employed task shifting to train East African health care workers to perform punch biopsies, enabling rapid diagnosis of Kaposi sarcoma.² “Capacity building” and “community dermatology” also encompass elements of task shifting. Community dermatology, initially a

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training program for health care workers in Mexico, refers to the concept of educating and training community members to reduce the local burden of skin disease.³ There are ongoing dermatology training programs targeted at local physicians or nurses in Tanzania, Mali, Ethiopia, and Bankgok.³

Observational uncontrolled studies have suggested that task shifting may be useful in dermatology. In Mali, after training 400 health care workers, knowledge of correct diagnosis and treatment of common skin diseases rose from 41% to 81% among trainees tested at 18 months posttraining.⁴ An Australian study⁵ described how over a 3-year period following the training of 11 local aboriginal people to screen children for pyoderma and scabies, prevalence rates of pyoderma decreased from 46.7% to 32.4% and rates of scabies infection decreased from 3.7% to 1.5%. Training health care workers to diagnose and treat yaws in Ecuador led to a 75% decreased prevalence over a 5-year period.⁶ Despite these examples of task shifting, there is a dearth of RCT evidence supporting its more widespread use.

The field of global mental health, which arguably targets an even more stigmatized and challenging-to-reach patient population, has successfully generated RCT-level evidence demonstrating efficacy and cost-effectiveness of task shifting in Uganda, Zambia, India, and Pakistan. In these countries, community health workers have been trained to implement evidence-based psychological interventions for individuals with schizophrenia, depression, alcoholism, and anxiety disorders.¹ These psychological interventions were culturally acceptable and cost-effective, validating use of task shifting to ease the global burden of mental illness.

Evidence-based models of training do not exist in dermatology; however, validated models do exist in global mental health. The apprenticeship model, by Murray et al,⁷ was created after working with over 100 lay counselors in 12 lower-and middle-income countries, and has since been validated through RCTs in Africa, Iraq, and Thailand. In this model, expert counselors train local individuals to serve as either local supervisors or local counselors. After initial training led by the expert, supervisors assume the leadership role and continue to coach and train counselors. Ongoing mentoring exists between the expert trainers and supervisors and the supervisors and counselors.⁷ A similar model could be used to implement task shifting in dermatology.

Discussion

Task shifting may enable the redistribution of available human resources to meet skin disease diagnosis and treatment gaps in lower-and middle-income countries. In addition, task shifting may be useful to target the psychiatric components of skin disease at the society level, to reduce social stigma associated with diseases such as HIV-associated skin conditions and leprosy, and at the patient level, to improve well-being of those affected by skin diseases, specifically those conditions that lead to deformities and social isolation. Furthermore, teledermatology may be implemented as a task-sharing tool to promote ongoing mentoring and support.

Limitations

The key barrier to the widespread use of task shifting in dermatology is a lack of evidence of efficacy. Additional limitations include identification of a sufficient number of dermatologists to serve as mentors, community members to train, and local infrastructures to support-task-shifting initiatives. Potential risks of implementing task shifting include burdening the workforce through introducing new job requirements, harming patients, or unethically providing suboptimal care to patients if health care workers are not adequately trained or supervised.

Comparisons

In the field of global mental health, task shifting is supported by the WHO's Mental Health Gap Action Programme, an international initiative to scale-up global psychiatric care. The field of psychiatry has RCT evidence to support the use of task shifting.

Future Directions

High-quality evidence is needed in dermatology to assess if task shifting could address the global burden of skin disease and the treatment gap in lower- and middle-income countries.

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