



Commentary

Impact of the Society for Research on Nicotine and Tobacco Health Disparities Network's Scholarship on Professional Development of Its Recipients

Danielle R. Davis MA¹, Norval J. Hickman PhD, MPH², Kelvin Choi PhD, MPH³, Cendrine D. Robinson PhD, MPH⁴, Christi A. Patten PhD⁵, Pebbles Fagan PhD, MPH⁶, Kolawole S. Okuyemi MD, MPH⁷, Shadi Nahvi MD, MS^{8,9}, for the SRNT Health Disparities Network

¹Vermont Center on Behavior and Health, University of Vermont, Burlington, VT; ²Tobacco-Related Disease Research Program, University of California Office of the President, Oakland, CA; ³Division of Intramural Research, National Institute on Minority Health and Health Disparities, Bethesda, MD; ⁴Behavioral Health and Reintegration Rehabilitation Research and Development Department of Veterans Affairs Washington, DC; ⁵Department of Psychiatry and Psychology, Mayo Clinic, Rochester, MN; ⁶Fay W. Boozman College of Public Health, University of Arkansas for Medical Sciences, Little Rock, AR; ⁷Department of Family and Preventive Medicine, University of Utah School of Medicine, Salt Lake City, UT; ⁸Department of Medicine, Albert Einstein College of Medicine, Montefiore Medical Center, Bronx, NY; ⁹Department of Psychiatry and Behavioral Sciences, Albert Einstein College of Medicine, Montefiore Medical Center, Bronx, NY

Corresponding Author: Danielle R. Davis, MA, Vermont Center on Behavior and Health, University of Vermont, 1 South Prospect Street, Burlington, VT 05401, USA. Telephone: 802-656-1984; Fax: 802-656-5793; E-mail: ddavis4@uvm.edu

Abstract

Introduction: Diversifying the workforce is an important strategy to reducing health disparities. Since 2007, the Society for Research on Nicotine and Tobacco (SRNT) Health Disparities Network has funded a travel scholarship to promote inclusion, professional development, and diversity among investigators interested in tobacco-related health disparities research. This study examined indicators of productivity among former scholarship recipients.

Methods: Scholarship recipients between 2007 and 2014 were invited to complete a survey online. The survey assessed demographic characteristics, academic productivity, and perceived professional benefit resulting from the scholarship.

Results: Of the 117 scholarships recipients, 89 (77%) responded. Respondents were 67% female and had a mean age of 37.8 years. Twenty eight percent were African American, 25% Asian American, and 17% Latino. Most respondents worked in academia (80%) and nearly three-quarters (74%) reported publishing manuscripts on tobacco-related disparities, with a mean of 3.8 (SD 4.4) disparities-related publications since receiving the scholarship. Respondents' work focused on a wide range of health disparities topics and nearly all respondents reported that the scholarship removed barriers to attending the meeting and reported professional benefit from receiving the travel scholarship. Following receipt of the SRNT travel scholarship, a diverse group of scientists demonstrated scholarly productivity, professional development, and advancement of health disparities research. Similar efforts are encouraged in other professional societies.

Implications: This study examines the productivity of early career recipients of the SRNT Health Disparities Scholarship. Results suggest that the investment in annual travel scholarships by a professional organization is an important support system for emerging scientists from diverse backgrounds. This investment may help to advance the science of health disparities and engage researchers in an area where there are critical gaps in the research workforce.

Introduction

Not only do tobacco-attributable diseases continue to disproportionately affect those from marginalized and minority groups in the United States,^{1,2} but these groups are also under-represented in the scientific and medical workforce.³⁻⁵ The US National Institutes of Health (NIH) has recognized diversifying the health workforce as an important strategy to reduce disparities.^{6,7} Professional groups, such as the Society for Research on Nicotine and Tobacco (SRNT), can help meet this need with programming to reduce disparities. Few efforts by professional organizations to target early career investigators and enhance diversity have been described in the scientific literature.^{3,8-10}

The SRNT Health Disparities Network was formally established in 2006 as a network within the organization to advance tobacco-related health disparities research, engage researchers of diverse backgrounds, and expertise in collaborative disparities-related research efforts, as well as provide guidance to SRNT to inform issues related to disparities and educate the research community on their importance.¹¹ The network established a scholarship in 2007 with the aim of supporting the professional development of early career investigators who conduct research addressing tobacco-related health disparities, as well as those from marginalized and minority populations. Priority is given to applicants from US minority racial/ethnic groups, with disabilities, from sexual or gender minority groups, or from disadvantaged groups. The scholarship provides full financial support for early career investigators to attend the SRNT Annual Meeting and a 1-year membership. We conducted a survey of former scholarship recipients to examine demographic characteristics, academic productivity, and perceived professional benefit resulting from the scholarship.

We invited all SRNT Health Disparities Network travel scholarship recipients between 2007 and 2014 to complete an anonymous, web-based, 22-item survey. The survey assessed demographic characteristics, current professional status, professional productivity, current area of research, and perceived benefits of the scholarship for the recipient. In addition, we queried the US NIH RePORTER to ascertain respondents' NIH funding as a principal investigator (PI) or co-PI of grants awarded between receipt of the scholarship and December 2017. We conducted descriptive analyses of the survey items, as well as thematic analysis of open-ended responses describing the perceived impact of the scholarship, and present illustrative statements of prominent themes.

Survey Findings

Of the 117 scholarship recipients from 2007 to 2014, a total of 89 responded to the survey (77% response rate). Respondents had a mean age of 37.8 (SD 8.9) years; 67% identified as female and 33% as male; 28% identified as African American, 25% Asian American, 17% Hispanic/Latino, 14% white, 8% more than one race, 5% as American Indian/Alaskan Native, and 3% "other race." Respondents reported working in a variety of professional fields

with the majority in either psychology (55%) or public health (33%). The majority of respondents reported their current work setting as academia (80%).

Respondents reported their current research focused on a wide variety of tobacco-related health disparities, including racial/ethnic minorities (80%) and socioeconomically disadvantaged smokers (51%). Respondents remained active in tobacco-related health disparities research with the majority reporting publishing articles and seeking grant funding in this area. Almost three-quarters (74%) published in the field after receiving the scholarship with a mean of 3.8 (SD 4.4) publications per respondent reporting publishing since receipt of the scholarship, over a mean 53.5 (SD 27.9) person-months of follow-up. Over half of respondents (55%) reported seeking funding in the area of tobacco-related health disparities and of these, 60% reported obtaining funding with a mean of 2.2 (SD 1.6) grants reported. NIH RePORTER search results indicated that 20 respondents were PI or Co-PIs of 30 NIH grants since receiving the scholarship and 26 of these grants (86%) were related to tobacco use and health disparities. Of these NIH grants, mechanisms included R01 (23%), R21 (23%), R03 (19%), R34 (4%), R36 (4%), F31 (4%), S06 (4%), and K mechanisms (19%). Among those who received NIH funding, the median total award was \$519 549 and award amounts ranged from \$17 721 to \$4 184 100.

The scholarship both reduced financial burden and facilitated opportunities to further professional development: 96% of participants reported that the travel scholarship removed barriers from attending the SRNT conference and 78% reported that the conference would be somewhat to very difficult to attend without the scholarship award. Nearly all respondents reported professional benefits as a result of the scholarship, such as networking with more experienced researchers (89%), connecting with colleagues conducting disparities research (85%), and developing and implementing a research project (16%). The scholarship also presented opportunity for collaboration: respondents reported collaborating with another conference attendee on published articles (19%), research studies (19%), or grants (10%) following receipt of the scholarship. In the open-ended question about the impact of the scholarship on their work, the major theme described by respondents was benefits of the scholarship in their professional development. One respondent reported, "The scholarship created an opportunity that I couldn't have obtained otherwise ... allowed for professional networking, [and] generation of manuscript ideas." Another stated "I met a lot of wonderful people who have been a key component in my career and education."

Conclusions

This cross-sectional survey of a diverse group of investigators engaged in tobacco-related health disparities research found that a travel scholarship program provided by the SRNT Health Disparities Network that facilitates attendance to the SRNT conference can lead to professional opportunities that may not have been

readily available otherwise. The majority of respondents continued to work in tobacco-related health disparities research after receiving the scholarship and were productive, with both publications and grant awards in this field.

These findings extend two themes in prior research for increasing inclusion and closing the disparities gap: mentorship and financial resources.^{12,13} Respondents reported that the scholarship facilitated establishment of national professional networks and collaboration. Professional organizations, such as SRNT, have an opportunity to promote professional development of investigators who are under-represented minorities or addressing health disparities using these tools.

Even with some limitations to the current work, such as cross-sectional nature of the survey, the lack of comparison group, and use of self-reported data, survey findings suggest that organizations can use scholarships as a tool to engage diverse, productive groups of early career researchers. Future work in this area could examine how such scholarship programs impact the diversity of membership and advance health disparities research within professional organizations. This “buy-in” to early career investigators may reciprocally benefit the professional organizations that award the scholarship and the field as a whole.

Our findings suggest that funding a travel scholarship program potentially enhances opportunities for networking and collaboration within a professional society among diverse emerging scientists. We encourage SRNT as well as other professional societies to invest in fully funded travel programs as a strategy to increase the diversity of the workforce and to advance health disparities research.

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Declaration of Interests

The content herein is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health or the US Food and Drug Administration.

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