



American Head & Neck Society Prevention & Early Detection Committee  
Community Service Awards

## Reports from Past Award Recipients

2017

**Project:** *Improving Awareness and Understanding of Betel Quid Use and Oral Cancer in a High-Risk Refugee Community in the United States*  
**Project Leads:** *Lucy L. Shi, MD; Danielle K. Depalo, BS; Amy Chen MD, MPH*

Betel nut (BN) is a psychoactive substance that is commonly used in Asian cultures, including among members of the refugee resettlement area of Clarkston, GA. While the association between chronic BN mastication and oral cancer has been established, these health consequences may not be appreciated by users in these communities. Our objective is to investigate patient awareness of BN health risks and to assess the efficacy of a pilot, visually-guided educational initiative. Patients from two clinics in Clarkston, GA were approached for the study. Patients were divided into two cohorts depending on their familiarity with BN and were administered surveys specific to their cohort and level of familiarity with BN. An educational initiative was subsequently conducted with both groups, which entailed reviewing an illustrated educational brochure, and a post-test was administered. These results were then statistically analyzed to determine trends in community BN usage and effectiveness of our intervention.

For our pilot study, 48 patients were surveyed for the familiar cohort and 25 for the unfamiliar cohort. Our results showed that BN usage was prevalent in the Clarkston, GA community, with up to 42.8% of respondents reporting social use. Among the familiar cohort, 75% believed BN was harmful for health and 52.3% believed BN alone could cause cancer compared to 8% and 4% among the unfamiliar cohort respectively ( $p < 0.0001$ ). Following the educational intervention, patient knowledge that BN mastication is harmful improved for the familiar (100%,  $p = 0.011$ ) and unfamiliar cohorts (100%,  $p < 0.0001$ ). Post-intervention patients in the familiar cohort were more likely to acknowledge that BN alone could cause cancer (87.5%,  $p = 0.0005$ ) and both cohorts improved their ability to identify oral cancer in an image ( $p < 0.01$ ). Our study highlights knowledge gaps on the carcinogenic properties of BN among a high-risk refugee population and awareness of the signs of oral cancer in the entire community. In addition, we also demonstrate the potential efficacy of a pilot visually-guided educational brochure to improve patient knowledge of BN and oral cancer presentations.

Through the AHNS grant, we hope to expand our educational and outreach efforts to areas beyond the Clarkston, GA community. There is a major South Asian population within metropolitan Atlanta, many of whom likely have exposure to BN. Through funding for widespread poster printing, brochure distribution, and community events, we hope our interventions can help to limit BN use and encourage early detection of cancer in these communities.



## 2017

**Project:** *Screening Fair in Little Haiti, Miami – University of Miami*  
**Project Leads:** *Brandon Burroway, Misha Armstrong, Simon Menaker, Dipan Desai*

We greatly appreciate the generosity of the American Head and Neck Society; we could not have accomplished our goals without the funding received from the 2017 community service grant. Our events were a definitive success with about 240 individuals screened for head and neck cancer across our five sites. At the Center for Haitian Studies site specifically, about 80 individuals were screened, eight of which qualified as high risk and in need of immediate follow-up care. Many more individuals were also referred for less immediate follow-up care to otolaryngology and to a number of other specialties including primary care, dentistry, and dermatology. One extremely useful change we made this year was utilizing the help of a social worker from the Center for Haitian Studies to help organize follow-up care for the patients, before they even left the clinic the day of the fair.

An abstract regarding our screening model was accepted for the 2017 American Public Health Association Conference, and we hope to contribute to the literature through additional papers and presentations. Next year, we will strive to further expand the fairs in order to serve as many members of the community as possible.

The grant money was used in order to print educational and survey materials for the participants, pay for translation and security services for the fair, and to pay for advertising via the radio and newspaper which is the way the vast majority of individuals learned about the screening event. Thank you again for helping us make this year's screening events a success.