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# Beyond the Volcanoes: A Community Partnership for Health in Rural Nicaragua

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## **Beyond the Volcanoes: A Community Partnership for Health in Rural Nicaragua**

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**Background:** Health inequities related to gender, ethnicity, socioeconomic status, and geography exist in rural Nicaragua due in part to lack of access to health services. The purpose of this ongoing project is to improve health equity in rural Nicaragua through social transformation using community-based participatory action research. Bronfenbrenner's ecological model of human development, school health, and primary health care theories provided the framework for this research. **Methods:** Community-based participatory action research involves six phases: partnership, assessment, planning, implementation, evaluation, and dissemination. In the implementation phase, community residents were randomly selected to participate in the cookstove intervention. Survey data were collected on demographic variables, cooking methods, layout of the homes, and health. During the evaluation phase, survey data were collected on the same parameters at follow-up. **Results:** Compared with the initial survey, responses from the post-survey one year after stove installation showed statistically significant differences in the improvement of health factors related to cough, shortness of breath, eye irritation, and headaches among the women who received a stove. **Conclusions:** The results show that installing improved cookstoves with chimneys has decreased many symptoms previously experienced by residents of homes in which cooking had been over open fires in the past.

### *Information about the Authors:*

Claire Simonpietri, Carly Crave, and Christina Lundy are senior nursing students. They have been involved with the research team for two to three years and have traveled multiple times to the community in Nicaragua. Jamielynn Tinkey, a sophomore nursing student, is excited to be joining the team and about her first trip to Nicaragua in March. They enjoyed presenting at the American Public Health Association Annual Meeting in November 2013 and have applied to make a presentation at the Posters on the Hill event sponsored by the Council of Undergraduate Research in March 2014. They are all hoping to pursue careers related to public and global health upon graduation.

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