

Improving Health Literacy Among Latino Migrant Dairy Farmworkers

Dayna Stimson, RN, DNP student
The University of Vermont College of Nursing and Health Sciences
Faculty Advisor: Dr. Ellen Long-Middleton | Site Mentor: Naomi Wolcott-MacCausland

INTRODUCTION

Background: Latino migrant farmworkers are a marginalized and medically underserved population in Vermont and nationally who experience significant health disparities and barriers to healthcare access compared to others living in rural areas.

Barriers include:

- Linguistic, geographic, and cultural isolation
- Lack of transportation
- Cost of care
- Fear of Immigration & Customs Enforcement (ICE) due to immigration status
- Low knowledge regarding community and health-related services
- **Low general literacy and health literacy**

Certain populations, including Latino immigrants, are more likely to experience lower levels of health literacy. Patients with low health literacy have worse health outcomes.

The Agency for Healthcare Research & Quality (AHRQ) Health Literacy Universal Precautions Toolkit (HLUPT) is an evidence-based collection of tools to be used by providers to improve spoken and written communication, patient empowerment, and supportive systems, leading to improved patient outcomes.

Purpose:

- Assess baseline health literacy and implement strategies to enhance health literacy using select tools from the HLUPT
- To enhance follow-up care for migrant farmworkers by improving health literacy in a community health outreach setting.

METHODS

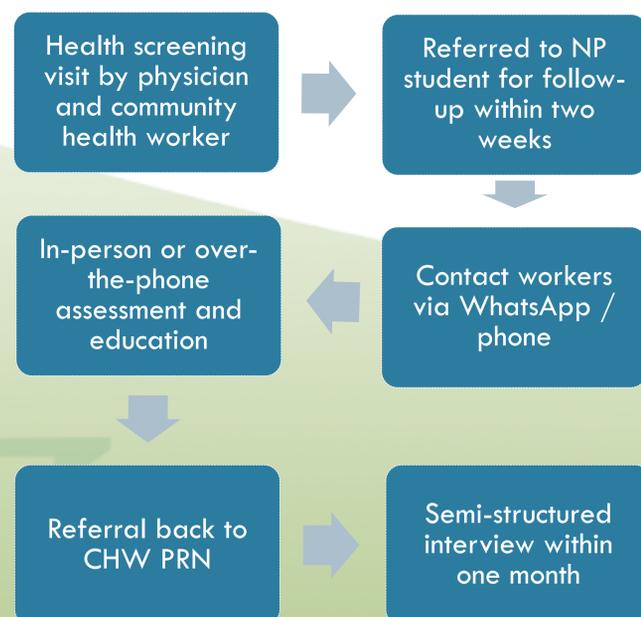
Sites: Dairy farms in Franklin County, Vermont

Context: Partnership with Bridges to Health, health outreach program for migrant farmworkers in Vermont that utilizes a care coordination model through use of regional community health workers (CHWs). As part of services, Bridges to Health provides on-farm health screening visits conducted by UVM Medical Center family medicine resident physician and CHW.

- 33 migrant farmworkers recruited following on-farm health screening visit by MD & CHW and referred for follow-up to NP student
- NP student provided health promotion intervention
- Baseline health literacy was determined using Short Assessment of Health Literacy (SAHL).
- AHRQ Health Literacy Universal Precautions Toolkit (HLUPT) provided framework for follow-up visit conducted in Spanish.
- Qualitative data obtained one month later by semi-structured phone interview to assess efficacy.

Measures and Analysis:

- SAHL- Spanish & English: 18 item health literacy assessment tool with good reliability and validity in both languages. Participants receive point for each correct answer, and scores between 0 and 14 indicate inadequate health literacy.
- Descriptive statistics of assessment measures
- Content analysis of semi-structured interviews with Bridges to Health staff and farmworkers



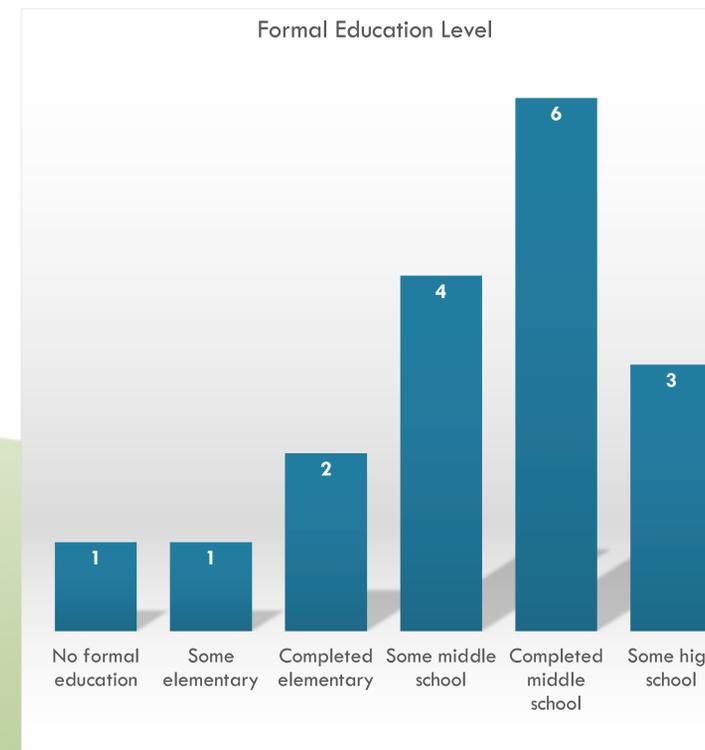
RESULTS

Of the 33 workers, 17 volunteered for follow-up healthcare. 40% (n=10) workers met the cut-point for inadequate health literacy.

Demographics:

- 16 men, 1 woman
- 100% Mexican
- Median age: 33
- Median income: \$31,850 for household of 5
- Most common complaints:
 - Dermatological
 - Gastrointestinal
 - Sleep-related
 - Dental

- Visits consisted mainly of education on medication doses and expected effects and non-pharmacological treatments for various conditions; each intervention was tailored based on the HLUPT. The most highly utilized resources were Tool 5: Teach-back Method and Tool 11: providing easy-to-understand printed materials.
- Stakeholders endorsed that visits were value-added to pre-existing farm health outreach program by providing the opportunity to reinforce health concepts and strengthen community ties outside farm.



DISCUSSION

Key findings:

- Most farmworkers reported barriers to adequate health care
- Health literacy tools well-received among this small pool of migrant farmworkers
- Administrators found visits to be value-added to farm health outreach program
- HLUPT enhanced ability to provide evidence-based patient education

Barriers:

- Coordinating farm visits challenging
- Developing chain of communication for further follow-up
- Cultural differences between farmworkers and researcher

Limitations:

- Small sample size
- Comparison of pre- and post-intervention data limited due to different measurements (quantitative vs. qualitative)
- Social desirability response bias

Implications for future practice:

- Sustainability contingent on highly motivated volunteer, likely nurse or NP student
- Creation of formalized internship position, with possible stipend, at Bridges to Health for nurse or nurse practitioner student would allow continuation of services.

CONCLUSIONS

- Implementation of the HLUPT to guide follow-up care was an effective means of conducting visits with migrant farmworkers, as it allowed visits to be tailored to specific needs of client.
- Community outreach to migrant communities using the framework of health literacy closes loop between health outreach visits & need for further follow-up
- Community outreach helps strengthen ties to farmworker community.

REFERENCES

1. AHRQ Health Literacy Universal Precautions Toolkit. Content last reviewed May 2017. Agency for Healthcare Research and Quality, Rockville, MD. Retrieved from <http://www.ahrq.gov/professionals/quality-patient-safety/quality-resources/tools/literacy-toolkit/index.html>
2. Baker, D. W., & Chappelle, D. (2012). Health Status and Needs of Latino Dairy Farmworkers in Vermont. *Journal of Agromedicine*, 17, 277-287.
3. Luque, J. S., Reyes-Ortiz, C., Marella, P., Bowers, A., Panchal, V., Anderson, L., & Charles, S. (2012). Mobile farm clinic outreach to address health conditions among Latino migrant farmworkers in Georgia. *J Agromedicine*, 17(4), 386-397. doi:10.1080/1059924X.2012.713837

Contact:
dayna.stimson@gmail.com
Phone: 760-709-2747