CS-CASH Pilot Grant: Improving Agricultural Worker Health & Safety Awareness through Multimodal, Case-Based Physician Assistant Education

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**Recommended Citation**  
Wheelhouse, Carey; Hyde, Mia; Wildermuth, Annie; and Mathews, Wayne, "CS-CASH Pilot Grant: Improving Agricultural Worker Health & Safety Awareness through Multimodal, Case-Based Physician Assistant Education" (2019). *Posters and Presentations: Physician Assistant*. 2.  
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CS-CASH Pilot Grant: Improving Agricultural Worker Health & Safety Awareness through Multimodal, Case-Based Physician Assistant Education

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Abstract

The University of Nebraska Medical Center Division of Physician Assistant Education intends to improve health outcomes of patients in Midwest agricultural communities through didactic, clinical, and case-based instruction of Physician Assistant Education intends to improve health outcomes of patients in Midwest agricultural care setting.

Aim 4

Aim 3

Aim 2

Aim 1

Methods

- Questionnaire rating student comfort with agricultural patient assessment, as well as assessing student knowledge regarding diagnosis and treatment of agricultural health conditions.

- Student handouts, case-based small group learning activities, and simulated patient encounters.

- Questionnaire rating student comfort with agricultural patient assessment, as well as assessing student knowledge regarding diagnosis and treatment of agricultural health conditions.

- Hands-on learning through a supervised 12-week clinical rotation in a rural, primary care setting.

- Questionnaire rating student comfort with agricultural patient assessment, as well as assessing student knowledge regarding diagnosis and treatment of agricultural health conditions.

Case-Based Learning Skills

- Taking a Patient-Centered and Culturally Competent History
- Performing a Physical Examination and Understanding Findings
- Ordering and Interpreting Diagnostic Tests
- Creating a Patient-Centered Treatment Plan
- Providing Patient Education, Including Preventative Measures

Discussion & Future Directions

Data collected will guide future endeavors in agricultural worker health and safety research, as well as continuous curriculum advancement as it pertains to agricultural health. Final data collection will consist of student evaluation data, pre and post surveys, and Typhon patient logs.

With the assistance of statistical support, data may be utilized to assess outcomes of didactic and clinical Physician Assistant education regarding agricultural health and safety issues, specifically respiratory diagnoses, hearing loss, and chemical exposure. Secondary data collection will also allow for further assessment of Midwest agricultural patient population needs.

Survey Questions

Question 3: How comfortable do you feel taking a comprehensive history on an agricultural patient?

Question 5: How confident are you in performing a complete hearing assessment?

Question 6: How confident are you in performing a thorough pulmonary examination?

Question 8: How confident are you in creating a differential diagnosis for a patient with an agricultural chief complaint?

Rating Scale: 1: Not at all 2: Slightly 3: Neutral 4: Somewhat 5: Very

Student Information

- 66 Students completed the Pre-Didactic Survey
  - 26 of the 66 students had previously lived in a rural area
  - 40 of the 66 students had not previously lived in a rural area
- 14 Students completed the Post-Didactic Survey
  - 3 of 14 students had previously lived in a rural area
  - 11 of 14 students had not previously lived in a rural area
- 30-45 anticipated student responses for the Post-Clinical Survey

Results

Comparison of Pre-Didactic and Post-Didactic Survey Results

References