

PROJECT SUMMARY

Project title: Addressing Immunization Disparities Among Vulnerable Populations

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Project Description: This research project will assess the extent to which medical schools prepare students to address the immunization disparities experienced by vulnerable populations in primary care settings. It will employ multiple methods to assess current medical school educational practice, identify evidence-based best practices, develop and recommend curricular modifications, and disseminate information to the broader medical education profession through presentations at professional meetings, policy briefs, and articles in peer reviewed journals.

Statement of the Problem: This research project will assess whether medical students are taught about the mental health of vulnerable populations and the degree to which they receive training relevant for screening, care, and treatment referrals in primary care settings. For children birth to 6 years of age, the vaccine schedule includes chickenpox, diphtheria, flu, hepatitis A, Hepatitis B, Hib, measles, mumps, polio, pneumococcal, rotavirus, rubella, tetanus, and whooping cough. For children and teens, 7 through 18 years of age, the CDC recommends vaccines for flu, HPV, meningococcal, and TDAP. For adults 19-64, the National Center for Immunization and Respiratory Diseases recommends a schedule of vaccines for influenza (annually), Tdap, MMR, VAR, RZV, HPV, PCV13, PPSV23, HepA, HepB, MenACWY, MenB, and Hib For persons over 65, the CDC also recommends vaccines for influenza, MMR, RZV, PCV13, HPV, PCV13, and PPSV23.

Research Questions or Hypothesis:

1. What is the evidence base regarding education of medical students knowledge and awareness of immunization disparities experienced by vulnerable populations in primary care settings?
2. What are the core elements of the medical education curriculum that can be revised and adapted to ensure students have the knowledge and skills to provide culturally competent health care for vulnerable populations who present with immunization disparities?

Project Goals:

1. To identify the extent to which medical students are trained to address immunization disparities among vulnerable patient groups.
2. To develop model curricular elements that can be used by other medical schools to prepare students to effectively screen for and ensure vulnerable populations have current immunizations.
3. To disseminate research results on how medical schools are addressing immunization disparities among vulnerable populations.

RESEARCH DESCRIPTION

Title: Addressing Immunization Disparities Among Vulnerable Populations

Statement of the Problem.

Disparities in health care access and quality create barriers for vulnerable populations that increase risk for adverse health outcomes. Unique circumstances and barriers encountered by persons who are lesbian, gay, bisexual and transgender (LGBT), homeless, and/or migrant farmworkers may decrease their likelihood of completing the schedule of childhood and adult vaccines, increasing their risk of infectious disease and of infecting others. The Advisory Committee on Immunization Practices (ACIP) has designed a vaccination schedule to protect young children, teens, and adults before they are likely to be exposed to potentially serious diseases and when they are most vulnerable to serious infections.

Project Description and Policy Relevance.

The purpose of this study is to identify whether and/or how medical students are being taught to recognize and address the challenges encountered by vulnerable populations in completing the schedule of childhood and adult immunizations. This research project will assess the extent to which medical schools prepare students to address the needs of vulnerable populations in obtaining vaccinations in primary care settings. It will employ multiple methods to assess current medical school educational practice, identify evidence-based best practices, identify, develop and recommend curricular modules, and disseminate information to the broader medical education profession through presentations at professional meetings, policy briefs, publication of articles, and through social media.

Homeless and LGBT persons and migrant farm workers are at higher risk for morbidity and mortality from both chronic and episodic illness than the general population. Few data are available on the prevalence of these conditions and uptake of vaccination for prevention. The unique conditions and circumstances encountered by these vulnerable populations can serve as obstacles to completing the recommended childhood and adult vaccination schedules, exposing them, and people they come into contact with increased risk for contracting infectious, yet preventable diseases.

Target Populations

- LGBTQ
- Persons experiencing homelessness
- Migrant farmworkers

Research Questions or Hypothesis:

- What is the evidence base regarding education of medical students being trained to meet the unique immunization challenges experienced by vulnerable populations?
- What are the core elements of the medical educational curriculum that can be revised and adapted to ensure students have the knowledge and skills to provide culturally competent health care for vulnerable populations who need age specific immunizations?

Project Goals:

- To conduct a survey in collaboration with national partners to identify the extent to which medical students are trained to address immunization disparities among persons who identify as LGBTQ or are migrant farm workers or homeless.
- To develop model curricular elements that can be used by other medical schools to prepare students to effectively address immunization disparities among vulnerable populations.
- To disseminate research results on how medical schools are addressing immunization disparities for vulnerable populations to a graduate medical education audience.

WORK PLAN

GOAL 1: To conduct a survey in collaboration with national partners to assess the extent to which patients who are LGBTQ, experiencing homelessness, or are migrant farmworkers receive recommended immunizations and barriers to receiving them.

Methodology

- We will work with our consultants, the Fenway Institute, the Migrant Clinicians Network, and the National Health Care for the Homeless Council to develop and administer a survey to assess the extent to which health care providers seek to ensure that vulnerable populations have CDC recommended immunizations across the life course and to identify barriers to success.

Analysis

- Survey results will be analyzed to identify the levels of recommended immunizations achieved by vulnerable populations across the life course and barriers to receiving them.

Anticipated Product

- Data driven recommendations will be disseminated through a minimum of two scholarly presentations on how medical schools prepare students to address immunization disparities among vulnerable populations in primary care settings.
- A minimum one article for publication will be published in a peer reviewed journal on the role of medical schools to teach students about immunization disparities among vulnerable populations.

PROJECT GOAL 2: To develop model curricular elements that can be used by medical schools to prepare students to effectively address immunization disparities among health care for vulnerable populations.

Methodology

- Recommendations of national medical organizations on addressing immunization disparities among vulnerable populations will be reviewed.
- Monthly video-conferences with CoP members and national partners to develop the framework for designing a curriculum to teach students to identify and respond to immunization disparities encountered by vulnerable populations.

- Members of vulnerable populations will be engaged in the design of more effective medical education curriculum that addresses immunization disparities.
- The immunization curriculum modules will be implemented in targeted medical school and residency training programs.

Analysis

- A pre/post test will be developed and used to assess changes in knowledge and attitudes of medical students and residents in addressing immunization disparities among vulnerable populations.
- Standardized patients will be trained to participate in the clinical assessment of medical student performance in addressing immunization disparities among vulnerable populations. .

Anticipated Product

- A policy brief and other scholarly products will be disseminated to medical education professionals on how medical schools are addressing immunization disparities in their curricula;
- Technical assistance will be provided to other medical schools on how to modify their curriculum to better address immunization disparities experienced by vulnerable populations.

Limitations

- Medical schools and residency programs may be resistant to additional curriculum demands
- Medical schools and residency programs may not prioritize teaching students and residents about immunization disparities experienced by vulnerable populations.

PROJECT GOAL 3: To broadly disseminate research findings and curriculum products on addressing immunization disparities among academic, clinical, and advocacy organizations

Methodology

- A repository of existing best practices in teaching medical student to address immunization disparities experienced by vulnerable populations will be established and maintained.
- Curricular units will be mapped to the *Medbiquitous Curriculum Inventory Working Group Standardized Instructional and Assessment Methods and Resource Types*.
- Social media will be used to broadly disseminate research findings and curriculum products in addressing immunization disparities among vulnerable populations.
- Policy briefs on inclusion of addressing immunization disparities among vulnerable populations will be submitted to a minimum of eight national and regional medical education and health professions organizations.

Analysis

- The number of social media impressions of research and curricular products will be monitored

- The number of medical students and residents who complete the curriculum will be tracked
- Medical student and residents evaluation of perceived effectiveness of the curricular modules.
- A pre/post survey of knowledge and attitudes about immunization disparities will be completed by medical students and residents exposed to the curricular modules.

Anticipated Products

- A web-accessible repository of curricular modules on addressing immunization disparities among vulnerable populations will be established and maintained.
- A policy brief with recommendations about the role of medical schools in training students to address immunization disparities among vulnerable populations will be developed and disseminated.
- Technical assistance will be provided to other medical schools to modify their curriculum to teach students how to address immunization disparities among vulnerable populations..

Limitations

- Medical schools and residency programs may be resistant to additional curriculum demands
- Medical schools may not prioritize teaching students and residents about immunization disparities among vulnerable population.

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