Addressing Health Disparities through Interprofessional Education and Community-based Participatory Research

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  • White Crane Wellness Center (WCWC, non-profit)
  • Health Resources and Services Administration (HRSA)

• No financial conflict of interest
Learning Objectives

1. Discuss key principles of Community-Based Participatory Research (CBPR) and core competency domains for Interprofessional Education (IPE) and Collaboration

2. Analyze benefits of utilizing of the CBPR approach in IPE and collaborative practice to address health disparities

3. Discuss lessons learned from developing, implementing and evaluating the “Interprofessional Approaches to Health Disparities” (IAHD) course at UIC

4. Develop action plans to apply similar learning experiences at participant’s institutions
Our Journey in Program Development

2005–2007
- Training Culturally Responsive Physicians
  - American Medical Student Association (AMSA) Foundation
  - Health Resources and Services Administration, US Department of Health and Human Services

2007–2008
- An Interdisciplinary Service Learning Experience to Prepare Tomorrow’s Health Care Professionals
  - Association for Prevention Teaching and Research (APTR) & CDC

2007–2010
- A Longitudinal Continuity of Care Predoctoral Curriculum to Promote Patient-centered Medicine
  - Health Resources and Services Administration, US Department of Health and Human Services

2010–2015
- Training Family Medicine Residents in Underserved Medicine
  - Affordable Care Act: Primary Care Residency Expansion
  - Health Resources and Services Administration, US Department of Health and Human Services

2013–2015
- Longitudinal Team-based Interprofessional Education to Care for Special Needs Populations
  - Macy Faculty Scholars Award, Josiah Macy Jr. Foundation

2015–2019
- ENGAGE-IL - ENhancement of Geriatric Care for All through TraininG and Empowerment: An Interprofessional Imperative
  - GWEP, HRSA, US Department of Health and Human Services
Racial and Ethnic Minorities Will Comprise Almost Half of the Total Population by 2050

**Figure 2**
Distribution of the U.S. population by race/ethnicity, 2000 and 2050

NOTE: "Other" includes non-Latino individuals who reported "Some other race" or "Two or more races." Data for 2040 do not include estimates for the "Other" category.


Background & Rationale

HEALTHCARE REFORM
STRAIGHT AHEAD
Notes: GDP refers to gross domestic product. Dutch and Swiss data are for current spending only, and exclude spending on capital formation of health care providers.

Source: OECD Health Data 2015.
Mirror, Mirror on the Wall
How the U.S. Health Care System Compares Internationally
Drivers for Change

IOM aims...care should be: safe, effective, patient-centered, timely, efficient and equitable

Recognition of social determinants of health

Persisting health disparities

Numerous calls to reform the health care system and health professions education

Emphasis on the need for integrating medical education with public health training

Evolving accreditation requirements for HPE
Health Disparities in Chicago

A Profile of Health and Health Resources within Chicago’s 77 Community Areas
Differences in Patient-Reported Experiences of Care by Race and Acculturation Status

Memoona Hasnain · Alan Schwartz · Jorge Giretti · Angela Bixby · Luis Rivera · and the UIC Experiences of Care Project Group

© Springer Science+Business Media New York 2012

Abstract Patient-reported experiences of care are an important focus in health disparities research. This study explored the association of patient-reported experiences of care with race and acculturation status in a primary care setting. 881 adult patients (African-American 34%; Hispanic—classified as unacculturated or biculturated—31%; Caucasian 33%; missing race 2%), in outpatient Family Medicine clinics, completed a written survey in Spanish or English. Consumer Assessment of Healthcare Providers and Systems (CAHPS) Clinician & Group (CAG) Survey Adult Primary Care instrument was used for experiences of care and Short Form-12 survey for health status. Controlling for other variables, race and acculturation were significantly associated with several CAG subscales. Hispanic patients gave significantly higher ratings for care experiences and expressed greater interest in shared decision making. Selected patient-reported measures of care are associated with patients’ race and acculturation status (for Hispanic patients). We discuss implications for both provision and measurement of quality care.

Keywords Patient-centered care · Acculturation · Cultural competence · Quality care

Introduction

Asking patients to rate the quality of their health care experiences is increasingly gaining emphasis in the ongoing evaluation of the provision of health care. Given persistent racial/ethnic disparities in health status in the United States, access to and utilization of health care, as well as the quality of care [1], it is crucial to explore differences in patients’ perception of the quality of care across ethnically diverse populations. These questions are particularly important when studies indicate that some non-white patients report better care experiences in situations where they are known to receive lower-quality care, while others do not [2–5]. One recent study [6] suggests both an important role for differential item use by respondents of different ethnicities and approaches to survey validation to...
## Changing Needs for Health Professions Training

<table>
<thead>
<tr>
<th>Need for...</th>
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<tr>
<td><strong>Revisiting the Medical School Mission at a Time of Expansion</strong></td>
<td><strong>Educating Physicians: A Call for Reform of Medical School and Residency</strong></td>
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<td>Josiah Macy Jr. Foundation – 2008</td>
<td>Carnegie Foundation - 2010</td>
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<tr>
<td>▪ Acceleration in the pace of change in order to prepare future physicians to meet the public’s increasingly demanding needs and expectations;</td>
<td>▪ Standardization of learning outcomes and individualization of the learning process</td>
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<td>▪ Medical educators to ensure that physicians have more backgrounds in population health and the role social factors play in effecting health change; and</td>
<td>▪ Integration of formal knowledge and clinical experience</td>
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<td>▪ More frequent use of community-based settings as learning environments and less frequent use of hospital settings.</td>
<td>▪ Development of habits of inquiry and innovation</td>
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<td>▪ Focus on professional identity formation</td>
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Figure 1: New Beginnings in Education, Service & Research
Hasnain, 2005 – Service Learning Conceptual Framework

- **Service Learning...** a teaching and learning strategy that integrates meaningful community service with instruction and reflection to enrich the learning experience, teach civic responsibility, and strengthen communities.

- **Initial SL focus expanded to Program in Patient-centered Medicine**

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- **Promote continuity of care in clinical practice**
- **Heighten students’ personal commitment to service, social justice, and civic responsibility**
- **Broaden students’ perspective about health professionals’ role in reducing health disparities**
- **Foster critically reflective practitioners**
- **Develop competencies for working in interprofessional teams**

Hasnain, 2005
Patient-centered Medicine Scholars Program

M1
Foundations of PCC

M2
1PCC for Vulnerable Populations

M3
2Patient’s Role in PCC

M4
3IAHD

Continuity of Care

1 Domestic Violence, Geriatrics, HIV/AIDS, Homelessness, Immigrant & Refugee Health
2 Chronic Disease Self-management, Home visits, Group Visits, Special Topics in PCM
3 Interprofessional Approaches to Health Disparities
Patient-centered Care

...health care that establishes a partnership among practitioners, patients and their families (when appropriate) to ensure that decisions respect patients’ wants, needs and preferences...IOM

Model for Patient-centered Delivery of Care

- Relationship Building
- Collaborative Decision Making
- Coordination & Integration of Care
- Communication & Education

© 2011 Hasnain, M. Department of Family Medicine, College of Medicine, University of Illinois at Chicago
Theoretical Foundation

Education in Action Philosophy

Drawing from the wisdom of...

John Dewey, Earnest Boyer, David Kolb and other educators and philosophers

• Active-experiential learning
• Reflection
• Application
• Integration

Adult Learning Principles - Knowles

Kolb’s Model
Focus on IPE & CP

Framework for Interprofessional Education & Collaborative Practice – WHO 2010

Interprofessional Education Collaborative 2011
Recommendations

“All health professionals should be educated to deliver patient-centered care as members of an interprofessional team, emphasizing evidence-based practice, quality improvement approaches and informatics.” IOM

“If we acknowledge the growing body of evidence that healthcare delivered by well-functioning teams produces better results, there is a serious disconnect with the educational system that is still structured in silos.” George Thibault, MD

The core curriculum of a medical education program must prepare medical students to function collaboratively on healthcare teams that include other health professionals. LCME: Standard 19

Although IPE can be viewed as curriculum (what material is learned) or an instructional method (how material is learned), its real promise lies in its role as a lever for promoting change. Dow & Thibault, NEJM 2017
Pilot Work

Training Future Health Providers to Care for the Underserved: A Pilot Interprofessional Experience

Memoona Hasnain¹, Michael J. Koronkowski², Diane M. Kondratowicz¹, Kristen L. Goliak²

¹Department of Family Medicine, College of Medicine, University of Illinois at Chicago, USA
²Department of Pharmacy Practice, College of Pharmacy, University of Illinois at Chicago, USA

ABSTRACT

Introduction: Interprofessional teamwork is essential for effective delivery of health care to all patients, particularly the vulnerable and underserved. This brief communication describes a pilot interprofessional learning experience designed to introduce medicine and pharmacy students to critical health issues affecting at-risk, vulnerable patients and helping students learn the value of functioning effectively in interprofessional teams. Methods: With reflective practice as an overarching principle, readings, writing assignments, a community-based immersion experience, discussion seminars, and presentations were organized to cultivate students’ insights into key issues impacting the health and well-being of vulnerable patients. A written program evaluation form was used to gather students’ feedback about this learning experience. Results: Participating students evaluated this learning experience positively. Both quantitative and qualitative input indicated the usefulness of this learning experience in stimulating learners’ thinking and helping them learn to work collaboratively with peers from another discipline to understand and address health issues for at-risk, vulnerable patients within their community. Discussion: This pilot educational activity helped medicine and pharmacy students learn the value of functioning effectively in interprofessional teams. Given the importance of interprofessional teamwork and the increasing need to respond to the health needs of underserved populations, integrating interprofessional learning experiences in health professions training is highly relevant, feasible, and critically needed.

Keywords: Interprofessional care, interprofessional education, interprofessional learning, underserved populations
Community-based Participatory Research (CBPR)

“A collaborative approach to research that equitably involves all partners in the research process and recognizes the unique strengths that each brings. CBPR begins with a research topic of importance to the community and has the aim of combining knowledge with action and achieving social change to improve health outcomes and eliminate health disparities.”

W.K. Kellogg Foundation Community Scholars Program, 2001
CBPR Principles

Participatory process
Joint process-cooperative, engaging community members & researchers to contribute equally
Co-learning process
Involves systems development + local community capacity development
Empowering process through which participants can increase control over their lives
Achieves balance between research & action
Community-Based Participatory Research

Interprofessional Approaches to Health Disparities (IAHD)

**Goal**: To equip learners with essential skills to improve health care for underserved populations and transform health disparities through interprofessional education, research and collaborative practice.
Educational Methods

• Orientation, student, faculty and staff development
• Community-based immersion activities
• CBPR & QI Research
• Monthly seminars & online tutorials
• Team-based learning
• Reflections
• Final showcase presentations
<table>
<thead>
<tr>
<th>Student Level</th>
<th>Medicine</th>
<th>Nursing</th>
<th>Pharmacy</th>
<th>Social Work*</th>
<th>Public Health</th>
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<tr>
<td></td>
<td>M4</td>
<td>Graduate level students (e.g. ANPs)</td>
<td>P3 (pilot P4)</td>
<td>2nd year MSW students</td>
<td>2nd year MPH students</td>
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<td>Place in Curriculum</td>
<td>PCM Scholars Program</td>
<td>Independent study</td>
<td>Independent study</td>
<td>Practicum coursework</td>
<td>Part or all of the field practicum requirements or independent study</td>
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<td>Pilot - <em>embedded in Advanced Pharmacy Practice Experience</em></td>
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*Planned for future participation
Assessment

- Assessment of Learning versus Assessment for Learning
- Balance between formative and summative assessment
- Mixed methods – opportunity for open ended feedback

*MILLER'S PRISM OF CLINICAL COMPETENCE (aka Miller's Pyramid)*

> it is only in the "does" triangle that the doctor truly performs

- Performance Integrated Into Practice
  - eg through direct observation, workplace based assessment
- Demonstration of Learning
  - eg via simulations, OSCEs
- Interpretation/Application
  - eg through case presentations, essays, extended matching type MCQs
- Fact Gathering
  - eg traditional true/false MCQs

Adapted by Drs. R. Mehay & R. Burns. UK (Jan 2009)
Kirkpatrick’s Four-step Evaluation

Step 1: Reaction - How well did the learners like the learning process?

Step 2: Learning - What did they learn? (the extent to which the learners gain knowledge and skills)

Step 3: Behavior - (What changes in job performance resulted from the learning process? (capability to perform the newly learned skills while on the job)

Step 4: Results - What are the tangible results of the learning process in terms of reduced cost, improved quality, increased production, efficiency, patient outcomes?
Objectives

1. Enhance health care professionals’ knowledge and competence to integrate geriatrics into primary care

2. Educate consumers about Alzheimer’s disease and related dementias

3. Empower and engage older adults and caregivers to enhance competency and adopt behaviors to improve overall health status

4. Enable health science students interested in geriatrics to acquire knowledge, understanding, and appreciation of integrated ethical geriatric care in a variety of health care settings

Programs

1. Online Accredited Learning in Interprofessional Geriatrics (ENGAGE-IL-OALIG)

2. Digital Tools to Empower Clinicians and Communities in Interprofessional Geriatrics (ENGAGE-IL-DTECCIG)

   Dementia Guide Expert for Families

3. Community-Campus Connections in Interprofessional Geriatrics (ENGAGE-IL-CCCIG)

4. Scholars and Leaders in Interprofessional Geriatrics (ENGAGE-IL-SLIG)

Go to engageil.com
Outcomes - Participants

Total PCM-SLP-IAHD Program Students, 2005-2019

PCM-SLP-IAHD Program, 2005-2019
Outcomes - Continued

• **PCM Scholars Program** – impact on choice of working in primary care and underserved settings and on population health

• **IAHD and ENGAGE-IL-SLIG** – overall positive learner feedback with suggestions for improvement

• **Online ENGAGE-IL learning modules** – over 6500 completed

• **Dementia app** - since Dec 2016, over 22,000 views/downloads in 12 different countries

• **Continuous external funding** since 2005

• **Sustainability** of educational innovations beyond grant funding

• **Involvement of multiple health professions colleges**

**PCM Scholars' reflections about their experiences are available as "PCM Voices".**
“PCM had the biggest impact on me in regards to getting to know a patient and what that patient goes through in the course of their care...I think this understanding will make me a more compassionate physician that values the time that I get with my patients more, and try to use it in the best possible way for them.”
“This program has enriched my appreciation for the patient’s background, lifestyle and living conditions and the way all of these factors impact his/her ability to take care of his/her health...I also received an introduction to the way that doctors think. I will take both of these important things with me into my practice.”
“The service learning program has motivated me to learn more about the prevalent issues that affect my communities and consequently my patient’s health outcomes. As a future physician, I will be able to apply all the lessons I learned in SLP. I have learned that health is very complex and influenced by many external factors. As a physician, I will like to have the resources that will allow me to help and empower my patients. I will like to focus on patient centered and preventive medicine and hope to be involved in my respective communities.”
Learner comments – IAHD

“Every one brought different experience and expertise to our project, especially since we had members who were already practicing professionals. That was especially helpful, because she had a much better understanding of systems level issues that aren't necessarily taught in medical or pharmacy school and come from years of experience. Also, coming from different professions and perspectives greatly expanded the scope of content we could share with our target audience for our health education intervention.”
“My team members helped shape the way I see myself within an interprofessional group. I was able to identify the differences in our knowledge and skills. Together we were able to use those different perspectives to put together a project that was somewhat successful.”
“I absolutely love all the topics that we are learning about. It’s interesting, especially when we discuss healthcare as a whole at a level that is higher than each of our professions. I feel that I am learning a tremendous amount, not just about geriatrics, but also about the healthcare system. The Scholars Program fosters a fantastic learning environment that is driven by the students’ interests and their eagerness to learn. The learning experience through this program is not something that I have seen in my regular coursework at the College of Pharmacy, and I am very grateful to be a part of this experience.”
“This program has really helped me to learn more about how to be a patient advocate.”

“I have really enjoyed and benefited from the multidisciplinary approach. This perspective has provided in-depth clarity as to the function of my colleagues’ professions in geriatrics care, as well as a more definitive understanding of the breadth of social work practice in this context.”
Patient-centered Medicine (PCM) Scholars Program, Service Learning Program (SLP) & Interprofessional Approaches to Health Disparities (IAHD)

PCM Scholars Program fosters the development of critically reflective future health professional leaders, scholars and change agents who embrace the concepts of patient advocacy, humanism, and compassion, and blend it with the art and science of their health professions.

The program offers medical students and other health science students learning opportunities to work with culturally and socioeconomically diverse patients in clinical settings and in the community.

Each year, interprofessional student teams engage in didactic and experiential learning activities, including mentored community-based participatory research (CBPR) and quality improvement (QI) projects.

- 5 Concentrations for SLP and IAHD: Domestic violence, HIV/AIDS, Homelessness, Geriatrics, and Immigrant & Refugee health
- Team of 12 interprofessional faculty - Medicine, Nursing, Pharmacy and Public Health.
- Over 300 medical students - participated in the SLP since 2005.
- Nearly 100 students from medicine, nursing, pharmacy and public health - participated in IAHD since 2014.
- 100+ presentations - conducted at community sites by students to close the gaps on health disparities.

Community Partners:
- Connections for Abused Women and their Children (CAWC)
- Project Vida; EdgeAlliance/ AIDSCare Progressive Services
- Lincoln Park Community Shelter; Cathedral Shelter (now Revive)
- Housing Opportunities and Maintenance for the Elderly (H.O.M.E.)
- Heartland Alliance, Syrian Community Network

PCM-SLP-IAHD Program Director: Memoona Hasnain, MD, MHPE, PhD, Interim Head, Department of Family Medicine, memoona@uic.edu To learn more, visit: https://tinyurl.com/yyjwtzpl
Syrian Community Health Fair – March 2019
Building healthy communities through care, compassion and collaboration

• UIC Interprofessional Approaches to Health Disparities (IAHD) Immigrant & Refugee Health Concentration Scholars organized and carried out the health fair

• Focus - nutrition, diabetes, blood pressure, smoking cessation and mental health

• Special thanks to our community partner, the Syrian Community Network, the Mecca Center and all volunteer faculty and students from medicine, nursing and pharmacy
### Community-based Participatory Research Projects 2014-2019

<table>
<thead>
<tr>
<th>Concentration</th>
<th>CBPR Projects</th>
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</table>
| Domestic Violence       | • Self-Care Tools and the Effect on Quality of Life for Survivors of Domestic Violence  
                          • Health Care Literacy & Empowerment for Survivors of Domestic Violence  
                          • Rediscovering Her Power: Assessing & Increasing Empowerment Amongst Survivors of Domestic Violence  
                          • Finding My Voice: Navigating the Healthcare System Curriculum                                                                                   |
| Geriatrics              | • Assessment of a Navigation Tool to Assist in Improving Healthcare Activation amongst Senior Residents: A Prospective Study Using Community-Based Participatory Research  
                          • Using Active Remote Care Technology to Enhance Health and Wellbeing of Home-residing Older Adults: Evaluation of Initial Impacts and Future Directions  
                          • Geriatric Health Literacy: Piloting a Healthcare Appointment Workbook  
                          • Efficacy of Different Curricular Methods of Chronic Disease Self-Management Education Programs among Community Dwelling Older Adults |
| HIV/AIDS                | • Improving Health Literacy at Project VIDA  
                          • Peer Video Testimonials to Increase Use of PrEP by African American and Latino Communities in Chicago  
                          • PrEP Continuum of Care: Analysis of Outreach to PrEP Initiation and Follow-up  
                          • Increasing PrEP Adherence                                                                                                                                 |
| Homelessness            | • An Interprofessional Approach to Improving Health Disparities in a Homeless Population  
                          • Nutrition Education & Cookbook Design at the Lincoln Park Community Shelter: A Community Based Participatory Research (CBPR) Pilot Study  
                          • Homelessness and Diabetes                                                                                                                                 |
| Immigrant & Refugee Health | • Assessing Barriers to Health Care Access amongst Refugees Recently Resettled in Chicago  
                          • Preventative Health Care Among Syrian Refugees: Beliefs, Practices, and Experiences  
                          • Employing a Health Fair to Determine the Healthcare Needs of the Syrian Refugee Population                                                                 |
Interprofessional Conceptual Model for Evaluating Outcomes

**NOTE:** For this model, “graduate education” encompasses any advanced formal or supervised health professions training taking place between completion of foundational education and entry into unsupervised practice.
Development and validation of a tool to assess self-efficacy for competence in interprofessional collaborative practice

Memoona Hasnain, Valerie Gruss, Mary Keehn, Elizabeth Peterson, Annette L. Valenta, and Anders Kottorp

Department of Family Medicine, College of Medicine, University of Illinois at Chicago, Chicago, Illinois, USA; Foundation for Advancement of International Medical Education and Research, Philadelphia, Pennsylvania, USA; College of Nursing, University of Illinois at Chicago, Chicago, Illinois, USA; College of Applied Health Sciences, University of Illinois at Chicago, Chicago, Illinois, USA

ABSTRACT

Although interprofessional education and collaborative practice have gained increasing attention over the past five decades, development of rigorous tools to assess related competencies is still in infancy. The purpose of this study was to develop an instrument to evaluate health professions students’ self-efficacy in interprofessional collaborative competency and to assess the instrument’s psychometric properties. We developed a new instrument based on the Interprofessional Education Collaborative’s (IPEC) Core Competencies for Interprofessional Collaborative Practice. In a cross-sectional study design, 660 students from 11 health programmes at an urban university in the Midwest USA completed the Interprofessional Education Collaborative Competency Self Efficacy Tool (IPECC-SET). Rasch analysis evaluated the following: (1) functioning of the instrument; (2) fit of items within each subscale to a unidimensional construct; (3) person-response validity; (4) person-separation reliability; and (5) differential item functioning in relation to gender and ethnicity. After removing seven items with suboptimal fit, each subscale demonstrated high internal validity. Two items demonstrated differential item functioning (DIF) for “Gender” and none for “Race/Ethnicity.” Our findings provide early evidence of IPECC-SET as a valid measure of self-efficacy for interprofessional competence for health professions students. Additional research is warranted to establish external validity of the new instrument by conducting studies across institutions.
Challenges & Discoveries

- Understanding change, stakeholder engagement – Kotter 8 steps
- Curricular transformation – providing a structure and mechanism for integration of innovations
- Coordination, organization, time management
- Staying true to process – patience & perseverance
- Developing & maintaining trust and respect, avoiding hierarchal roles
- Maintaining motivation – intrinsic versus extrinsic
- Unanticipated benefits
- Vision - big picture
Small Group Discussion

Please reflect on:

Your experiences in using CBPR methodology and interprofessional education.

See reflection guide for questions.
Group Reports
Let’s Develop Action Plans
Key Take Home Lessons

- Utilize a systems approach
- Integrate educational theory and principles
- Optimize the change process
- CQI - Build on incremental blocks
- Do everything with love, joy and gratitude
- Don’t be paralyzed by perfection
- Do everything with love, joy and gratitude
Future Directions

- Continuous program refinement through rigorous learner assessment and program evaluation
- Linking UGME, GME and Faculty development
- Ongoing program of interprofessional education, service and research/scholarship
- Improving prevention and population health with special focus on understudied vulnerable populations – new concentrations in “Disability” and Incarcerated populations” in planning phase
Let’s work together, the possibilities are endless!

Foster the development of critically reflective future health professional leaders and scholars who embrace the concepts of patient advocacy, humanism, and compassion, and blend it with the art and science of different health professions.

“Together we can do so much.” Hellen Keller
“With great privilege comes great responsibility. I'm unbelievably lucky to have my dream job - being a FAMILY DOCTOR! In return for my training, I am giving back to communities in need via the National Health Service Corps. I recently became the Medical Director at Foremost Family Health Center in Balch Springs TX, which means besides being the only Family Doctor in the town, I'm challenged to build up a whole team of clinical staff and services to meet the needs of this community. What an amazing opportunity to make a difference!”

Lindsay Martin-Engel, PCM Graduate 2013
Acknowledgements

• Contributions of a large number of individuals – students, staff, faculty, UIC Health Professional Colleges, Community Partners - including agency staff & clients from:
  • Connections for Abused Women and their Children (CAWC)
  • Project Vida; EdgeAlliance/ AIDSCare Progressive Services
  • Lincoln Park Community Shelter; Cathedral Shelter (now Revive)
  • Housing Opportunities and Maintenance for the Elderly (H.O.M.E.)
  • Heartland Alliance, Syrian Community Network

• Funding: American Medical Student Association [AMSA], Association for Prevention Teaching & Research [APTR] & CDC, Grant # 1 D56 HP 08344 by the Health Resources and Services Administration, Josiah Macy Junior Foundation, HRSA Geriatrics Workforce Enhancement Program (GWEP) Grant # U1QHP28730

• UIC-COM Department of Family Medicine
# SLP and IAHD FACULTY

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"Of all the forms of inequality, injustice in health care is the most shocking and inhumane." Martin Luther King Jr.

Additional Resources:

- Patient-centered Medicine Scholars Program
- ENGAGE-IL
- New Book on South Asian Health
- UIC IPECC-SET
Although IPE can be viewed as curriculum (what material is learned) or an instructional method (how material is learned), its real promise lies in its role as a lever for promoting change.

Dow & Thibault, NEJM 2017
Resource: Facilitating factors for sustaining CBPR partnerships
<table>
<thead>
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<th>Funding and Other Resources for Partnership Infrastructure</th>
<th>Established Core Principles</th>
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<tr>
<td>Funding and Other Resources for the Community</td>
<td>Continuous Planning Process</td>
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<td>Excellent Project Manager</td>
<td>Ability to Evolve</td>
</tr>
<tr>
<td>Tangible Benefits to Members of the Partnership</td>
<td>Having a Specific Focus</td>
</tr>
<tr>
<td>Having the Right People and Organizations Involved</td>
<td>Having a National Reputation</td>
</tr>
<tr>
<td>Organizational Representation</td>
<td>Being About an Approach (CBPR), Not Just a Project</td>
</tr>
<tr>
<td>Strong Staff Team</td>
<td>Excellent New Partners</td>
</tr>
<tr>
<td>Shared Experiences and History</td>
<td>Trust</td>
</tr>
<tr>
<td>Good Communication</td>
<td>Performing Internal Evaluations</td>
</tr>
<tr>
<td>Strong Long-term Commitment</td>
<td>Learning from Past Mistakes and Successes</td>
</tr>
<tr>
<td>Individual Relationships Between/Among Partners</td>
<td>Flexibility</td>
</tr>
<tr>
<td>Mutual Respect and Support</td>
<td>Humor</td>
</tr>
<tr>
<td>Shared Understanding or Shared Purpose</td>
<td>Achievement of Targeted Goals</td>
</tr>
</tbody>
</table>

Developing and Sustaining Community-Based Participatory Research Partnerships: A Skills-Building Curriculum  University of Washington - Unit 7
2019 IAHD Projects
Finding My Voice: Navigating the Healthcare System
Exploring the Creation of a Healthcare Navigation Curriculum for Survivors of Domestic Violence Through Community Engagement and Interprofessional Collaboration
Aleen Onan, Maria Quilautke Omez, Farah Khan, Elizabeth Ortiz, Nikita Waliwishi, Sonya Ono MD, Meron ha Hasnain MD, MPH, PhD
Interprofessional Approaches to Health Disparities | University of Illinois at Chicago

Background
Connections for Abused Women and Children (CAWC)

Objectives
1. Identify the most beneficial aspects of the curriculum.
2. Evaluate knowledge gained from the curriculum.
3. Assess skills gained from the curriculum.

Methods
CAWC in partnership with CAWC

Results
The most beneficial aspect of the curriculum is to empower myself.

Conclusions
The most important lesson I have learned is to critically evaluate my experiences and to be open to feedback.

Acknowledgments
This project was supported by the Department of Family Medicine, College of Nursing, College of Pharmacy, College of Medicine, and the School of Public Health. Special thanks to our women at CAWC, Maria Quilautke Omez, CAWC staff, Dr. Harman, Dr. Ono, Dr. Alifff and Turkey Jones.

References
Efficacy of Different Curricular Methods of Chronic Disease Self-Management Education Programs Among Community Dwelling Older Adults

Darwish, D., Lester, T., Rivera, L., Schorsch, P., Gruss, V.
Interprofessional Approaches to Health Disparities | University of Illinois at Chicago

Background
- Problem: Ongoing need to provide effective chronic disease management services to enhance health outcomes and reduce healthcare costs in older adults.

Methodology
- Study Purpose: To identify which curricular methodology works best in providing basic chronic disease (diabetes) management services to enhance health outcomes and reduce healthcare costs in older adults.

Results
- Each of the four different curricular formats was found to increase the knowledge, self-management, and understanding of the residents as shown by the results of the pre and post-tests in Table 1.
- Table 1: Pre-Post educational intervention increase in residents' knowledge, self-management, and understanding by curricular format.

<table>
<thead>
<tr>
<th>Curricular Format (Topic)</th>
<th>Self-directed (HTS) N = 3</th>
<th>Team-based (TM) N = 3</th>
<th>Didactic Lecture (DA) N = 5</th>
<th>Interactive Game (IG) N = 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>1.67</td>
<td>1.4</td>
<td>1</td>
<td>1.75</td>
</tr>
<tr>
<td>Disease Self-Management</td>
<td>0.33</td>
<td>0.6</td>
<td>0.8</td>
<td>1.25</td>
</tr>
<tr>
<td>Understanding</td>
<td>1.34</td>
<td>0.13</td>
<td>0.6</td>
<td>1.75</td>
</tr>
</tbody>
</table>

- Table 2: Pre-Post change in knowledge for various curricular formats.

<table>
<thead>
<tr>
<th>Curricular Format (Topic)</th>
<th>Self-directed (HTS) N = 3</th>
<th>Team-based (TM) N = 3</th>
<th>Didactic Lecture (DA) N = 5</th>
<th>Interactive Game (IG) N = 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in pre-post scores</td>
<td>1.11</td>
<td>0.78</td>
<td>0.93</td>
<td>1.25</td>
</tr>
</tbody>
</table>

- It can be seen from Table 2 and the graphs below that the interactive game format had the biggest impact in increasing the perceived effectiveness of the residents with an average increase of 4.25 points on the survey compared to 1.11 points for self-directed, 0.78 points for team-based, and 0.93 points for didactic lecture.

- This significant increase in the interactive game format is likely due to active engagement of the information and more encouragement from the residents.

Conclusion
- Key findings and how they relate to prior evidence:
  - In general, people learn differently and thus various approaches to learning must be implemented.
  - Health care professionals must be aware that caring for different populations needs to involve population-focused approaches.

- Implications:
  - While more research needs to be conducted, our results show significant differences in how the elderly population learns and retains information. This is important to all healthcare providers caring for this population as improved learning and retention can lead to increased adherence to medical care and thus improved patient outcomes.

Next steps/future directions:
- Facilitate this study with a larger sample size and a few variables to explain the impact of the interactive format on the participants' self-efficacy and health outcomes.

References

Acknowledgements
Identifying Barriers to PrEP Access & Adherence within the At Risk African American and Latinx Populations served by Project Vida in Chicago

Ahad Bagasarawala MD(c), Christina Feng, MSN(c), Anna Hallman PharmD(c), Sarbhi Jain MD(c), Virginia Mason MPH(c), Seunghee Song DNP-WHNp(c), & Patrick A. Tranner, MD, MPH

Interprofessional Approaches to Health Disparities | University of Illinois at Chicago

Background
- Pre-exposure prophylaxis (PrEP) is a safe and effective method for HIV-negative patients who engage in high-risk behaviors to prevent acquisition of the infection.
- However, PrEP failure has been shown to reduce the risk of HIV infection in high-risk people by 92%.
- Although there are estimated 1 million people in the United States who would benefit from PrEP, it has been prescribed to less than 800 people since it went on the market in 2014.
- PrEP adherence rates range anywhere from 10% to 20% of patients who can benefit from it, with the average rate being around 50%.

Research Question
What barriers are preventing the use of African American and Latino populations in Chicago, served by Project Vida from adhering to PrEP?

Community Partner
Project Vida is an open community organization that aims to improve quality of life and reduce health disparities in underserved communities by promoting self-esteem and providing holistic health and educational services.

The organization currently serves as a point of direct services as well as connecting community members with resources in the Little Village neighborhood of Chicago.

Proposed Methods & Objectives

1. Understand the barriers associated with low adherence to PrEP in the At Risk African American and Latino communities in Chicago, served by Project Vida.
2. Assess barriers experienced by this community through those groups, quantitative.
3. Provide PrEP resources to community members.

Methods for Proposed Program Implementation

Community Outreach
Project Vida will host outreach events and advertise those events.

Focus Group Location
Focus Group Location: Project Vida

Focus Group Description
Focus groups of 6-8 individuals will be conducted in collaboration with Project Vida (due to transportation). Compensation: Community members will be offered incentives to participate in the focus group and the sum of $25 for their time. The survey will take approximately 60 minutes.

Procedures for Data Collection:
Quantitative data will be administered during focus groups, 1-2 months postprandial, & follow-up with pharmacies to obtain prescription fill history.

Literature Review Methods
Our group started with Project Vida in the Little Village neighborhood of Chicago and expanded our literature review to include American Journal articles addressing adherence to PrEP.


Results
Common Themes from the Literature on PrEP Access & Adherence Barriers

- Financial burden
- Multidisciplinary: Identify which individual, social, and structural barriers are most likely to be prevalent.

Quantitative Survey

- Multidisciplinary: Identify which individual, social, and structural barriers are most likely to be prevalent.
- Multidisciplinary: Identify which individual, social, and structural barriers are most likely to be prevalent.

Key Findings
- The literature review highlighted current barriers preventing access to and adherence to PrEP (both reducing the PrEP adherence rate).
- An analysis of the literature showed the following barriers are present:
- Designed focus groups that will provide the space for community members to express their feelings and experiences.
- Designed questionnaires to collect quantitative and qualitative data that will help identify the key participant knowledge, awareness, and beliefs about PrEP (to help create an intervention specifically for the clients served by Project Vida).

Discussion & Conclusion

- Key findings:
  - The literature review highlighted current barriers preventing access to and adherence to PrEP (both reducing the PrEP adherence rate).
  - An analysis of the literature showed the following barriers are present:
  - Designed focus groups that will provide the space for community members to express their feelings and experiences.
  - Designed questionnaires to collect quantitative and qualitative data that will help identify the key participant knowledge, awareness, and beliefs about PrEP (to help create an intervention specifically for the clients served by Project Vida).

References
- A full list of references is provided at the end of the document.

Acknowledgements
- Project Vida, the Chicago Department of Public Health, The University of Illinois at Chicago.
- The authors would like to thank Project Vida for their support throughout the study.

Next Steps (Outcomes)
- Address the identified barriers by implementing a program targeting specific populations.
- Provide ongoing interventions to support the implementation of Project Vida.
- Help reduce barriers increasing client PrEP access & adherence.
A Nutrition Educational Initiative for Homeless Persons in Chicago

Elifklim Amartey, BS, College of Nursing; Rachel Bervell, BA, College of Medicine; Edwin Le, BA, College of Pharmacy; Steven Papastefan, BA, College of Medicine.

Interprofessional Approaches to Health Disparities | University of Illinois at Chicago

Background

- Homeless persons in Chicago face a variety of unique challenges that have a direct or indirect impact on their health.
- Proper nutrition is particularly difficult for homeless persons, and many have diets deficient in essential vitamins and macronutrients. Additionally, financial limitations may lead homeless persons to purchase inexpensive foods high in saturated fats, sugars, and salt.
- We sought to establish a community-based collaborative partnership with the Lincoln Park Community Shelter (LPCS) to address challenges faced by their residents.
- Aims to improve the nutritional literacy of our guests, and to better understand the challenges faced by homeless persons in achieving good nutrition. We also aimed to better understand our inherent biases and privilege when interacting with homeless persons in Chicago.

Methodology

Needs Assessment: A needs-based assessment consisting of interviews of the residents and social workers identified nutritional education as an actionable intervention in a needed area for improvement for the residents.

Pre-Intervention Survey: A pre-intervention survey was administered to the residents to assess disease knowledge, nutritional literacy, and confidence in nutritional decision-making.

Nutritional Education Intervention: Four specific sub-challenges in nutritional management: 1) Diabetes fundamentals, 2) nutrition fundamentals, 3) financial considerations, and 4) in-practice nutritional decision-making.

- All sessions were presented through PowerPoint presentations. Sessions were interactive, conversational, and encouraged learner participation.
- Simple foods were used in the final session for nutritional labeling and financial decision-making demonstrations.

Results

Pre-Intervention Diabetes Survey Results

<table>
<thead>
<tr>
<th>Factor</th>
<th>Score (1 - Not at all confident/knowledgeable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confidence in diabetes management (n=1)</td>
<td>3</td>
</tr>
<tr>
<td>Confidence explaining diabetes to others (n=1)</td>
<td>2</td>
</tr>
<tr>
<td>Confidence in making healthy food choices (n=1)</td>
<td>2.64</td>
</tr>
<tr>
<td>Confidence in preventing long-term complications of diabetes (n=1)</td>
<td>2.09</td>
</tr>
<tr>
<td>Perceived knowledge of diabetes-friendly foods (n=1)</td>
<td>2</td>
</tr>
<tr>
<td>Perceived knowledge of diabetes medications (n=1)</td>
<td>2</td>
</tr>
</tbody>
</table>

![Graph showing nutritional knowledge and decision-making](image)

Sample Didactic Session: Financial Considerations

![Graph showing cost of health-care](image)

Conclusions

- The homeless community has many challenges that are not fully addressed by the healthcare system.
- Financial limitations, limited nutritional knowledge, and false perceptions of healthy behavior may contribute to the prevalence of nutritional deficiencies and chronic health conditions in this population.
- The community-based participatory action (CBP) project aims to create sustainable solutions toward a health disparity that is common in the homeless community: nutritional literacy.
- Through an educational and collaborative didactic series, we created a framework for nutrition that is both actionable and achievable with limited financial resources.
- Minimizations surrounding nutrition and chronic disease states were common in this cohort. For example, only 45% of our cohort believed that heart disease is a potential consequence of diabetes, and an estimated 45% believed that dental care was a component of diabetes. The didactic series aimed to address common misconceptions and adapt our cohort's knowledge base to better reflect that of evidence-based medicine.

The primary limitation of our study was that the individual members of each session changed on a weekly basis, due to movement in and out of LPCS. The process of assessing post-intervention diabetes knowledge/awareness during the duration of our IAHD sessions. Future studies should focus on active mentorship and planning with residents, even interventions for prevention of chronic health disease, and strategies to access subsidized healthy foods for homeless persons in Chicago.

References

![List of references](image)

Acknowledgements

We would like to thank our community partners at Lincoln Park Community Shelter for facilitating our IAHD project, and most importantly, the homeless residents with whom we had the pleasure of working. The IAHD is funded by the Department of Family Medicine, UIC.)
Assessing Health Needs of Middle Eastern Immigrants and Refugees

Amina Ahmad, Shani Chibber, Krishna Constantino, Kayya Vattia, Riddhi Vyas, Memona Hasnain

Interprofessional Approaches to Health Disparities | University of Illinois at Chicago

Background

- Problem: Refugee and immigrant patients often have unmet chronic and acute health concerns.
- Purpose: To determine the healthcare needs of immigrant and refugee patients served by the Syrian Community Network (SCN), a non-profit organization in Chicago.
- Context: The project was conducted in partnership with SCN since strategies that integrate healthcare delivery methods along with community engagement and support was shown to be beneficial.

Summary of Literature: Research in healthcare needs of refugees shows that mental health, infectious disease, chronic disease, and malnutrition are the most common concerns among immigrant and refugee populations.

Methodology

- Design: Cross-sectional survey study. A survey was designed to ascertain the healthcare needs of the SCN community and incorporate standardized screening tools to assess for diabetes, depression, and tobacco use.
- Measures: Main categories: demographics, diabetes, hypertension, depression, and tobacco use.
- Participants: All participants were interviewed in either English or Arabic.
- Pooling of data collection: All interviews were conducted in English or Arabic and written on a specially designed health history where screening and educational materials were provided for participants.
- Data Collection: The survey was distributed in English and Arabic to a specially designed health history where screening and educational materials were provided for participants. Volunteers fluent in Arabic were also present to assist with data collection and education.

Results

- Figure 1: Health Demographics
  - Table: Health Demographics
  - Figure 2: Bar chart showing health care providers
  - Table: Table showing health care providers
  - Figure 3: Health History
  - Table: Table showing health history
  - Figure 4: Types of Payment Options Used by Participants for Medical Care
  - Table: Table showing payment options for medical care

Conclusions

- Weighted average shows that demographics and selected aspects of health care for participants:
  - 45% did not currently see a primary care physician and had not received care at least twice in the last year.
  - 45% stated that they were able to access care on time and that the patient obtained care.
  - Of the patients who reported needing a primary care physician, 45% stated that they were able to access care on time.
  - Few reported a history of chronic disease.
  - Most of the participants stated that they were able to access care on time.
  - Participants were not able to access care on time.

References

[Insert references]

Acknowledgements

This research was supported by the UIC Department of Family Medicine. We thank Dr. Shawn Hasnain for serving as faculty mentor and Dr. Syed Ahmed for serving as external mentor. We also thank the Syrian Community Network for funding the study. We thank Mr. Rehman Tahir for developing the survey.