FACILITATORS AND BARRIERS TO DIABETES EDUCATION IN HMONG IMMIGRANTS LIVING IN THE UNITED STATES

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Objectives

- Provide background /context regarding the Hmong people
- Detail the problems underlying gaps in diabetes self-management in the Hmong.
- Explain the methods, findings and conclusions of a community engaged study of California Hmong immigrants with diabetes.
- Discuss dissemination of research findings.
Specific Aims

1. To identify knowledge, perceptions, and practices related to diabetes among Hmong Americans through focus group interviews, facilitated by the collaboration with community and academic partners, in order to determine the baseline for developing culturally sensitive diabetes education.

2. To explore perceived barriers and facilitators encountered with diabetes education, preferred sources, channels, and formats for diabetes education.
Design

- Qualitative Study, Community Engaged
- Hybrid Design-Inductive and Deductive Approaches (Bradley, Curry & Devers, 2007)
- Ethical approval received the MUSC IRB (Pro00039320)
Population & Setting

- Study Location-Fresno, CA
- Use of two interpreters
- Inclusion/Exclusion Criteria:
  - Identify self as first generation resettled Hmong American
  - 18 to 70 years old
  - Self-report as having diabetes type 2 ≥ 6 months
  - Ability to understand Hmong or English
  - No debilitating co-morbidities
  - Agree to interview for 60-90 min
  - And follow-up if needed
Recruitment

- Community partner
- Recruitment flyer
- Incentive-$30 gift cards
Interpreters

- Both interpreters are bilingual, bicultural Hmong Americans
- PI Review of study protocol with interpreters
- Reviewed the Standards for Interpreters in Health Care (National Council on Interpreting in Health Care, 2005)
Informed Consent

- Waiver of consent
- Statement of Research
Data Collection

- Self developed case report forms (CRFs)
- Demographic information
  - Age
  - Sex
  - Marital status
  - Language spoken
  - Level of education
  - Ability to read and write Hmong and English
  - Length of diabetes diagnosis
  - Place of birth
  - Length of time lived in the United States
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Fig 2 Demographics of Study Participants n=16
Data Collection - Focus Group Interviews

- 60 mins face to face focus group interview (FGI) in a local realtor’s office
- Interviews started with an introduction
- Interviews audio recorded
- Questions were semi-structured and open ended
Focus Group Interview Questions

- What do you understand about diabetes?
- What would happen if you don’t take care of your diabetes?
- How comfortable are you in speaking and understanding English?
- What kind of diabetes education have you received?
- Do you find that diabetes education helps you to understand the illness more?
- How would you like to receive diabetes education?
- What is diabetes?
- What does diabetes mean to you?
- What do you think causes diabetes?
- How do you communicate with health care providers?
- What do you want to know about diabetes from your provider?
- What do you find helpful (not so helpful) about diabetes education?
- What language was the diabetes education provided in?
- Has it helped you in any way to manage your life differently to maintain your health?
- Do you think using pa’ndau would help you understand diabetes?
Data Analysis

- Translation of Data
- Nvivo 10 software
- Inductive Approach: Grounded theory (Glaser & Straus, 1967)
- Deductive Approach: Framework of the Study of Access to Medical Care (Aday & Andersen, 1974)
- Immersion of data with mentor, iterative cycles of coding, expanding and reducing themes
- Validation of the study result done through the use of member checks in the community
Open Coding using Participants’ Words

Grouped into Categories of Diabetes Education Experience

Conceptual Grouping

Refinement of Focused Codes

Final Themes

Conceptual Framework

Fig 1. Data Analysis using Grounded Theory (Glaser & Straus, 1967)
The Framework of the Study of Access to Medical Care (FSAMC)

- FSAMC was used to verify if themes that emerged from diabetes education experience of HAs informed the theoretical constructs of the model.
- Constructs used are health policy, characteristics of the health delivery system, characteristics of the population, and consumer satisfaction.
- Operationalization of constructs: Consumer satisfaction (sub constructs: cost and quality), Health care delivery system (sub constructs: resource and organization).

Figure 1. Framework for the study of access (Aday & Andersen, 1974)
Major points in diabetes education experience of HA with diabetes
Results - Health Care Access

Consumer Satisfaction (Cost and Satisfaction with Health Care Providers)

Cost: "For all my visits and prescription, I pay from my own pocket. This is what makes me upset."

Health Care provider: “My doctor is Hmong in the clinic. She is very good. When I explain my symptoms like coughing, she is willing to take me for an x-ray because she is worried my lungs might have problems. She is very good and cares for me.”

“I would like her (provider) to prescribe me stronger medication or change the medication that my uncle told me about. But she only prescribes me medication that helps me stay "comfortable" and does not have any affect to my health. Well, they don't even work for me.”

Health Care Delivery System (Resource and Organization)

“Communication-It is satisfying to go to a Hmong doctor. It is easier to explain and express your need.” “I only go to a Vietnamese doctor, so for me, when I go visit my doctor, I take my child with me to translate for me. She is 11 years old. And sometimes she has to miss school.”

Mistrust: “Yes, if they wanted us to get better, then maybe they would have provided us some education about diabetes. Because they don’t, we always go in for visits to get medications. It’s a way for them to get money from us.”

Translation: “They (staff) know how to explain it, but their translation is a bit “shaky.” “Yes, there is translation at the clinic, the Hmong workers there help translate. Sometimes they are busy checking people in or doing something else but I wait.”
Limited Understanding of Diabetes

“I do wonder why is it that when we lived in Laos, our elders never had this disease, but when we moved here to America, how is it that we are getting it now?”

“They say that those who are overweight have it (diabetes), but how come some who are overweight don’t have it. I’m skinny and I still have it. I have no idea how it came about.”

For me, I think that diabetes is a bad disease and I don’t know why I have it.”
Results

Perceived Barriers to Diabetes Education

- Language Barrier-Of the sixteen participants, two reported that they can read and write Hmong, and one could read and write English. “If a lot of English is spoken at one time, then it’s hard to understand, but when a few easy words are used then I understand a little bit. All participants except one agreed to this statement: “Yes, I just know the easy words to get by.”

- Self-Management Barriers. A very consistent theme in this study that the participants reported is that they did not adhere to self-management behaviors (SMBs). “We elderly have to eat rice. If we just eat vegetables, then we won’t be comfortable working.” “The reason I do not to take prescribed medication from the doctor is because some does help you and some may just attack your system and causes other health concerns like kidney failure and blurred vision.”

- Stress. “But, when you have high blood sugar, then you will have to live with it until the day you die, it is a very sad thought…” “There won’t be a medication that can help you heal from it, so those medicines are what you will have to take for the rest of your life.”
Results

Perceived Facilitators to Diabetes Education

- Focused Culturally Specific Education—“There should be a program focused on diabetes education and offered in Hmong too, so that we can understand it better. “I would like you (researcher) to take pictures of fruits, grains, or any foods, that way I see it, because I cannot read it. This is better than a paper in English that I cannot read.” “Putting it in a movie setting will definitely help me learn.

- Peer Support Group—“We need to meet in a group with the same health condition that comes together to help encourage each other and to give advice about what they have done to help themselves fight diabetes. It's like learning from each other and using each other's ideas.” “Like I said, the group helped me maintain normal blood sugar. They taught me to check my blood sugar and eat good foods.”
Fig 2 Conceptual framework of diabetes education experience of Hmong Americas with diabetes.
Discussion

- Health Care Access Barriers-Cost, quality, communication, mistrust and translation service.

- Language Barrier-An obstacle in providing care (Cobb, 2010, Yang et al., 2009). Positive influence of having health care providers who speak the same language (Fernandez et al., 2011).

- Mistrust of health care providers-corroborated by Devlin and colleagues (2006).

- Translators-No formal translators can result in inaccurate translation (Cobb, 2010).
Discussion


- Lack of Diabetes Education-There is benefits to improved diabetes knowledge, and self management behaviors (Funnell et al., 2012, Hawthorne et al., 2008)

- Patient Centered Diabetes Education i.e. Culturally appropriate education such as the use of videos (Lor & Bowers, 2014) to teach the Hmong about diabetes

- Peer Support Groups-this was endorsed by Devlin et al, 2006.
Study Limitations

- Conducting research with non native English speakers
- Translation of medical terms in the Hmong language
- Conceptual model might not be representative of all Hmong people
Conclusion

• Hmong Americans have difficulty adhering to diabetes self management need more culturally appropriate diabetes education
• Policy/advocacy needed to prioritize health care access and improved health outcomes for HA
• More research is needed on diabetes education in HA
THANK YOU