

Md. Jalal Uddin

Data 698: Mid Term Draft Project

Mid Term Drafts Project: Preventing Chronic Disease of South Asian Community through Engagement with Community and Faith-Based Organizations in New York City.

South Asian Community in New York City experience an enormous burden from certain chronic diseases, such as cardiovascular disease (CVD), hypertension, and diabetes. Specific South Asian subgroups also report poor nutritional practices, further elevating CVD risk. Studies have demonstrated low medication adherence in some of those subgroups, a critical component of diabetes and hypertension management. Each of these risk factors is further exacerbated by barriers to accessing culturally and linguistically appropriate care and tailored health information for the South Asian Community in New York City.

Although Diabetes Management (DM)/Hypertension (HTN) prevention and self-management programs that enable lifestyle changes and enhance linkage to healthcare have been shown to be an effective method of promoting prevention and control of these chronic conditions, there is a lack of culturally tailored programs to promote DM/HTN prevention and management and existing programs are limited in their sustainability and scalability.

We propose to build on the important role that faith-based and community-based organizations can play in affecting the health of immigrants and racial and ethnic minority populations by implementing the Racial and Ethnic Approaches to Community Health for South Asian Community in New York City. The program Community Service Plan (CSP) has partnered with mosques, social service agencies, and primary care settings in New York City substantial concentrations of South Asian communities to improve cardiovascular risk factors (including obesity, hypertension control, and diabetes management) and promote healthy eating. Specifically, focusing on:

- 1) Enhance and promote systematic and sustainable linkages to culturally and linguistically tailored community- and clinic-based resources to improve diabetes and hypertension prevention and management in South Asian communities.
- 2) Implement reinforcing and integrated evidence-based approaches to improve access to environments promoting nutrition in South Asian communities by introducing education and changes to communal food practices in faith settings.
- (3) enhance city-wide campaigns on by disseminating culturally tailored communications and education on CVD risk reduction to South Asian communities.

Evidence shows that promoting systematic and sustainable linkages to culturally and linguistically tailored community and clinically based resources and improve access to environments supporting nutrition in communities' plays vital role to develop diabetes and hypertension prevention and management. For this purpose, I have engaged mosques, social service agencies, and community-based primary care practice setting in Brooklyn, Bronx, Manhattan, and Queens Neighborhoods with substantial concentrations of South Asian Community to improve cardiovascular risk factors including obesity, hypertension control, and diabetes management and promote healthy eating.

I have contacted CSAAH (Center for the study of Asian American Health) under the department of population health at NYU School of Medicine. CSAAH is working with 20 community-based primary care practice setting patients and with four faith-based organization to prevent, manage and control patient's diabetes and hypertension. All 20 community-based primary care practice setting, and four religious organization are located in Brooklyn, Bronx, Manhattan, and Queens. The community-based primary care practice setting has more than 2000 hypertensive, and diabetes patients and more than 3000 congregants' members come during Friday prayer at all four-faith based organization. CSAAH involved with them since May 2015 and has been providing the following services.

- (1) Conduct culturally appropriate health education workshops on hypertension management with South Asian participants.

- (2) implementing nutritional strategies, including education and changes to common food practices
- (3) provide individual counseling and support
- (4) assist participants with goal setting and lifestyle changes.

Specifically, CSAAH is helping to improve blood pressure control and manage diabetes by promoting healthy eating using those approaches.

Among the four faith-based organization, Assafa Islamic Center has a total of 1500 congregants and average weekly attendance at Friday Jumma prayers of 250 congregants. Madina Masjid has a congregation of 2000 and average weekly attendance at Friday Jumma prayers of 400 congregants. Muslim Community Center has a congregation size of 500 and average weekly attendance at Friday Jumma prayer is about 200. Jame Mohammadia has a congregation size of 200 and average attendance at Friday Jumma prayer is about 100.

To facilitate the blood pressure and diabetes management program, CSP's community health workers trained 24 volunteers from these 4 mosques. These 24 volunteers are now providing free monthly blood pressure screenings and basic hypertension reduction and management strategies to the mosque congregants. Close to 400 mosque congregants received free blood pressure screening and consultations from the KOT volunteers. From all four mosques, a total of 207 KOT baseline surveys were collected. Participants were followed up at 6-months at all 4 sites and 12-months follow-ups were conducted at Madina Masjid and Assafa Islamic Center, with ongoing 12-month data collected at MCC and Jame Mohammadia to be collected in February 2019.

Preliminary results from baseline and 12-month KOT data at Assafa and Madina (n=25) show that mean systolic blood pressure (SBP) decreased from 128.8 at baseline to 120.2 at 12 months ($p=0.027$). Mean diastolic blood pressure (DBP) decreased from 79.0 at baseline to 77.3 at 12-months ($p=0.415$). BP control (using cutoff of 140 for SBP and 90 for DBP) was 72% at baseline and 80% at 12-months ($p=0.508$). Health related self-

efficacy (range of 1-4, 4=highest self-efficacy) also increased between baseline and 12-month follow-up; the mean score increased from 3.46 to 3.74 ($p=0.002$).

The program has also implemented nutrition strategies at all 4 mosques in Lower East Side and Sunset Park. During the month of Ramadan, at the sites in Lower East Side and Sunset Park, REACH FAR community health workers conducted 6 nutrition workshops where they discussed easy ways of adopting healthy foods. Through these workshops, about 1,000 congregants were reached. In addition, program staff members held more than 50 fruit distribution events at these sites. CSP sponsored fruits for the congregants at these events and the mosque members were delighted to have these kinds of health promotion activities and services. CSP staff members provided individual counseling on healthy eating and distributed healthy messages. Culturally tailored health materials such as approximately 250 plate planners, and 80 blood pressure booklets were distributed. Mosque leaders warmly hosted the events and provided assistance throughout.

A total of 153 cross-sectional surveys were collected from four mosque sites at baseline; to date, a total of 97 follow-up surveys have been collected from two sites with remaining follow-up surveys will be collected by May, 2019. Survey participants are predominantly men (99%), reflecting the demographics of the mosques' congregations. Preliminary results found improvements in self-reported measures related to health and healthy food availability. At baseline, 28.9% participants responded "very good" or "excellent" to the question "How healthy is your overall diet", and at the 12 month follow-up, 32.3% responded "very good" or "excellent" ($p=0.637$). Additionally, at baseline, 13.5% of the respondents agreed with the question "It is difficult to choose healthy food options served at my mosque," while at follow-up, 8.5% agreed ($p=0.298$). For the question "The meals at my mosque do not serve healthy options," at baseline, 21.1% agreed with this statement, and at follow-up, 8.5% agreed ($p=0.021$). Additionally, at baseline, 83.9% reported that fruit was always or usually available, compared to 89.7% at 12-month follow-up ($p=0.297$).

A positive outcome that highlights sustained policy change around access to healthy foods in FBO settings is that Madina Masjid will now sponsor free fruits for the congregants on a Friday each month. Initially, CSP was sponsoring fruits once a month at

all four mosques. CSP staff members will now encourage the other three mosques to take sustainable steps like Madina Masjid to make the program a greater success.

In addition to Blood pressure management program and implementing nutrition strategy, CSP is also providing the following services to the congregants: health insurance enrollment, smoking/tobacco use cessation, diabetes prevention and control activities, connection to community resources, and group exercise sessions. A total of 6 health insurance information and outreach events held at the mosques and about 250 members received health insurance related information. 12 people were enrolled into NY State of Health Insurance Marketplace by the staff members who are also certified IPA/Navigators. To provide smoking cessation assistance, one of the staff members received training on smoking cessation assistance and provided direct assistance to mosque members who smoke. In addition, staff members led periodic group physical activity sessions at the mosques as well as diabetes management workshops.

The program activities were disseminated through two ethnic media newspapers. Each newspaper has about 10,000 weekly circulations. In addition, through their own social media channel, two of the four mosques disseminated program activities which reached about 10,000 viewers.

A major lesson learned from this program is that being regularly present at the FBO sites helps build partnership. As the CSP members were visiting the mosques regularly, and being from the same faith community, it was easy for them to establish strong partnership with the mosque leadership. It was not only the mosque leadership but mosque members were also very pleased and trusted the staff members.

Working with mosque leadership, we have identified a health champion or committee, administer a baseline survey and organizational assessment and then collaboratively develop a plan to:

- (1) Introduce policies and practices regarding serving healthy foods during communal meals or enhancing existing menus to incorporate healthy meal options (e.g., lower fat dairy products, serving brown rice)

(2) implement a volunteer-led blood pressure screening program.

(3) support program efforts with a communication strategy to inform community members about program activities and to increase awareness of the risk of cardiovascular disease.

All program elements had monitored to track progress, fidelity and satisfaction, as well as behavior change.

Preliminary results show that implementing nutrition strategies at mosques increases access to healthful diets for the congregants. While not all of the measures show a statistically significant change, the change in measures indicates the expected direction of change, and we anticipate that a larger sample will allow for statistical significance. Follow-up surveys will be collected from two additional mosques and final data will be analyzed to evaluate the program outcome for the overall sample.