

Understanding Barriers to and Facilitators of Physical Activity and Stress Management among Bangladeshi Immigrants in New York City Using Qualitative Methods



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DREAM Project

BACKGROUND

From 2000 to 2010, the Bangladeshi population in NYC experienced a 119% increase in size, growing from 28,269 to 61,788 individuals. Although the prevalence of diabetes among Bangladeshis has been well documented in Bangladesh, few studies have documented prevalence rates and management practices among US Bangladeshis. Several community-based samples of Bangladeshis in NYC report prevalence rates in the range of 17-25%, as compared to 10% for non-Hispanic whites. The DREAM (Diabetes Research, Action, and Education for Minorities) Project is an NIHMD-funded study to better understand the diabetic management practices of this particular community using a community-engaged research approach through employing community health workers (CHWs). Preliminary data collected through the intervention revealed low rates of participation in physical activity among study participants, often coupled with high rates of reported stress and anxiety.

The purpose of this study is to better understand the barriers to and facilitators of physical activity and stress management in the Bangladeshi community in order to improve and enhance an existing CHW intervention to address disparities in diabetes prevalence and management.

METHODS

IRB approval for the qualitative sub-study was obtained in August 2012; all participants provided written consent prior to study participation. Participants were purposively recruited from community-based settings using word-of-mouth and snowball sampling methods. Six focus groups were completed with a final sample of n= 67 participants (63% male, 37% female). Mean participant age was 42 years old; Mean years of residence in the US was 12. Each focus group consisted of 10-12 participants. A monetary incentive of \$30 was offered to respondents in exchange for their participation. Gender-specific focus groups were conducted in-language by trained group moderators, using an instrument that had been previously piloted to ensure saliency and cultural meaning. The moderator guide included topics on obesity, physical activity, social stressors, acceptable strategies for health promotion, and motivation to participate in CHW interventions. Focus groups were audio-recorded for later translation and transcription. Transcripts were reviewed and coded by study investigators using a constant comparative approach. Atlas.ti was used to facilitate data coding and retrieval. Coding Analysis Toolkit (CAT) was used to ensure inter-coder reliability among study investigators.

RESULTS

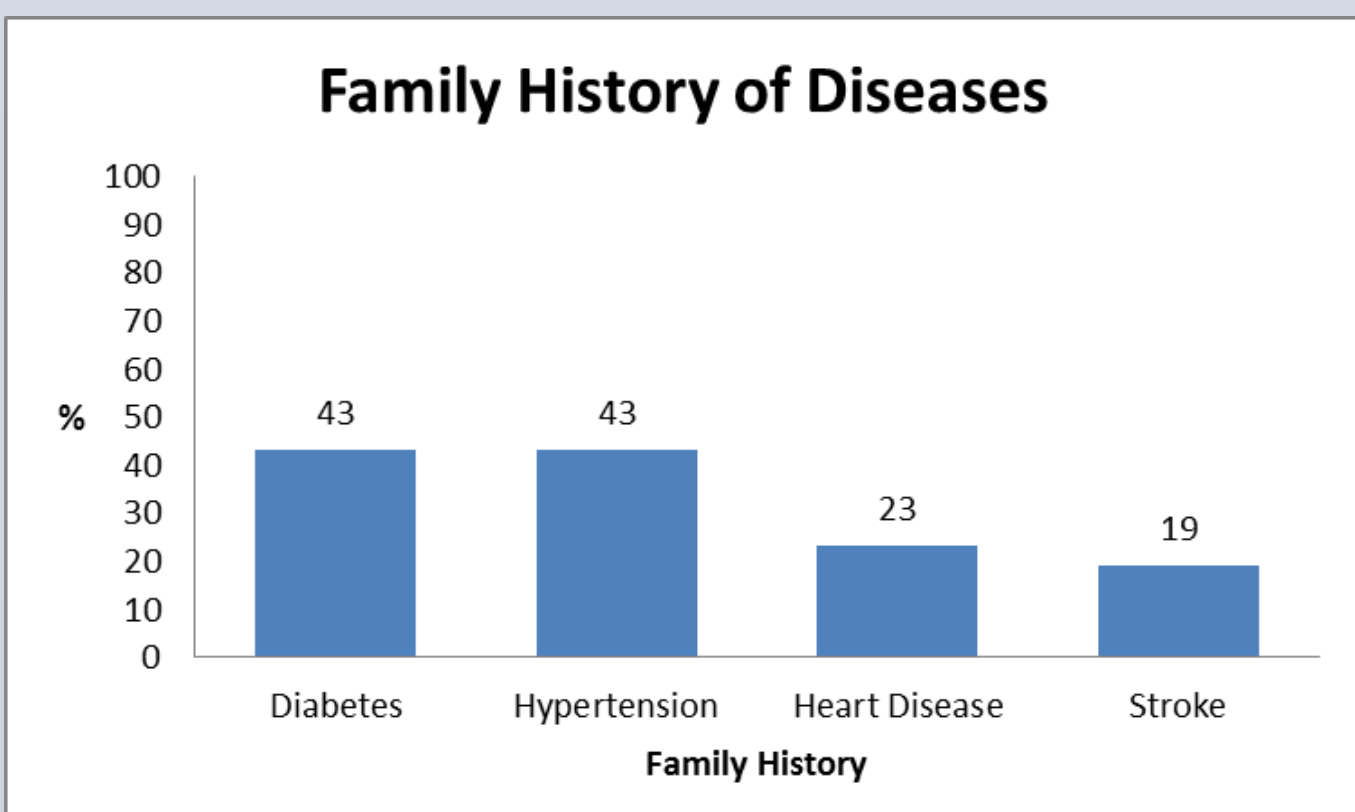


Figure 1. Results – Family History

RESULTS (continued)

CORE CODE FAMILY	FREQUENCY COUNT	FREQUENCY PERCENTAGE
Obesity & Stress Management (OSM)	213	19%
Physical Activity (PA)	383	34%
Strategies for Health Promotion (SHP)	193	17%
Stress Management (SM)	339	30%
Total	1128	

Table 1. Results – Frequency of Core Code Families

Most Frequent Themes:

- 1) Barriers to Physical Activity (PA)
- 2) Facilitators of Physical Activity (PA)
- 3) Common Stressors

40% of females and 50% of males did not meet recommendations for weekly physical activity based on self-report.

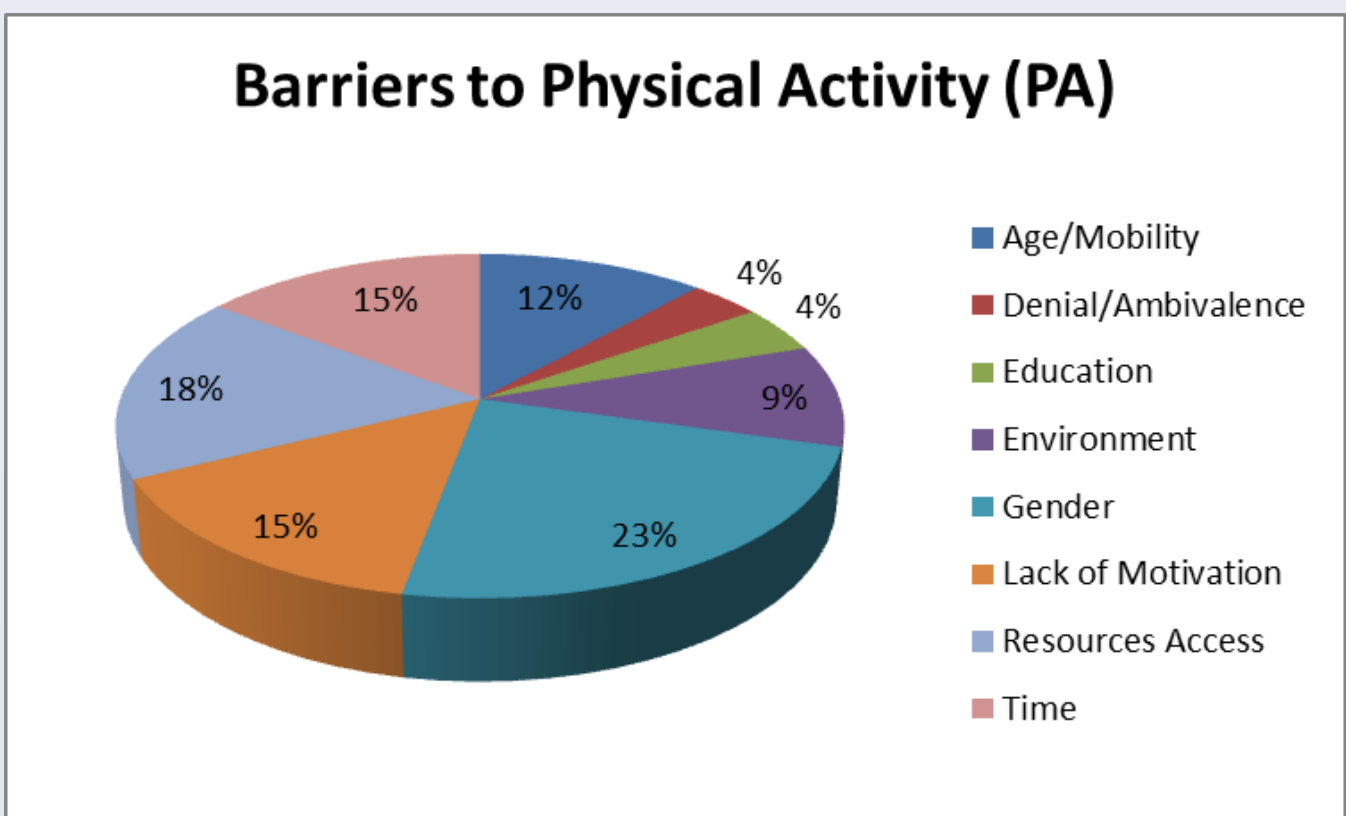


Figure 2. Results – Barriers to PA

Gender differences and **lack of access to resources** had the highest frequency count for barriers to physical activity (23% and 18%, respectively), while denial/ambivalence and education had the lowest frequency count (4% and 4%, respectively).

“so many womens they can not go outside walk like freely like others than our cultures, you know, so our cultures women like most of the time they don’t try to go outside and like free like other womens, that’s the one big problem.”

- Male, on Gender Barriers to Physical Activity

“Actually I think that for a few related reasons [I] cannot go to the gym because sometimes it can be seen that there is no gym for only women, that we can’t find. That’s why we can’t go. But next to my house, especially because of my work, I cannot find the time to go to a gym. Meaning that I will go outside and go to the gym, that thing I cannot do. And plus because of our Muslim country, that we will go outside and go running, these things we cannot do. Because of that, mostly in my case, those things are not done. Exercising that way doesn’t happen.”

- Female, on Lack of Access to Resources for Physical Activity

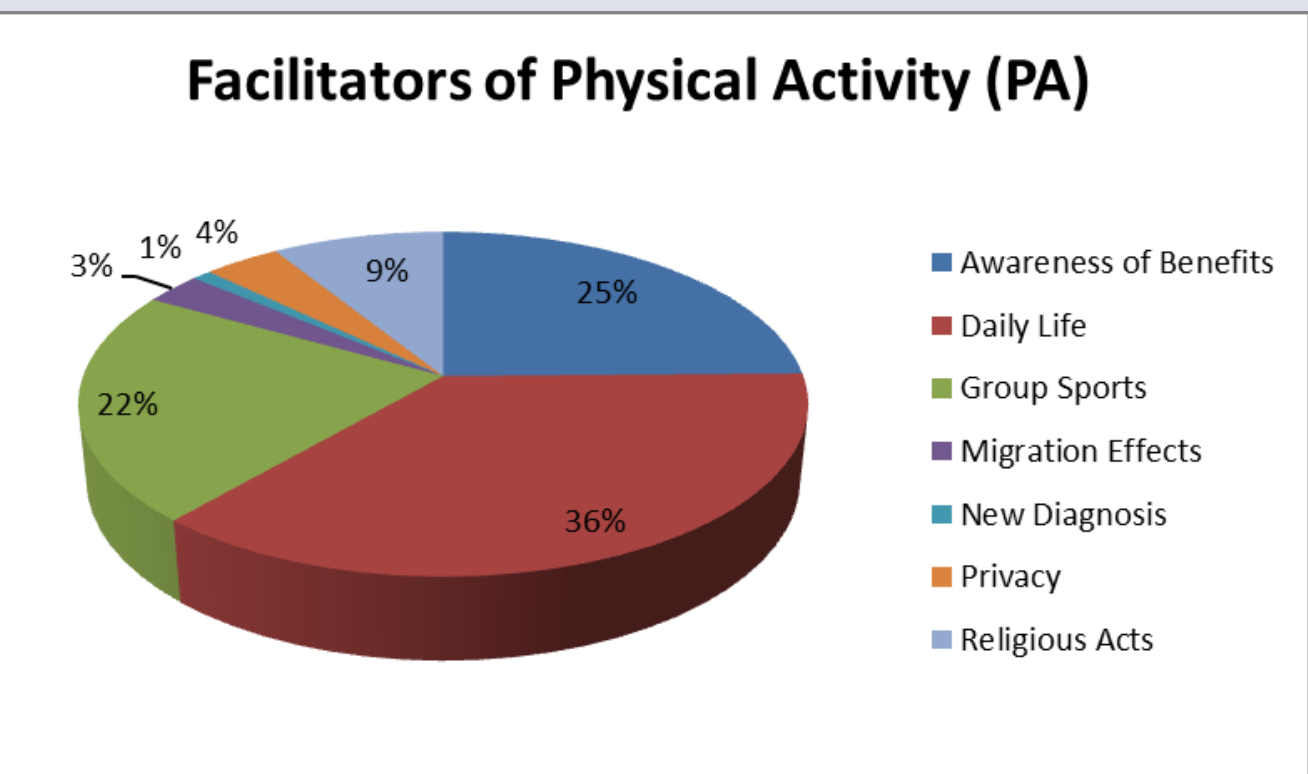


Figure 3. Results – Barriers to PA

Incorporating physical activity into one’s daily life and having **awareness of the benefits of physical activity** had the highest frequency count for facilitators to physical activity (36% and 25%, respectively). In contrast, migration effects and new diagnosis of disease had the lowest frequency count (3% and 1%, respectively).

“Praying standing up is exercise. Sitting and praying is not exercise.”

- Female, on Physical Activity

“If you exercise, mental and physical health and your skin stays well. In every aspect it’s good. Everyone has to walk and everyone has to exercise.”

- Female, on Awareness & Benefits of Physical Activity

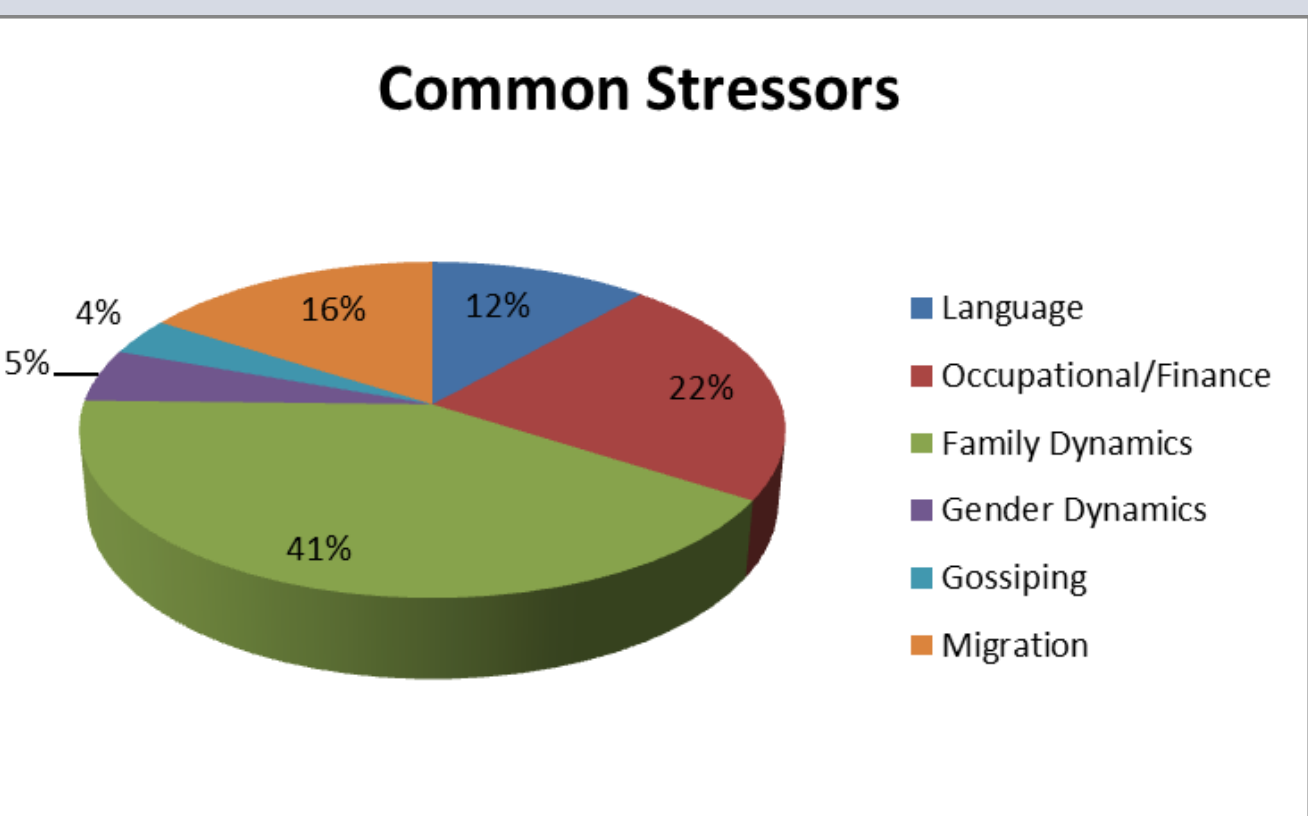


Figure 4. Results – Barriers to PA

Family dynamics and issues with **occupation/finance** had the highest frequency count as common stressors under stress management (41% and 22%, respectively), whereas gender dynamics and gossiping had the lowest frequency count for common stressors (5% and 4%, respectively).

“I think that from mental stress, the problems I suffer from every day, [it] affects my life a lot. Because when I have stress, I cannot do anything normally. My normal life, meaning right now the normal routine, more or less everyone has stress or worry, but when there is a lot, I cannot complete my normal life. This, from a young age, this is a lot of problem. I am, until however long there is no solution, until then I cannot do it. And until I find a solution, I feel like my normal life – if I have a problem, I feel like my normal life becomes a mess however long until I don’t find a solution.”

- Female, on Common Stressors

RESULTS (continued)

Other Emergent Themes: Cultural Conceptions of Healthy Weight and Dietary Practices

“In our society, meaning, if [someone] becomes fat, then [they] become happy. Meaning, “no, her body is very pretty. Very good. Appears pretty.” [They] say these things a lot. But they are not understanding that if you become fat, it is really bad for the body. But the fat thing, our country likes it a lot. Our country, society.”

- Female, on Cultural Conceptions of Healthy Weight

“If we don’t eat rice for one meal, then we feel like we didn’t eat anything. Even if we eat other things, if we don’t eat rice then we feel like we didn’t eat anything. After the whole day, and then at night, we eat rice.”

- Female, on Obesity

DISCUSSION

Areas of concern for the Bangladeshi community include cultural stigma associated with mental health issues, gender and religious norms related to participating in physical activity, as well as cultural conceptions of health and its relationship to weight. Substantive differences exist in perceptions regarding barriers to and facilitators of physical activity by gender, and should inform future strategies for health promotion. Additional suggestions for strategies include incorporating group activities such as recreational sports and health education sessions. Notably, religious practices including prayer were perceived as an essential form of physical activity and means of stress management in all focus groups. There is high need for community based organizations and other health promotion resources to provide culturally-tailored services that account for language barriers, gender norms, and social service needs. Limitations of this study include convenience-sampling methods and potential contamination bias, as some participants were not heterogeneous strangers. Efforts to increase internal validity were made through frequent discourse and internal-code agreement checks between study investigators.

CONCLUSIONS

Qualitative results suggest a need for culturally relevant interventions that address participation in physical activity using approaches that are sensitive to important faith- and gender-based norms. Additionally, the prevalence of common stressors such as “family dynamics” affecting participation in physical activity illuminate the importance of enhancing education around stress management in the existing CHW intervention.

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