KEY TAKEAWAY: South Asians are at high risk for premature death and disability from poor self-management of diabetes. Increased supports need to be designed and implemented with rigorous research methods and care.

Impacts of Illness Perception, Distress, and Depression on Diabetes Self-Care and Management in South Asians (SA) in New Jersey

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Background

South Asians (SAs) are one of the largest Asian American subgroups, AND suffer high diabetes burden, and demonstrate poor diabetes control. Poor understanding of diabetes including cultural health beliefs ≠ successful self-management practices/outcomes.

Objective

Using Leventhal's Self-Regulation Model (SRM) aim to understand the scope of the cognitive and emotional barriers and facilitators of self-care for this subpopulation and fill important knowledge gaps.

Aims
[1] document the levels of diabetes distress (DD) and depression in SAs with diabetes [2] describe illness perception (IP) and knowledge of self-management of diabetes of SAs [3] describe the facilitators and barriers in which SAs attempt self-care of diabetes

Methods / Pilot Design

[1] **Qualtrics Survey (N=100)**

[2] **Online In-depth Interview (N=10)**

[3] **Online Focus Groups (N=6-8)**

Inclusion Criteria: (1) ages 35-80 (2) identify as SA (3) can speak and read English (4) have a documented diagnosis of Type II diabetes for at least 1 year

Exclusion Criteria: (1) unable to access online survey (2) Type I diabetes diagnosis or Type II diabetes diagnosis for less than one year (3) significant cognitive impairment, (4) pregnancy (5) unable to provide informed consent due to language barriers

Design

Recruitment Strategy
Participants will be recruited through:
1. Emailing study flyers via local community-based SA non-profits and cultural groups in NJ soliciting self-referral
2. Health fairs in NJ/NY
3. Provider direct referral

If participants agree to participate, they will be sent an IRB-approved consent form for completion and signature via email.

Survey (N=100)

Demographics: age, sex at birth, education, language, years living in US, family composition (e.g., living alone)

Diabetes Distress Scale -17
  17 items, Likert Scale
  [1 ("no problem") to 6 ("a very significant problem")]
  Overall Distress Score & 4 Subscales: Emotional Burden, Regimen Distress, Interpersonal Distress, and Physician Distress

PHQ – 9
  9 items
  Assesses DSM-5 criteria for Major Depressive Disorder & severity

Summary of Diabetes Self-Care Activities (SDSCA)
11 items, general diet, specific diet, physical activity, medication-taking, and blood-glucose monitoring

Illness Perception Questionnaire –Brief (IPQ-B)
8 items, Likert Scale
[0 ("No effect at all") to 10 ("Severely effects my life"]
Provides dimensions of [1] identity [2] cause [3] timeline
[4] consequences [5]control or cure

In-Depth Interview (N=10)
Focus Groups (N=6-8)

Planned Analyses

- Descriptive statistics on N=100
- Examine % of sample that had elevated PHQ-9 & DDS
- Elevated depression (PHQ≥5) or diabetes distress (DDS-17 ≥3)
  - Examine relationships between IPQ-B and SDSCA using GLM & LR models
- Focus groups and 1:1 interview
  - Examine relationships between PHQ=9, DDS SDSCA, and IPQ-B

INTERVIEW CODEBOOK	FOCUS GROUP CODEBOOK
Illness label	Diet and exercise
Cause of the illness	Glucose monitoring
Troubling symptoms	Taking medications incl. side effects
Threat posed by illness	Reading labels/nutrition
Expectation of controllability	Provider visits
Timeline of illness	Goals for self-care
Emotional reaction to illness	Barriers to self-care
	Facilitators of self-care

Timeline

2025-26 TIMELINE	Quarter 2			Quarter 3			Quarter 4			Quarter 1		
	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Aim 1 Recruit, Enroll, Data Collection		▓	▓									
Staff Training & Monitoring for Focus Groups			▓	▓								
Aim 1 Analyses					▓							
Aim 2a Recruit & Enroll					▓	▓						
Conduct Focus Groups						▓	▓					
Aims 2a Analyses								▓				
Aim 2b Recruit & Enroll							▓	▓				
Conduct Individual Interviews								▓	▓			
Aims 2b Analyses										▓		
Submit Journal Articles							▓	▓	▓			
Dissemination to Community										▓	▓	▓

These pilot data can serve as an important basis for future research to develop interventions to increase access to culturally-tailored diabetes support to this growing but underserved Asian subgroup.