MHealth Acceptance and Usage among South Asian Adults in US

Padmavathy Ramaswamy, PhD (c), MSN, RN, FNP-C, Diane Santa Maria, DrPH, MSN, RN, APHN-BC, Myneni, Sahiti, PhD, MSE, Constance Johnson, PhD, MS, RN, FAAN

Background and Significance
- South Asians (SAs) are disproportionately more affected by CVD and Diabetes compared to other groups (Talegawkar et al., 2017).
- Modifiable risk factors – physical inactivity and unhealthy diet contribute to the increased risk of CVD in South Asians.
- Mobile-based technology including smartphone applications and wearable and connected devices have shown promise in health behavior change (Fedele et al., 2017, Wang et al., 2017).
- Interventions using mHealth have demonstrated feasibility and efficacy among other ethnic minorities such as Filipinos (Bender et al., 2018).
- There is a gap in knowledge regarding the usage and acceptance of mHealth among South Asians

Objectives
- To examine the overall usage of mHealth and wearable technology among SA adults living in the US
- To examine factors associated with acceptance, usage, non-usage and discontinuation of mHealth in this population

Theoretical Framework

Methods
- **Approach**
  - Cross-sectional survey study
  - Survey instrument developed by Pare, Leaver, Bourget (2018)
- **Sample and setting**
  - Convenience and snowball sampling
  - South Asian adults above the age of 18 years living in the United States
  - Recruitment via social media and in-person
  - Sample size: 100
- **Data Collection**
  - Survey using Qualtrics online survey software
  - IRB approval through UTHealth IRB
  - Incentive: Drawing for one $100 gift card

Measurements
- **Demographics**
- **Types of ownership and usage**
- **Motivations to use**
- **Technology acceptance and intention to continue using**
  - Perceived ease of use (PEOU) – 4 items
  - Perceived usefulness (PU) – 7 items
  - User satisfaction – 3 items
  - Intention to continue using – 3 items

Data Analysis
- **Statistical analysis using IBM SPSS Version 25**
- **Descriptive statistics**
- **Pearson correlation coefficients to examine correlations between PEOU, PU, user satisfaction and intention to continue using mHealth.**
- **Chi-square to examine group differences**
- **Psychometric analyses – reliability estimate of the instrument**

References

Nursing and Research Implications
- This research will be significant in understanding usage of acceptance of mHealth technology in South Asians.
- Contribution of research in designing interventions using mHealth technology for primary prevention of CVD and Diabetes.
- Future qualitative studies will be needed to explore barriers of use of mHealth.