# Understanding the Barriers and Facilitators to Colorectal Screening among South Asian Immigrants in NYC

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#### **Presentation Overview**

- Background
  - CRC
  - Barriers to CRC Screening among South Asians
- Methods
  - Quantitative
  - Qualitative
- Results
- Conclusions

#### Leading Sites of New Cancer Cases and Deaths – 2015 Estimates

#### Estimated New Cases\*

#### Estimated Deaths

Male	Female	Male	Female	
Prostate	Breast	Lung & bronchus	Lung & bronchus	
220,800 (26%)	231,840 (29%)	86,380 (28%)	71,660 (26%)	
Lung & bronchus	Lung & bronchus	Prostate	Breast	
115,510 (14%)	105,590 (13%)	77,540 (9%)	40,290 (15%)	
Colon & rectum	Colon & rectum	Colon & rectum	Colon & rectum	
69,090 (8%)	63,610 (8%)	26,100 (8%)	23,600 (9%)	
Urinary bladder	Uterine corpus	Pancreas	Pancreas	
56,320 (7%)	54,870 (7%)	20,710 (7%)	19,850 (7%)	
Melanoma of the skin	Thyrold	Liver & Intrahepatic bile duct	Ovary	
42,670 (5%)	47,230 (6%)	17,030 (5%)	14,180 (5%)	
Non-Hodgkin lymphoma	Non-Hodgkin lymphoma	Leukemia	Leukemia	
39,850 (5%)	32,000 (4%)	14,210 (5%)	10,240 (4%)	
Kidney & renal pelvis	Melanoma of the skin	Esophagus	Uterine corpus	
38,270 (5%)	31,200 (4%)	12,600 (4%)	10,170 (4%)	
Oral cavity & pharynx	Pancreas	Urinary bladder	Non-Hodgkin lymphoma	
32,670 (4%)	24,120 (3%)	11,510 (4%)	8,310 (3%)	
Leukemia	Leukemia	Non-Hodgkin lymphoma	Liver & Intrahepatic bile duct	
30,900 (4%)	23,370 (3%)	11,480 (4%)	7,520 (3%)	
.lver & Intrahepatic bile duct	Kidney & renal pelvis	Kidney & renal pelvis	Brain & other nervous system	
25,510 (3%)	23,290 (3%)	9,070 (3%)	6,380 (2%)	
All sites	All sites	All sites	All sites	
848,200 (100%)	810,170 (100%)	312,150 (100%)	277,280 (100%)	

<sup>\*</sup>Excludes basal cell and squamous cell skin cancers and in situ carcinoma except urinary bladder.

@2015, American Cancer Society, Inc., Surveillance Research

#### **CRC** in South Asians

- Cancer is the leading cause of death among Asian Americans
- Among South Asians, studies suggest:
  - CRC incidence rates increasing
  - South Asians are younger and have more advanced disease at presentation compared to Whites
  - Low rates of CRC screening compliance
    - Ever screened 33% 17% FOBT, 9% sigmoidoscopy, 13% colonoscopy
    - Up-to-date screening 25% 8% FOBT, 8% sigmoidoscopy, 13% colonoscopy

# **Barriers to CRC Screening**

- Cultural
  - Years in the US
  - Language proficiency
- Communication
  - Trust in healthcare system
  - Level of comfort in communication with provider
- Demographic and health access factors
  - Gender
  - Age
  - Education and income
  - Insurance status
  - Lack of a regular PCP
- Lack of research on CRC screening practices among South Asians in the US and the factors associated with CRC screening uptake

# **Study Goal**

 Understand the barriers and facilitators of CRC screening among South Asian immigrants in NYC using a mixed methods, community-engaged approach



# Methods - Quantitative Data

- NYC Community Health Survey
  - Data aggregated from 2009-2013
- Sample
  - Asian Indian, Bangladeshi, Pakistani and Nepali immigrants
- Outcome
  - Colonoscopy screening (ever and up-to-date)
- Descriptive and regression analyses to explore barriers and facilitators to colonoscopy screening

# **Methods – Qualitative Data**

- Recruitment at community based-venues
  - CBOs, social services agencies, FBOs
- In-depth interviews with South Asian immigrants
  - Asian Indian, Pakistani, Bangladeshi, and Nepali (n=51)





# **Qualitative Interviews**

 Face-to-face, semi-structured, in-depth interviews in their preferred language by a bilingual, bicultural CHW or intern

Qualitative	Quantitative
Beliefs regarding cancer	Demographics
Colon cancer screening and health behaviors	Health status – screenings, history
Access to care	Access to care
Social support	Self-efficacy
Health information sources	Health information sources
Health communication	Health communication
	Acculturation

#### PRELIMINARY RESULTS

## **Results – NYC CHS**

	Total Weighted n=1,107,000	Asian Indian Weighted n=18,000	Bangladeshi Weighted n=8,507	Pakistani Weighted n=6,372	Nepali Weighted n=844	p- value*
Gender						<.001
Male	46%	59%	76%	84%	100%	
Female	54%	41%	24%	16%	0%	
Household Income/						<.001
Poverty						
<200% FPL	28%	50%	58%	73%	36%	
≥ 200%FPL	72%	50%	42%	27%	64%	
Uninsured	5%	12%	14%	35%	92%	<.05
Education						<.001
< High school	6%	7%	0%	0%	0%	
High school grad	24%	15%	32%	29%	36%	
Some college	22%	28%	13%	18%	0%	
College graduate	48%	50%	55%	53%	64%	
Colonoscopy						.24
<10 years	37%	40%	44%	20%	36%	
≥ 10 years	63%	60%	56%	80%	64%	

# Results - Qualitative Sample

	Asian Indian (n=14)	Pakistani (n=16)	Bangladeshi (n=17)	Nepali (n=4)
Gender				
Male	50%	44%	47%	50%
Female	50%	56%	53%	50%
Age				
50-60 years	29%	31%	47%	25%
61-70 years	36%	38%	41%	50%
71 and above	36%	31%	12%	25%
Health insurance				
Private	0%	6%	0%	0%
Medicare/Medicaid	62%	62%	23%	100%
Other	23%	12%	76%	0%
No health insurance	15%	20%	0%	0%

# Results - Qualitative Sample

Cancer screening	Yes	No	Don't Know	Missing
FOBT	35%	55%	10%	
Sigmoidoscopy	16%	67%	12%	6%
Colonoscopy	39%	59%	2%	
Barium Enema	27%	65%	8%	
Digital Rectal Exam	18%	72%	10%	

### **Results - Qualitative Data Codebook**

Primary Code	Secondary Code	<b>Tertiary Code</b>	Code in Atlas.ti	Definition
Health Information			Health information	How participants receive health information
	Barriers		Health information: Barriers	This refers to which obstacles participants report when they seek health information.
	Sources		Health information: Sources	Sources of health information that participants rely on. Sources could be television, health providers, religious leaders etc.
		Doctor	Health information: Sources: Doctor	Participant specifically states they rely on their doctor as a source of health information.
		Family	Health information: Sources: Family	Participant specifically states they rely on their family as a source of health information. Family includes spouses, children, parents, aunts, uncles, cousins but not friends.
		Media	Health information: Sources: Media	Participant specifically states they rely on their doctor as a source of health information. Media includes Internet, TV, radio, social media sources and newspaper.
	Trust in sources		Health information: Trust in sources	This refers to which sources of information participants report to be trustworthy.

#### **Qualitative Data: Preliminary Themes**

Interviewer: If the doctor asked/suggested this test (Colonoscopy and

Sigmoidoscopy) for you, would you then do it?

**CRC01:** I haven't heard of it. On the advice of doctor [I'll do it].

**Interviewer:** Some people fear because of the site of test?

**CRC11:** Yeah some people fear and feel shy because of the site of test.

**Interviewer**: I see. O maybe they don't have access to healthcare system.

**CRC11:** No no, its not that, its because they take off the pants and underwear so

people get shy. First they check by finger, then insert tube, people get bothered

that what kind of problem is that, then they don't go for it.

**CRC39:** If it's God's will that someone is to die then has to die. Right? That time is set. Our, Muslims its faith that time is set.

Interviewer: hmm

**CRC39:** Nor the time can be changed here or there, the time it is for you to die that fully that time will come. If not then no matter what kind of sickness you have time

will keep going

### Conclusion

- A confluence of poor access to healthcare, language barriers, and cultural and social beliefs play a role in CRC screening disparities among South Asian immigrants.
- Low rates of CRC screening among South Asian immigrants
- South Asian immigrants face a number of barriers to colonoscopy screening
  - Access to care factors such as health coverage type and having a regular PCP
  - Sociodemographic factors such as income
- Qualitative results also suggest lack of knowledge, stigma and fatalism may also be barriers to screening