

A row of semi-trucks is parked in a lot under a cloudy sky. The trucks are in various colors: a yellow one in the background, a red one in the middle, a blue one in the foreground, and a white one on the far right. The text is overlaid on the left side of the image.

SOUTH ASIAN TRUCK DRIVER HEART (SATH) HEALTH

- Pinaz Gulacha

Background

- Southern Ontario- 48.2% of long-haul truck drivers are of South Asian origin
- 1996 to 2001, the number of people who identified as South Asian increased by 33% whereas the overall population in Canada increased by only 4%
- South Asians, who originate from India, Pakistan, Bangladesh, or Sri Lanka, are at higher cardiovascular risk than White Caucasians
- Long-haul truck drivers engage in certain occupational behaviors
 - sitting for long periods of time
 - social isolation
 - disturbed sleep patterns
 - poor nutrition choices
 - fatigue, smoking
 - substance use/abuse
 - less physical activity

Contd.

- South Asians are high risk for developing Type 2 diabetes (T2DM) and coronary heart disease (CHD), often up to 5 to 10 years earlier than other ethnicities
- The World Health Organization (WHO) lists cardiovascular disease (CVD) as one of the main causes of mortality and morbidity in the world
- modifiable risk factors for CVD include
 - overweight/obesity
 - blood lipid profile
 - nutrition choices
 - blood pressure
 - sedentary lifestyle

Background Research

- Little is known about the distribution of cardiovascular risk factors in truck drivers in Canada
- Initial step was to conduct a systematic review identifying the CVD risk factors in long-haul truck drivers
- Systematic Review:
 - 19 studies included
 - 2 case-studies
 - 4 case-controls
 - 8 cross-sectional
 - 2 literature review
 - 3 cohort studies

Systematic Review in Canada

- This review included 33 peer reviewed articles and 9 reports relevant to the health and wellness of commercial motor vehicle drivers
- Multiple risk factors were identified leading to various outcomes

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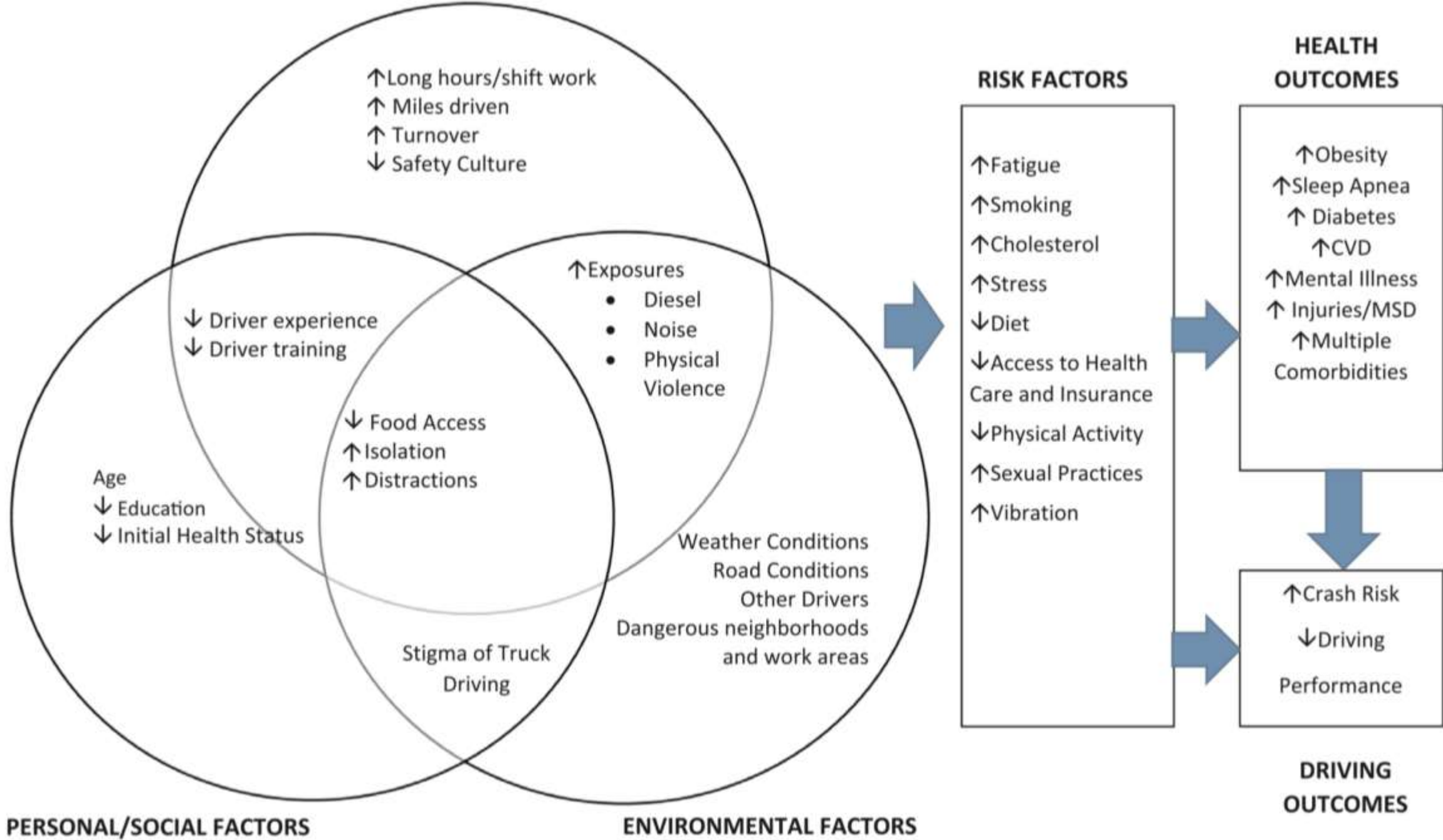


Health and wellness of long-haul truck and bus drivers: A systematic literature review and directions for future research



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Background Research Contd.

- None of these studies were conducted in South Asian truck drivers
- None of these studies explored health perceptions and behaviors of truck drivers
- Do not have official demographic distribution of ethnicity – South Asians primarily?

So now what?...

A qualitative study will help us understand the needs and health beliefs of this population, to inform future screening, prevention, and health promotion efforts

Overarching Research Question

What are the knowledge, attitudes and practices of the South Asian truck drivers in Ontario, Canada towards their cardiovascular health?

Our Proposal

- We propose a convergent mixed-methods study, to deepen our understanding of the perceptions, attitudes and practices of South Asian truck drivers', based in Southern Ontario, Canada with regards to their CVD health.
- The objectives of this study are:
 - To use qualitative research method in order to explore the needs and health beliefs of the South Asian truck drivers in southern Ontario
 - To use a quantitative analysis of the Inter-Heart Risk Score.

Study Design

- Mixed-Methods Study
 - Quantitative
 - Demographic information sheet
 - Inter-heart risk score non lab version
 - Qualitative
 - Semi-structured interviews



DEMOGRAPHIC SURVEY

Participant ID

Today's
Date: _____

1. What is your age?

2. Please print your address:

3. Phone number:

4. Email

5. Work status

6. Country of origin

7. Years lived in Canada

Risk factor	Question	Points for the answer	Points for each section	
Age	Are you a man 55 years or older OR woman 65 years or older?	2	Points:	
	OR Are you a man younger than 55 years or woman younger than 65 years	0		
Smoking. Pick the description which matches you best:	I never smoked	0	Points:	
	OR I am a former smoker (last smoked more than 12 months ago)	2		
	OR I am a current smoker or I smoked regularly in the last 12 months, and I smoke...	1-5 cigarettes per day		2
		6-10 cigarettes per day		4
		11-15 cigarettes per day		6
		16-20 cigarettes per day		7
More than 20 cigarettes per day	11			
Second hand smoke	Over the past 12 months, what has been your typical exposure to <u>other people's</u> tobacco smoke?	Less than 1 hour or exposure per week or no exposure	0	Points:
		OR One or more hours of secondhand smoke exposure per week	2	
Diabetes	Do you have diabetes mellitus?	Yes	6	Points:
		No or unsure	0	
High Blood Pressure	Do you have high blood pressure	Yes	5	Points:
		No or unsure	0	
Family history	Have either or both of your biological parents had a heart attack?*	Yes	4	Points:
		No or unsure	0	
Waist to hip ratio	Pick one only:	Quartile 1: Less than 0.873	0	Points:
		Quartile 2 &3: 0.873 - 0.963	2	
		Quartile 4: greater than or =0.964	4	
Psychosocial factors	How often have you felt work or home life stress in the last year? Pick one only	Never or some periods	0	Points:
		OR Several periods of stress or permanent stress	3	
	During the past 12 months, was there ever a time when you felt sad, blue, or depressed for two	Yes	3	Points:



IHRS-NON LAB VERSION



SEMI- STRUCTURED INTERVIEW

04 May 2019

SATH Semi Structured Interview Guideline Version 2.0

Assessing the current state of knowledge, attitude and practices around cardiovascular health of Canadian South Asian truck drivers in Southern Ontario

Semi-Structured Interview

What comes to mind when you hear heart health?

How has your heart health affected your daily life?

Do you think your work affects your heart health? If yes, how? If no, why not?

Are you concerned about your or your fellow truck drivers heart health? Yes/No, why?

How serious is heart health problem for you and your fellow truck drivers?

Tell me about some factors that you think would increase your chances of getting heart disease?
If Yes, which ones.

Has your family physician or any health care professional suggested you change anything in your current lifestyle to improve heart health? If Yes, what change was suggested?

Are you doing anything to address your concern? If Yes, what are you doing to address your concerns? If you cannot address them, what are the reasons?

Theory

- Phenomenological Approach – lived experience
 - Naturalistic observation is a primary qualitative research method in which a participant is studied in its natural environment.
 - Qualitative research incorporates study and interpretation of a phenomenon of interest in its naturalistic environment.
 - Qualitative description design requires getting information from those who experience the phenomenon of interest directly.
 - This study design focusses on understanding a particular phenomenon by studying the meanings ascertained from the participant's perspective in a natural setting.

Methodology

- Interpretive Description
 - In what ways do truck drivers explain perspectives of cardiovascular risk factors?

Sampling

- *Inclusion Criteria*

- Employed long-haul or short-haul truck drivers
- South Asian ethnicity (defined as originating from India, Pakistan, Bangladesh, or Sri Lanka)
- Must hold an AZ drivers license
- Must be in the same profession for more than a year
- Participants must agree to attend the initial interview
- Participants must be fluent in either one of English, Hindi, Urdu or Punjabi
- Male truck drivers of ages 22 and above

- *Exclusion Criteria*

- Unable or unwilling to provide written informed consent
- Unwilling to complete the 3-part interview
- Female truck drivers
- Previous heart condition

Sampling



**SELECTING
"SITE"**



PARTICIPANTS



**KEY
INFORMANTS**



**OPPORTUNISTIC
SAMPLING**



**SNOWBALL
SAMPLING**

-Dr. Susan Jack

Demographic Characteristics

Characteristic	N	%
Country of Ancestral Origin (n=12)		
India	11	91.7%
Pakistan	1	8.3%
Current Education Level (n=12)		
No Formal Studying	1	8.3%
Completed Junior High School (Grade 9 or Equivalent)	1	8.3%
Completed High School (Secondary School)	6	50%
Some University	1	8.3%
Diploma or Certificate from trade, technical, vocational school, or business college	3	25%
Total Household Income (n=12)		
20,000-60,000	6	50%
60,000-90,000	6	50%

Demographic Characteristics

Total Individual income from trucking (n=11)		
20,000-60,000	5	45%
60,000-90,000	6	55%
% of family income represented by individual income (n=11)		
Very little	2	19%
About Half	4	36%
Most of it	5	45%
Marital status (n=12)		
Currently Married	10	83.3%
Living with Partner/Common Law	2	16.7%

Data Transcription and Translation

- Punjabi interviews were transcribed in Punjabi
- Translated in English
- Translated documents will be used for coding and analysis
 - Issues in coding
 - Meanings of slangs or certain words in Punjabi differ from what it means when literally translated in English
 - Examples
 - Ok and "hanji"
 - Brother and "paaji"
 - Right and "thik"

Some Codes

- Food, nutrition, eat
- Physical activities

“If we will not so proper workout or proper food, its going to affect my heart”

- Health status
- Knowledge

“Nothing in my mind”

*“In my knowledge I think if a person will eat more junk food
then heart problem will occur very soon”*

“If any problem will come will go to doctor”

- Pain

“Heart health like pain in heart? And food is the main concept”

- Working conditions

- Physical activity

“They eat and sit and never see the problems”

- Professional healthcare

“Whatever doctor suggest you to do just do that”

Emerging themes

- Lack of knowledge
- Effect on work
- Physical activity
- Responsibility
- Inability to relate
- Skewness in perception



VISIBLE MINORITIES

44,490 of Canada's truck drivers are visible minorities – the majority from South Asia

	Total	Visible Minority	South Asia
1996	132,050	4,635	2,355
2001	158,950	11,580	6,975
2006	190,755	24,825	16,460
2011	167,035	27,585	18,790
2016	181,330	44,490	32,260

Source: Newsreel Media and National Household Survey



Suggestions?