



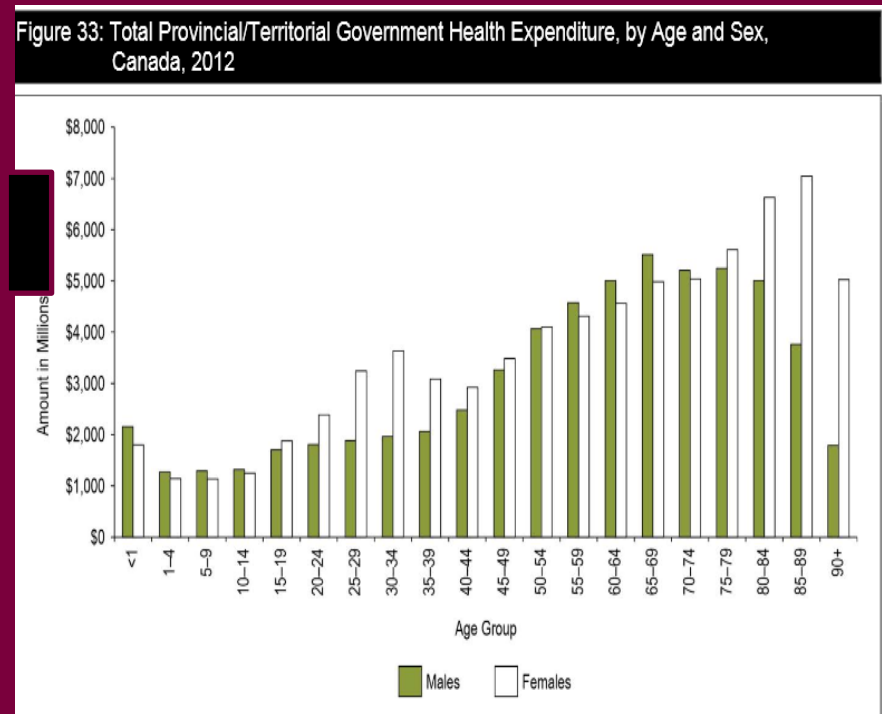
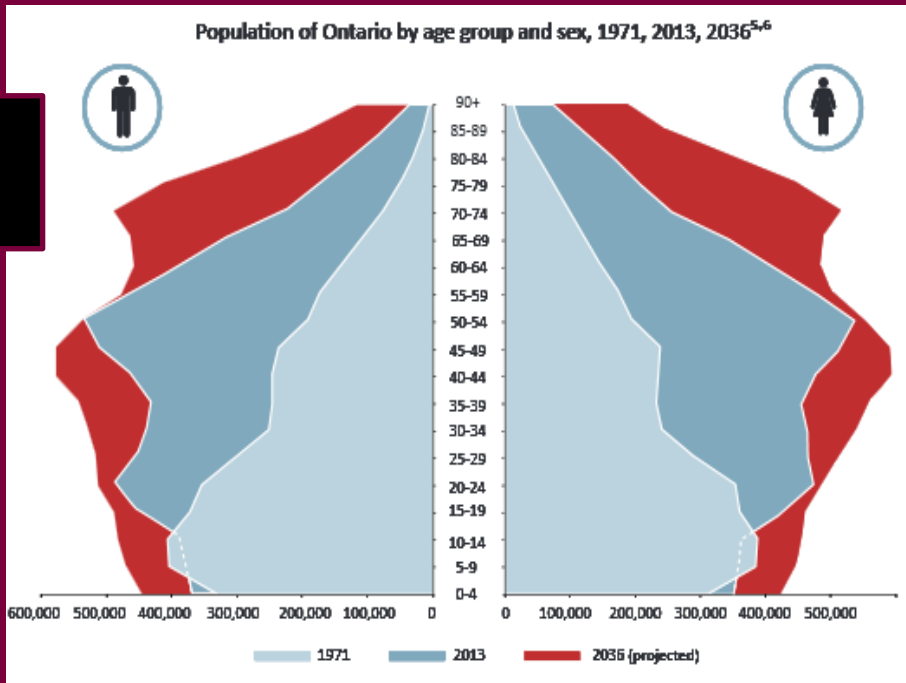
Health Related Quality of Life of Older Adults residing in Ontario Subsidised Housing

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Introduction

- Background
 - High prevalence of chronic disease among older adults
 - High prevalence of lifestyle-related illness among low SES
 - Older adults living in subsidized senior's buildings have lower SES
 - Does this population have a low health-related quality of life?

Community Data: Cost of Healthcare



Health expenditures raise as people age & the older population with in Canada is expected to grow

Graph 1: Public Health Ontario. (2016) Ontario's Population: Determinants of Health. Retrieved from <https://www.publichealthontario.ca/en/DataAndAnalytics/OntarioHealthProfile/Pages/default.aspx>

Graph 2: Canadian Institute for Health Information. (2014) National Health Expenditure Trends, 1975 to 2014. Retrieved from: https://www.cihi.ca/en/nhex_2014_report_en.pdf

Introduction

- Objective:
 - Understand health-related quality of life (HRQoL) in this population as measured by
 - Self Reported Health status
 - EQ5D: Pain/discomfort, anxiety/depression, ability to perform daily tasks, self-care, mobility
 - and the factors affecting both these measures:
 - Demographic
 - Health conditions
 - Chronic disease knowledge
 - Lifestyle risk factors and Chronic Diseases
 - Confidence to make changes
 - Health literacy

Methods

- Health Awareness and Behaviour Tool (HABiT)
 - CCHS
 - EQ5D
 - CANRISK
 - CHEP (Cardiovascular risks)
 - Other Diabetes Risk questions (CHAD)
 - NVS-UK (Health literacy)
- Residents 55 years and older
- 12 subsidized apartment buildings in 3 communities
- Trained research staff/paramedics

Methods

- Analysis:
 - Descriptive analysis
 - Regression
 - Outcomes: HRQoL and SRHS
 - Predictors:
 - Demographic
 - Health conditions
 - Lifestyle risk factors
 - Chronic disease knowledge
 - Confidence to make changes
 - Health literacy

Results

- 437 residents, mean age = 72.2
- Demographics:
 - 73% female
 - 71% high school or less
 - 91% lived alone (widowed, single, divorced)
- Self-reported Health:
 - 42% poor-fair health status
 - 27% diabetes
 - 55% hypertension
 - 39% high cholesterol
 - 33% overweight
 - 33% obese

Results cont.

- Knowledge of chronic disease risk factors
 - Very good (over 80%), less for diabetes
- Health literacy
 - Nutrition label comprehension inadequate in 80%
- HRQoL:
 - 70% pain/discomfort
 - 61% had mobility problems
 - 44% anxiety/depression
 - 42% problems doing usual activities
 - 18% problems with self-care

Results cont.

- What factors are related to HRQoL? (n=437)

	SRHS	HRQoL
Age	.276	-1.195
Gender	-1.374	-1.092
Education	.846	.849
Smoking	3.058**	----
Alcohol Intake	-2.483*	----
High Cholesterol	-2.036*	----
Heart Problems	-5.560***	-3.167**
Stroke	----	-2.034*
Handle Day-to-day	6.315***	3.699***
Confidence to Change	----	2.222*
Sitting- Watching TV	----	1.927

* p < .05 ** p < .01 *** p < .001

Related to SRHS and QoL

- What factors are related to SRHS/HRQoL? (n=437)

	SRHS	HRQoL
Age	.276	-1.195
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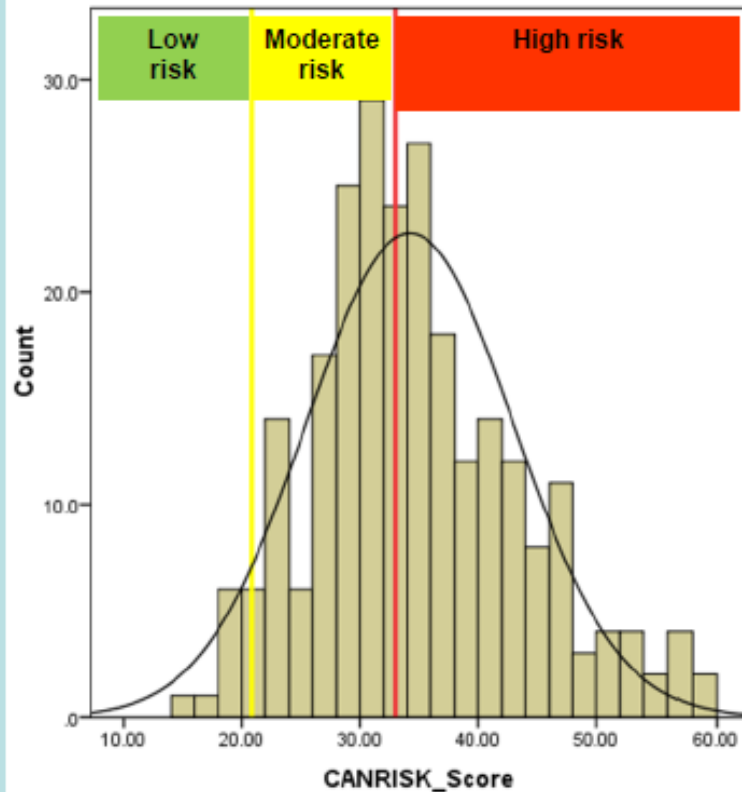
✕ MODIFIABLE ✕

* p < .05 ** p < .01 *** p < .001

	Pain/ Discomfort	Mobility	Self-care	Usual Activities	Anxiety/ Depression
Age	1.496	-2.436*	-1.925	-.365	3.777***
Gender	.636	.694	-.785	.838	1.591
Education	-1.775	1.375	-.193	-1.463	-.256
Alcohol Intake	----	-2.384*	----	----	----
Diet	----	2.042*	----	----	----
Heart Problems	----	-2.580*	-3.231**	----	----
Stroke	----	-2.625**	-3.162**	----	----
Diabetes	----	-2.261*	----	----	----
Handle Day-to-day	2.921**	2.131*	2.661**	4.837***	3.678***
Concern of risk	----	----	----	----	-1.881
Confidence to change	2.556*	----	----	----	3.326**
Intent to change	----	----	.310	.638	----
Sitting-TV	1.476	1.520	2.622**	3.487**	----

* p < .05 ** p < .01 *** p < .001

Distribution of CANRISK scores (Risk of developing diabetes)



Predictors of Intent to change behaviour (N= 499 individuals; 135 with and 364 without diabetes)

Intent to change (Nagelkerke R ² for model fit 0.223)	
Predictors/ Variables	OR (95% CI)
Age**	0.970 (0.947, 0.995)
Gender	0.826 (0.503, 1.359)
Education	1.156 (0.947, 1.412)
Has Hypertension	1.367 (0.855, 2.186)
Has High Cholesterol	1.172 (0.732, 1.876)
Has Diabetes	1.166 (0.685, 1.982)
Self Efficacy To Change**	1.361 (1.155, 1.604)
KnowledgeScores**	1.362 (0.784, 2.365)
PerceivedConcernofRisk	1.445 (1.201, 1.738)

** Significant at $p < 0.05$

Predictors of Health Related Quality of Life and Self Reported Health Status (N= 299 non-diabetics who completed the CANRISK)

HRQoL (R ² for model fit 0.142)			Self-reported Health Status (R ² for model fit 0.171)		
Predictors/ Variables	B	SE	Predictors/ Variables	B	SE
Has High Cholesterol	-2.087	2.394	Has High Cholesterol**	-.291	.125
Had Stroke**	-9.542	3.488	Had Stroke**	-.484	.182
Smoking	.532	.985	Smoking	-.097	.051
Ability to handle day-to-day demands**	5.000	1.245	Ability to handle day-to-day demands**	.209	.065
Ability to handle personal crisis	.808	1.093	Ability to handle personal crisis	.100	.057
Self Efficacy To Change**	1.883	.909	Self Efficacy To Change	.072	.047
<u>CANRISK_Score**</u>	-0.266	.125	<u>CANRISK_Score**</u>	-.018	.006

** Significant at p<0.05

Variable	CVD Knowledge		Quality of Life		Intent to Change	
	B (SE)	t	B (SE)	t	B (SE)	OR
Age	-.005(.003)	-1.766	-.005(.005)	-1.091	-.049(0.013)	.952*
Sex	-.150(.057)	-2.606*	-.085(.093)	-.909	-.594(.259)	.552*
Highest Education	.023(.022)	1.039	.037(.036)	1.025	.241(.108)	1.273*
Has Hypertension	.125(.050)	2.516*	-.219(.080)	-2.722*	.508(.227)	1.663*

*p<.05; **p<.005; ***p<.001.

having hypertension, female gender, younger age and higher education were associated with better knowledge

Discussion

- Overall, poor-fair HRQoL in this population
- High prevalence of chronic disease and lifestyle risk factors
- Older adults are well-informed of the risk factors
- Common factors related to HRQoL measures:
 - Ability to handle day-to-day demands
 - Confidence to make changes
 - Heart problems and stroke
- Anxiety/Depression strongly related to age, ability to handle demands, and confidence to make changes

Discussion

- This population needs support:
 - Resources beyond health education
 - Resources to help meet day-to-day demands
 - Links to programs and supports for healthy behaviours and increase social connectedness
 - Many exist, but may be underutilized
 - Awareness may be a factor (limited internet)
- Limitation:
 - Self-reported data

Next Steps

- CHAP-EMS:
 - Community Health Assessment Program through EMS
 - Health promotion and prevention, referrals to resources, link back to primary physician



Next Steps

- RCT:
 - 1 year
 - 12 Intervention sites, 12 Control sites
 - Guelph, York, Hamilton (more to come)
 - Weekly, drop-in sessions
 - Subsidized seniors' apartment buildings
- HABiT will be repeated post-intervention

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