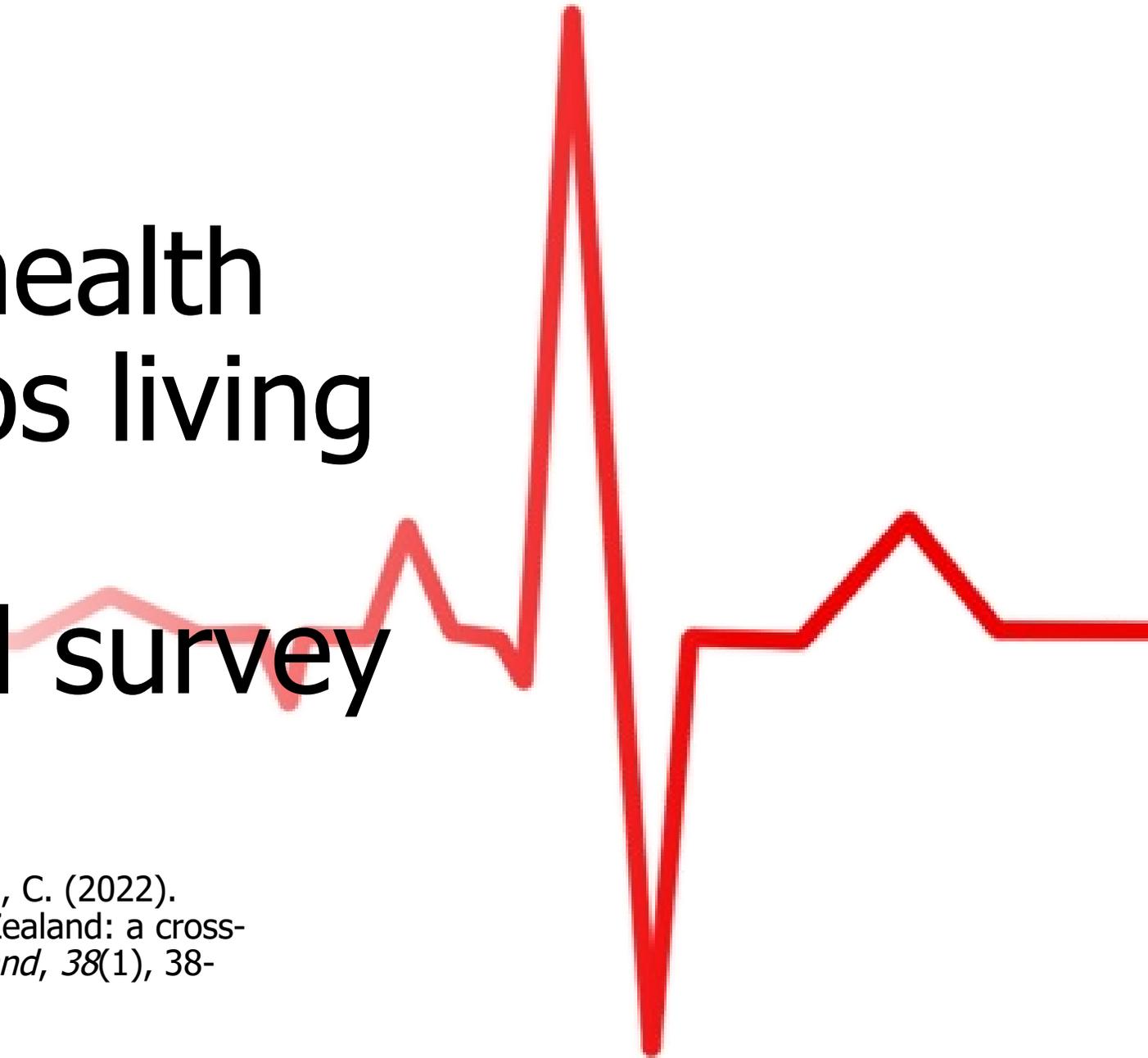


Cardiovascular health profile of Filipinos living in New Zealand: a cross-sectional survey



Citation

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Disclaimer

- This presentation is intended for educational purposes and does not replace independent professional judgement. Statements of fact and opinions expressed are those of the presenter and are not of the opinion or position of Statistics New Zealand.

Introduction

- Reducing cardiovascular disease burden is a **global health priority** (Tan et al., 2020).
- **Remarkable differences** of cardiovascular health profiles in different ethnic groups are known, where some cardiovascular related conditions affect one ethnic group more than others (Breathett et al., 2020).
- Among different ethnic communities in Western countries, there is an **increasing prevalence of diabetes** among Asian and South Asian populations and higher incidence of hypertension in Hispanic and Black American populations (International Diabetes Federation, 2019; Deere & Ferdinand, 2020).

Filipinos in Aotearoa New Zealand

- Filipino population **increased** from 40k to 72k (80% increase) between 2013 and 2018 (Statistics New Zealand, 2019).
- Other Asian subgroups have been identified with common health conditions such as cardiovascular disease and stroke, **Filipino data were not examined** in recent studies on ethno-specific cardiovascular risk profiling in New Zealand (Selak et al., 2020).
- There are **limited literature examining health outcomes** of Filipino communities living in Australia and Aotearoa New Zealand (Maneze et al., 2016; Monzales et al., 2019)

Aims

1. To examine the cardiovascular health profile of Filipino immigrants living in Aotearoa New Zealand
2. To examine the predictors of high and low cardiovascular risk common to Filipinos immigrants in the Aotearoa New Zealand context

Methods

- Filipino community groups in social media (participants \geq 18 years old and living in New Zealand)
- Online questionnaire made available for one month (questions adapted from [Ministry of Health's New Zealand Health Survey](#))
 - health conditions (hypertension, diabetes, hypercholesterolaemia)
 - health status (self-reported health, bmi)
 - health behaviours and risk factors (nutrition, physical activity, sleep, alcohol intake, smoking status)
 - sociodemographics (age, education, income, length of stay in NZ, health insurance, work hours)
- Human research ethics approval from Auckland University of Technology Ethics Committee (Number: 19/207)

Demographic and health profiles

- n = 432 Filipino adults (27% males)
- 31% had lived in the country for ≥ 3 years
- 49% categorised as overweight or obese (bmi ≥ 25)
- 22% have poor to fair perception of their health
- 27% current smokers
- 11% physically active
- 7% meeting [daily vegetable and fruit intake](#)
- 54% had health insurance

Cardiovascular risk profile

- 148 (34%) were identified as **high-risk**, being told by the doctor to have one or more conditions (hypertension, diabetes, or hypercholesteremia) in the last 12 months
- The high-risk group had a **significantly higher proportion** of the following participants:
 - overweight or obese
 - current smokers
 - reported having poor to fair perception of their health
 - had lower than [average daily sleep](#) (in hours)

Results of the stepwise logistic regression analysis

Predictors of high cardiovascular risk

Characteristics	β	SE	P value	Odds Ratio (95% CI)
Duration of stay in New Zealand				
3 years or more	0.412	0.14	<0.01	2.28 (1.34 – 3.88)
Gender (M)	0.261	0.130	0.04	1.68 (1.01 – 2.80)
BMI				
Overweight + Obese	0.471	0.112	<0.001	2.56 (1.61 – 4.10)
Self-reported health				
Poor + Fair	0.414	0.135	0.01	2.29 (1.35 – 3.88)
Average daily sleep (in hours)	-0.200	0.190	0.04	0.82 (0.69 – 0.98)

β : estimate, SE: standard error

Cardiovascular Risks common to Filipinos in Aotearoa New Zealand

- Cardiovascular health profile of this cohort is **comparable** to Filipinos living in the US, Canada, and United Kingdom. This includes common patterns and risk factors such as smoking history, reduced physical activity and low intake of recommended dietary requirements for fruits and vegetables (Abesamis et al., 2016).
- Filipinos have **lower levels of physical activity and fruit or vegetable intake** than Asian groups living in Aotearoa New Zealand (Ministry of Health, 2020b, 2020c).
- Smoking rate for this cohort is **higher** compared to the adult population.

Cardiovascular Risks common to Filipinos in Aotearoa New Zealand

- In a US study, **similar patterns** were observed, where only 25% of the sample met the recommended physical activity levels and was lower than 49% national average (Bhimla et al., 2017).
- Non leisure physical activity occurring at work, or to and from work, was **lowest among Filipino immigrants** compared to Mexican and Chinese immigrant groups in the US (Afable-Munsuzet al., 2010).
 - participants may not include their physical activity when getting to work (incidental exercise) or in their work settings

Possible factors linked to health outcomes

- **Socio-cultural factors** are strongly linked to health outcomes (Benítez, 2012).
 - immigrants sleep less and later in the night to communicate with family members located overseas across time zones; were also known to work longer hours and willing to take on after hours and overtime schedules including after hours and shift work (Perez et al.,, 2013)
- It is well established that levels of **acculturation** influence health outcomes, behaviours and lifestyle choices of immigrants (Arcia et al., 2001 & Ea, 2018); shown to occur in other migrant groups the longer they stay in the host country ("**healthy migrant effect**") (Gustavsen et al., 2021).

Recommendations

- Existing cardiovascular risk reduction strategies need to **integrate culturally tailored interventions**.
- Previous interventions used mobile applications to modify physical activity behaviours among Filipino-Americans, however, **recruitment challenges related to cultural needs** have been noted and required to be carefully addressed to ensure completion of interventions (Bender et al., 2016).
- **Behavioural strategies** were seen to be effective among Filipinos, which included self-monitoring of blood pressure and culturally appropriate health counselling (Ea et al., 2018).
- Knowledge about **evidence-based strategies that are culturally relevant** to patient groups are helpful for to provide culturally appropriate care in an increasingly diverse healthcare setting.

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Salamat po. (Thank you.)

Any questions?