





CC Para el Desarrollo de Servicios de Salud y Enfermería para el Cuidado en ENT



## Health Literacy assessment and metabolic compensation in People with Cardiovascular Disease in Santiago de Chile

Claudia Bustamante, Claudia Alcayaga, Fernando Poblete, Camila Valdés

School of Nursing-Public Health Department

Facultad de Medicina at Pontificia Universidad Católica de Chile



## Objectives



- To discuss advances in health literacy research in a chilean population sample.
- To share characteristics of people with cardiovascular diseases who participated on a case management intervention adapted to chilean context.



#### Background: Cardiovascular disease in Chile

- High Blood Pressure and Type 2 Diabetes:
   risk factors and leading cause of mortality
   and morbidity in Chile (ENS 2003, 2009, 2016))
- High demand of health services in primary health centers and Cardiovascular Health Program (PSCV) (MINSAL s/f))
- Implementing a model based on risk
   adjustment and nursing case management
   (Proyecto Fondef ID15I10277 PI: Poblete, F.)

Figure 1 based on: Margozzini & Passi (2018) Encuesta Nacional de Salud, ENS 2016-2017: un aporte a la planificación sanitaria y políticas públicas en Chile. Ars Médica. 43 (1) 30-34





#### Background: Health Literacy Assesment in Chile

- Health literacy research in Chile is incipient.
- Some efforts applying screening tools (i.e.: Chew et al 2004), (Weiss et al 2005) shows, high risk of low literacy level in people who attends in public health system, especially in people with chronic conditions (Escoda & Terrazas, 2008; Bustamante, Alcayaga, Campos, Urrutia, & Lange, 2008)
- Since 2010, the National Health Survey
  incorporates one item to asses heatlh literacy in
  adult population (Ministry of Health, National Health Service
  2009-2010)

Table 1, based on: Ministry of Health (2010) Encuesta Nacional de Salud, ENS 2009-2010

"How confident are you filling out forms by yourself?"
National Health Survey, 2009-2010 -Low level

	Men		Women		Total	
Age	n	%	n	%	n	%
15-24	364	3,9	439	5,2	803	4,6
25-44	687	7,1	1050	8,7	1737	7,9
45-64	715	10,3	1033	16,5	1748	13,5
>= 65	391	24,3	616	35,5	1007	30,7
Total	2157	9,0	3138	13,8	5295	11,5



### Materials and Methods

- *Study design*: cross-sectional study.
- **Setting**: Family Health Center "La Faena" at Peñalolén, in Santiago-Chile, in the context of a larger study, a randomized clinical trial (Fondef ID15I10277).
- *Eligibility criteria*: A randomly selected group of patients from Cardiovascular Health Program were invited to participate (n= 647).
- *Outcomes and measures*: at baseline health literacy level was measured and also evaluated its relation with metabolic compensation in this population.
  - "Screening Items to Identify Patients with Limited Health Literacy Skills" (Wallace et al, 2006).
  - Also clinical parameters, self-efficacy and social support was measured.

The study was approved by the ethics committees of the Pontificia Universidad Católica de Chile and the Oriente Metropolitan Health Service.

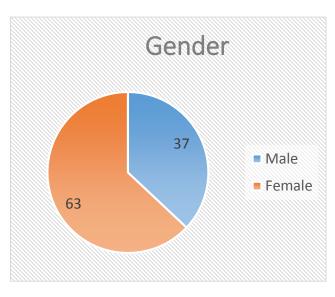


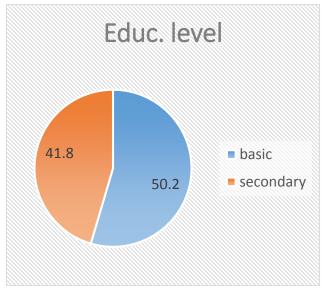


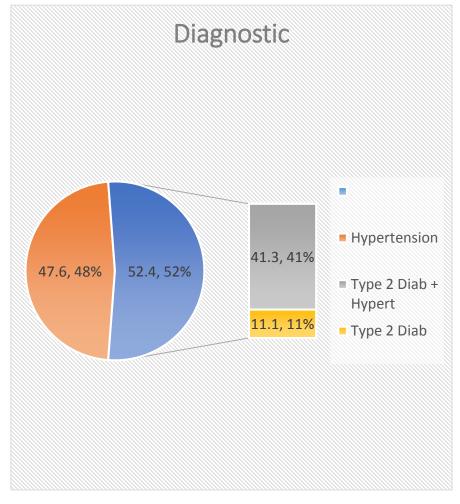


#### Results- General characteristics

n	647		
Average age	63 years		
Single	18%		
married	53%		
divorced	27%		
Clinical Parameters			
HbA1c	7,68 (SD 2,02)		
Out of therapeutic range (T2D)	54,4%		
Systolic	134 (SD 20)		
Diastolic	81 (SD 12)		
Out of therapeutic range (BP)	41,8%		







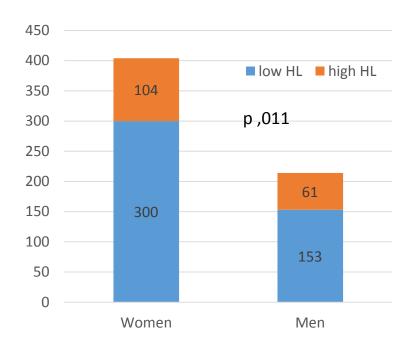


## Results: Health literacy assesment

low literacy level by item	%
Difficulties in understanding written instructions	36
Frequency with which it requires help to understand written instructions	31,7
Confident to complete medical forms	71,3

Liteacy level by age	Age (media)
High HL	59,72
Low HL	64,36
p ,000	

#### HL level-Gender



#### **Metabolic compensation**

Clinical parameters: initially HL is significative only for SBP, however, it disappear when adjusting, mainly by effect of the age

Differences in health literacy by Gender

Health literacy evaluation tools

Differences in health literacy by Age

Other relevant variables for further analysis and research

Specific mechanisms and relations between health literacy, self-management and metabolic compensation in Chilean context

#### DISCUSSION & CONCLUSIONS

cqbustam@uc.cl



# Health Literacy assessment and metabolic compensation in People with Cardiovascular Disease in Santiago de Chile

Claudia Bustamante

Claudia Alcayaga

Fernando Poblete

Camila Valdés

School of Nursing

Public Health Department

Facultad de Medicina

Pontificia Universidad Católica de Chile