



NATIONAL ACADEMY OF SCIENCES



Inter-American Development Bank



National Institute
on Aging



Política pública basada en evidencia
para enfrentar los desafíos del envejecimiento
en América Latina y el Caribe

Late life depression and health care utilization

Carmen García-Peña, PhD

Department Health Policy Research

Health Research Division

Children's Hospital of México Federico Gómez

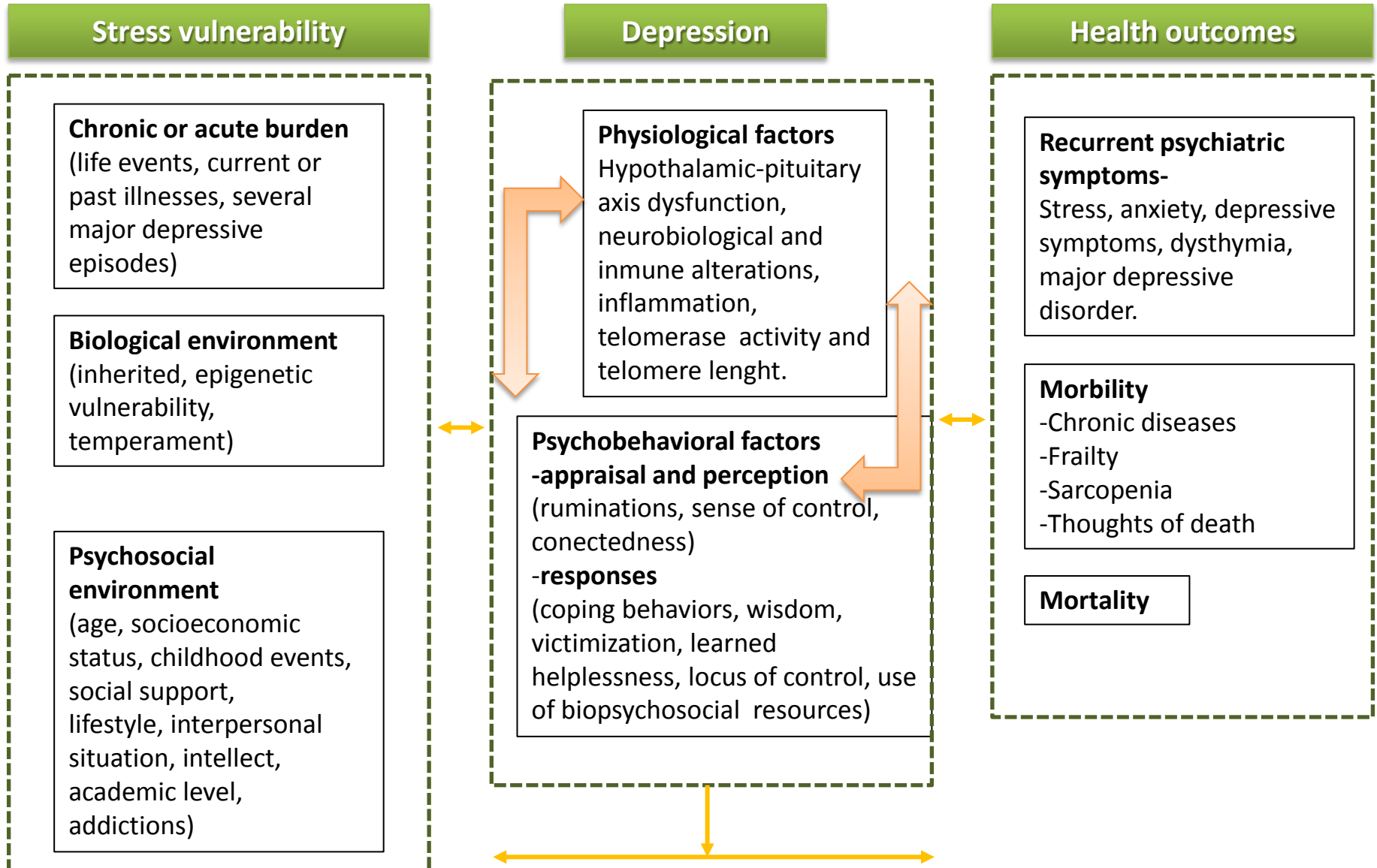
Late life depression

- ❖ One of the most prevalent mental disorders in older adults with different pathways: etiological, neurobiological, behavioral and psychological.
- ❖ Complex, frequent relapses and chronic clinical course.
- ❖ It can occur in a wide spectrum that ranges from subclinical depression to severe forms of major depression, depending on the severity of the symptoms.
- ❖ Characterized by psychological and somatic components.
- ❖ Accompanied by multiple affective and somatic symptoms.

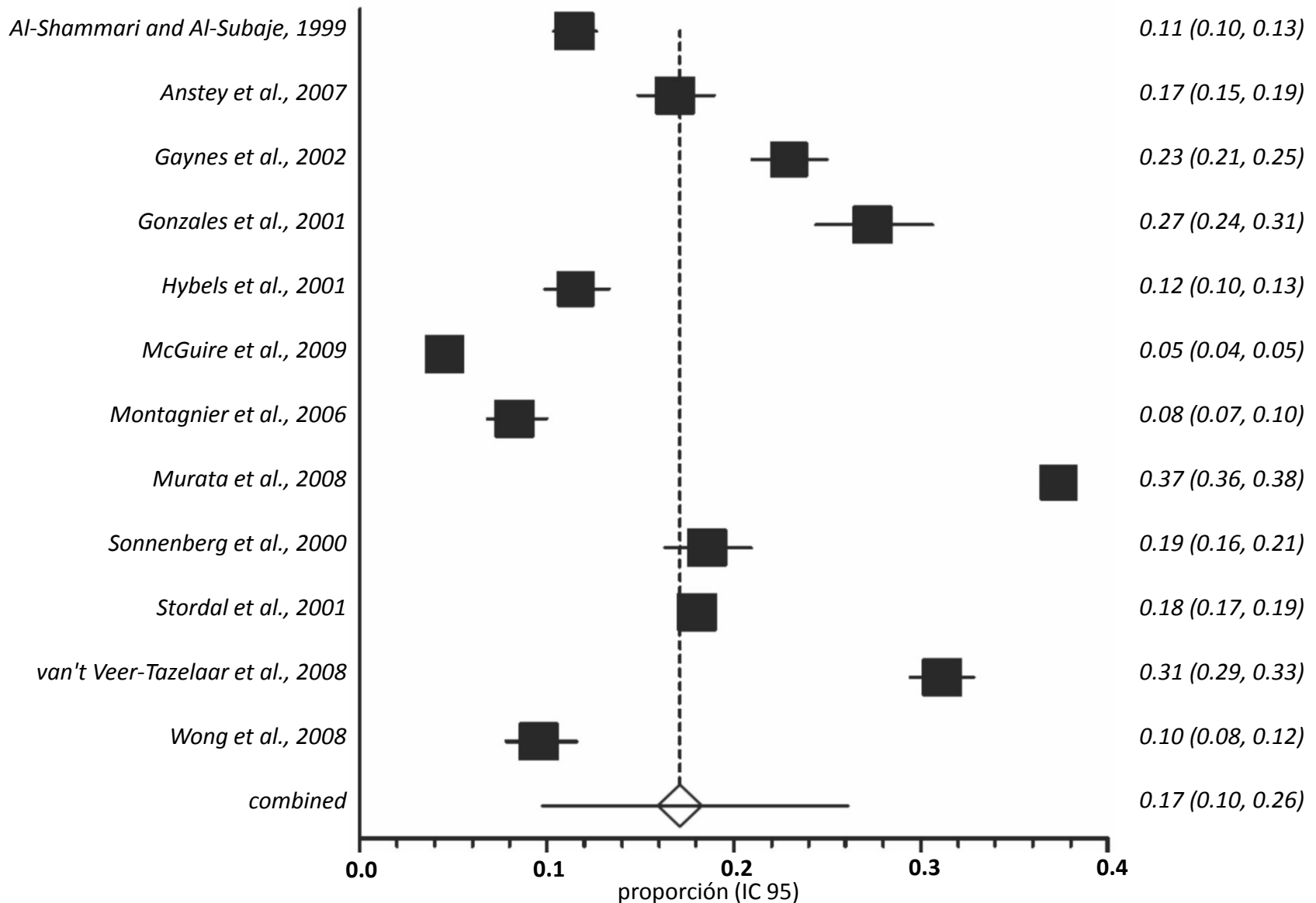
Consequences of depression

- ❖ Increases the physical symptoms of other conditions.
- ❖ Decreases adherence to pharmacological treatment.
- ❖ Associated with adverse behaviors (diet, exercise, smoking)
- ❖ High direct costs: Treatments, high rates of health service utilization, extended stays, disability, loss of function
- ❖ Increases mortality
- ❖ Affects 25% of external elderly, but primary care physicians only recognize a third part of them.
- ❖ It may be associated with cognitive impairment.

Conceptual framework



Prevalence using dimensional diagnostics (GDS, CES-D, PHQ9)



Prevalence using dimensional diagnostics (GDS*). Latin American studies

| | |
|--------------------------------------------------------------------------------------|-----------------------|
| ENDS Encuesta Nacional de Demografía y Salud Colombia (2010) | 17,574 (9.5%) |
| SABE* Salud, bienestar y envejecimiento Ecuador (2009) | 5,235 (39.1%) |
| SABE* Salud, bienestar y envejecimiento Latinoamérica y Caribe (2000) | 10,180 (21.7%) |
| PREHCO* Puerto Rican Elderly: Health Conditions Puerto Rico (2003) | 4,662 (26.1%) |
| CRELES* Costa Rican Longevity and Healthy Aging Study Costa Rica (2005) | 2, 827 (21.3%) |
| ENSANUT Encuesta Nacional de Salud y Nutrición México (2012) | 8,874 (36%) |
| MHAS Mexican Health and Aging Study México (2001) | (37.9%) |
| ENS Encuesta Nacional de Salud Chile (2010) | 1,053 (85.6%) |
| Depression in older adults study IMSS* | 4859 (20.4%) |

Aldana Olarte R.A, Pedraza Marín JA . Análisis de la depresión en el adulto mayor en la encuesta nacional de demografía y salud 2010. Universidad del Rosario, 2012.

Freire W, et. al. Encuesta Nacional de Salud, bienestar y envejecimiento SABE I Ecuador. MIES, Ecuador 2010.

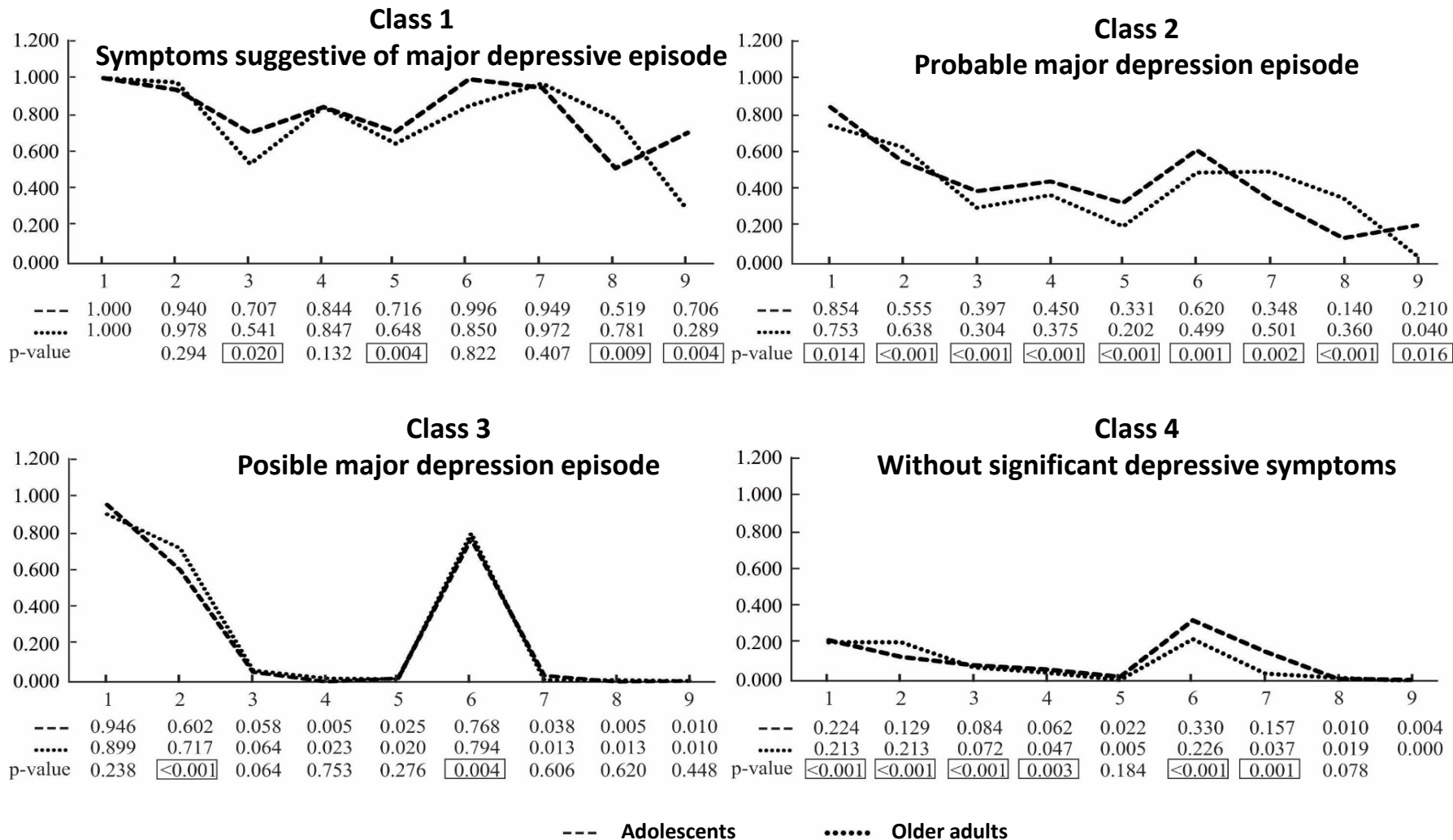
Palloni A, Peláez M. Informe, Encuesta sobre salud, bienestar y envejecimiento SABE, 2004.

Palloni A, et. al. La salud de los adultos de edad mayor en Puerto Rico, Informe general 2002-2003.

Fereccio C. Encuesta Nacional de Salud ENS Chile 2009-2010, V. Resultados.

The nature of depression can differ qualitatively between adolescents and older adults

Conditional probabilities of having each of the symptoms for each class



| | | | | |
|--------------|--------------------------|----------------------------------|--------------------------------------|---------------------|
| 1. Dysphoria | 3. Drastic weight change | 5. Thinking and concentration | 7. Fatigue | 9. Suicide ideation |
| 2. Anhedonia | 4. Sleeping problems | 6. Excessive/inappropriate guilt | 8. Psychomotor agitation/retardation | |

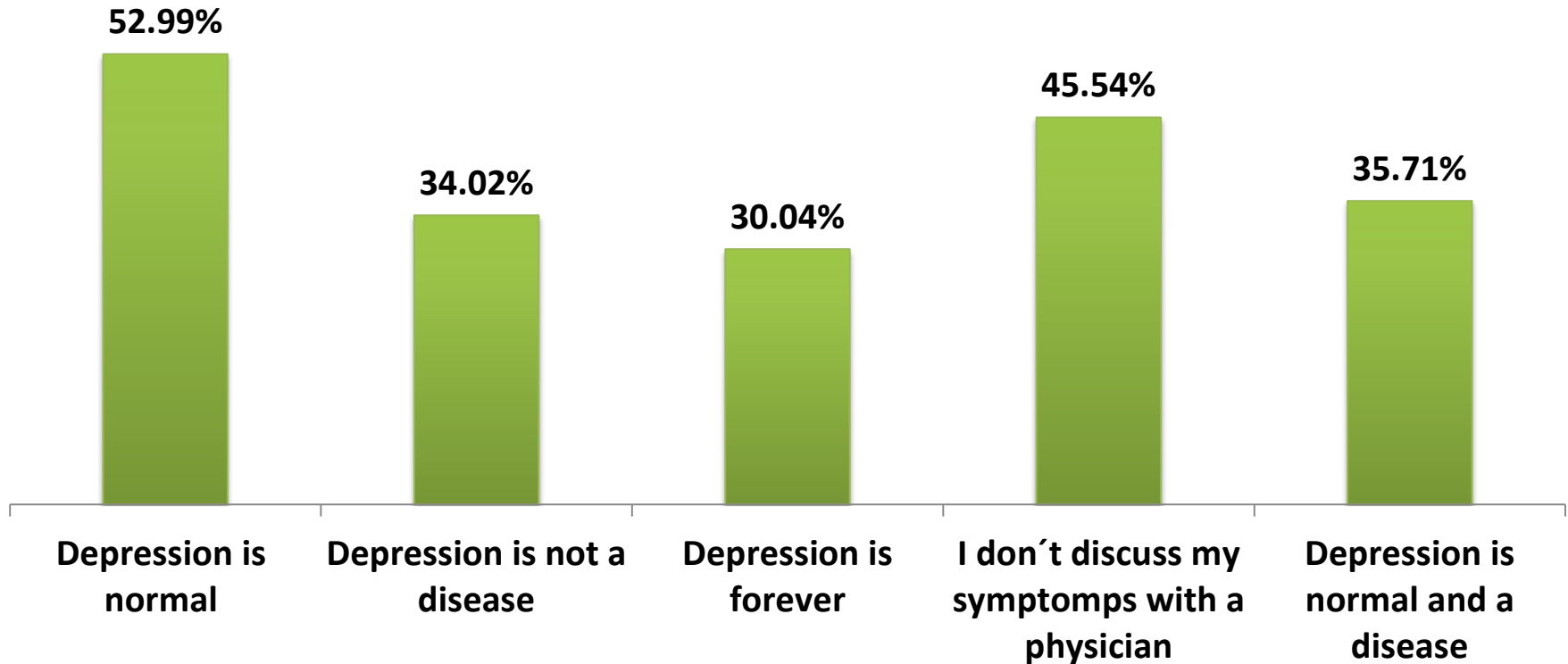
Frequency and distribution of depressive symptoms among adolescents and older adults

| | Total | Adolescents | Older Adults | |
|------------------------------------------|-------------|-------------|--------------|---------------|
| | n (%) | n (%) | n (%) | OR (95% IC) |
| Dysphoria | 2728 (58.5) | 1454 (59.5) | 1274 (57.3) | 1.0 (1.0-1.2) |
| Anhedonia | 2080 (44.6) | 959 (39.2) | 1121 (50.4) | 0.6 (0.6-0.7) |
| Drastic weight change | 819 (17.5) | 428 (17.5) | 391 (17.6) | 1.0 (0.9-1.2) |
| Sleeping problems | 870 (18.6) | 413 (16.9) | 457 (20.6) | 0.8 (0.7-0.9) |
| Thinking and concentration | 579 (12.4) | 305 (12.5) | 274 (12.3) | 1.0 (0.9-1.2) |
| Excessive/inappropriate guilt | 2403 (51.5) | 1340 (54.8) | 1063 (47.8) | 1.3 (1.2-1.5) |
| Fatigue | 1050 (22.5) | 509 (20.8) | 541 (24.3) | 0.8 (0.7-0.9) |
| Psychomotor Agitation/Retardation | 559 (12.0) | 157 (6.4%) | 402 (18.1) | 0.3 (0.3-0.4) |
| Suicide Ideation | 307 (6.6) | 214 (8.8) | 93 (4.2) | 2.2 (1.7-2.8) |

OR= Odds Ratio; CI= Confidence Interval

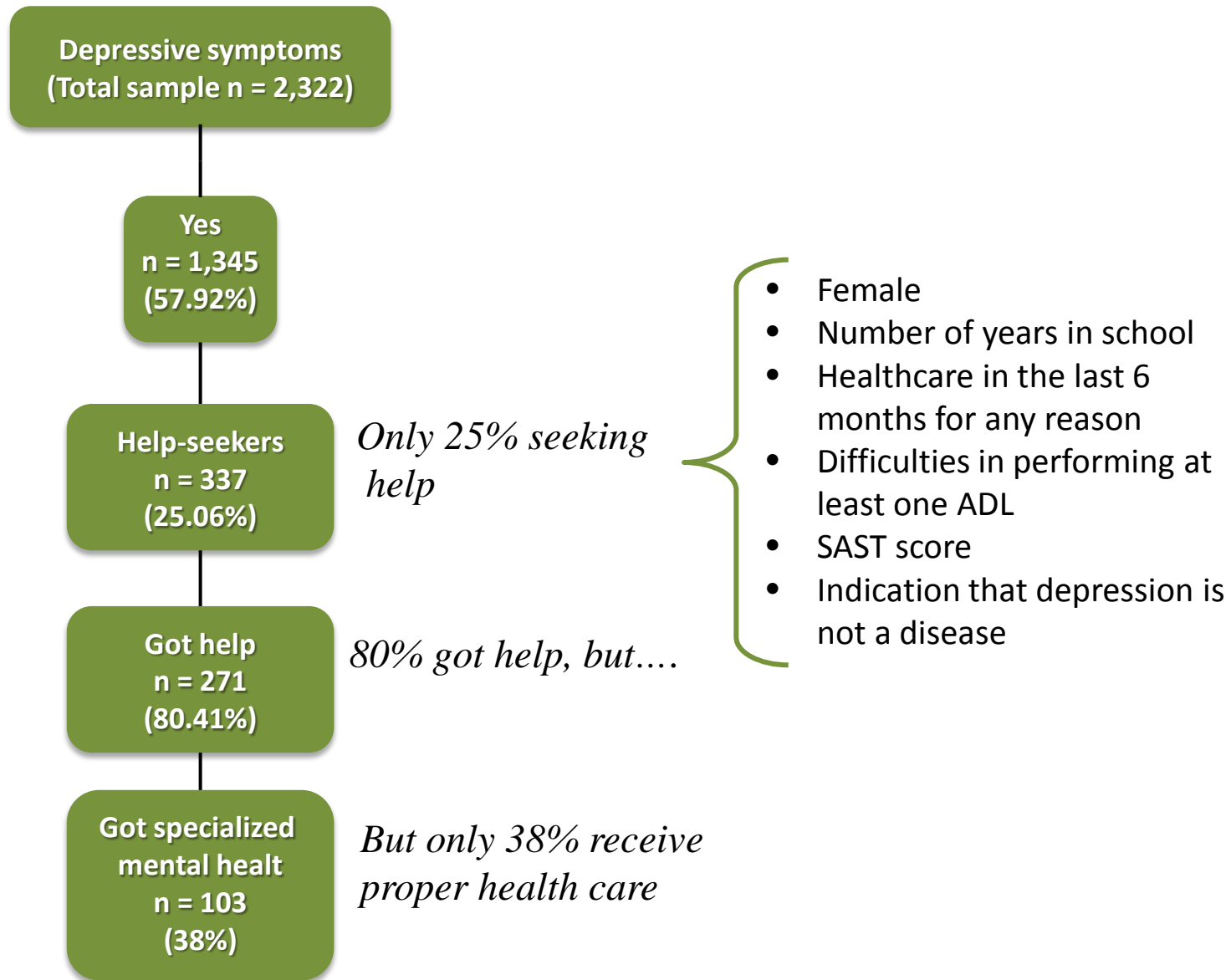
The Odds Ratios compares prevalence of adolescents and older adults. (OR>1 means that adolescents endorse the symptom more than older adults)

What do older adults believe?

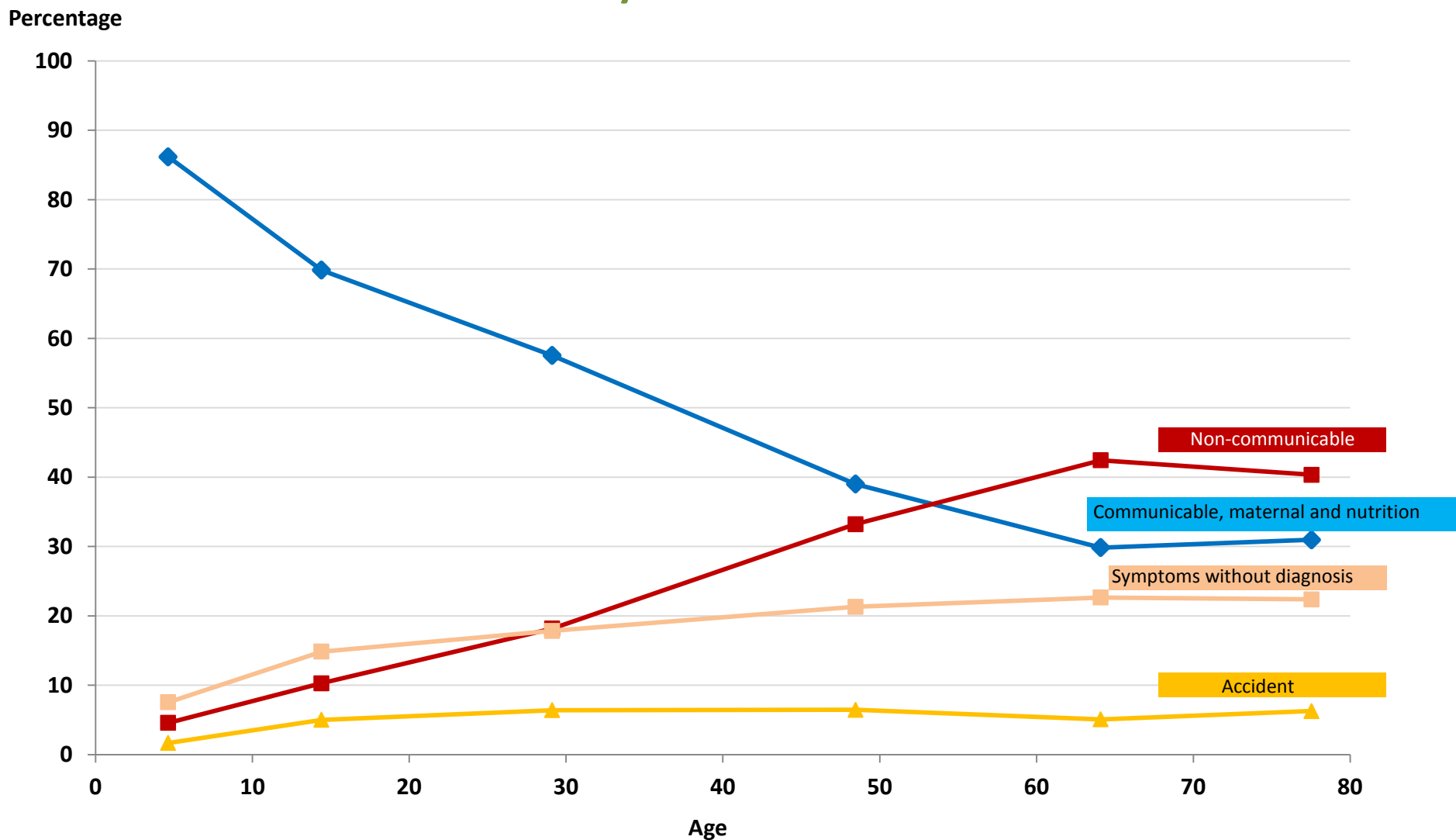


Multivariate: Older individuals and female

- ❖ 2,240 individuals were studied
- ❖ Mean age 73.16
- ❖ 67.19% female



Health problems classified by type, two weeks before the survey. ENSANUT 2012



Association of healthcare use with presence of significant depressive symptoms, with and without recent severe morbidity

| | Utilization rates (%) | | | | Adjusted Odd ratio (aOR) [¶] | | |
|---------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------|------------------------------------------------------|-------------------------------------------|---------------------------------------------|-----------------------------------------------------|-------------------------------------------|
| | Without significant depressive symptoms (n= 5,836) ‡ | | With significant depressive symptoms (n= 1,460) ‡ | | Without significant depressive symptoms | With significant depressive symptoms | |
| | ...and <u>no</u> recent severe morbidity (n=3,788) | ...and recent severe morbidity (n=2,048) | ...and <u>no</u> recent severe morbidity (n=527) | ...and recent severe morbidity (n=933) | ...and recent severe morbidity (n=2,048) | ...and <u>no</u> recent severe morbidity (n=527) | ...and recent severe morbidity (n=933) |
| | During the past 6 months sought healthcare for any reason at... | | | | | | |
| . . . any healthcare institution | 79.3 (77.7-80.7) | 88.9 (87.1-90.5) | 86.3 (83.1-88.9) | 90.7 (88.4-92.6) | 2.1 (1.8-2.5) | 1.6 (1.3-2.1) | 2.5 (2.0-3.3) |
| . . .any IMSS healthcare facility | 66.2 (64.19-68.07) | 73.8 (71.3-76.2) | 72.3 (68.1-76.2) | 78.5 (75.6-81.1) | 1.4 (1.3-1.7) | 1.3 (1.1-1.7) | 1.9 (1.6-2.2) |
| . . .any IMSS family medicine clinic ^Ψ | 64.4 (62.5-66.3) | 70.7 (67.1-73.4) | 70.1 (65.8-74.1) | 74.6 (71.8-77.2) | 1.3 (1.2-1.5) | 1.3 (1.1-1.6) | 1.6 (1.4-1.9) |
| . . .any IMSS hospital ^Ψ | 17.5 (16.0-19.2) | 29.3 (26.8-31.2) | 21.5 (17.5-26.1) | 36.3 (32.6-40.1) | 2.0 (1.7-2.3) | 1.3 (1.0-1.7) | 2.7 (2.2-3.2) |

‡ 153 original observations were not included in these analyses due to missing data

¶ Reference: Participants without significant depressive symptoms and no recent severe morbidity

Ψ These events are mutually exclusive

Estimates adjusted for age, sex, education, serious illness of someone close, retirement, trouble with neighbors, financial problems, and marital separation/divorce

Healthcare utilization exceeds in depressed patients between 15 to 35% compared with non-depressed, even under similar morbidity

Challenges

Help-seeking barriers

❖ Physician

- Limited training for pharmacological and no-pharmacological treatment
- Stigmas, prejudices

❖ Patient

- Recognition and acceptance of symptoms

❖ System

- Inertia, false beliefs.
- Improving access and innovate. Other strategies!!
- Pharmacological treatment available in **primary care**

Most treatments of depression take place in primary health care (Regier et al., 1993)

Patients prefer to be treated by physician at the primary health care (Brody et al., 1997)

Challenges

Researcher

- ❖ To evaluate interventions at different levels of approach
 - consider and integrate multimorbidity and other conditions.
- ❖ To consider addressing schemes that are sustainable and can be transferred into practice, for the patient and the system.
- ❖ To design and evaluate care flows to detect warning signs of suicide
- ❖ To develop and evaluate interventions that increase understanding and awareness among primary care physicians and health staff, to increase medical training and bring down the stigmas.
- ❖ More importantly: **Preventing depression!!**

It is necessary:

- ❖ To analyse existing databases for systematic reviews and meta-analysis.
 - Prevalences
 - Determinants
 - Implications
 - Costs
 - Alternative treatments and prevention:
 - To think about IMPACT? (Improving mood-promoting access to collaborative treatment)*