Trajectories of Health from the Mexican Health and Aging Study
(MHAS/ENASEM)

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MHAS/ENASEM: Prospective Longitudinal Study of Aging in Mexico

MHAS 2001 - 2003 Fieldwork
MHAS Timeline 2001-2015

Sample: Born in 1951 or earlier

- Wave 1
- Wave 2
- Wave 3
- Wave 4

15,186 Individuals

2001 2003 2012 2015

- 546 Deceased
- 2,742 Deceased (Accumulated=3,288)

Add sample: Born 1952-1962:
n=5,896

546 Deceased
Survival Analysis for Infectious and Chronic Conditions, 2001-2012

Risk of dying is 3 times higher for those with both chronic and infectious diseases at baseline compared to those with only chronic diseases.

Hazard Ratios for Mortality as a Function of BMI, 2001-2012

Hazard Ratios for ADL Disability as a Function of BMI, 2001-2012

Lowest hazard ratio of having an ADL limitation occurs at BMI = 26 compared to higher or lower levels of BMI.

Risk of 11-year Disability Onset by Education, Men age 50-59

Risk of ADL disability onset over 11 years is 3 times higher for those with no-education compared to those with 7+ years education.

Trajectories of Number of ADL Limitations by Age and Years of Education

Source: Díaz-Venegas, C. and R. Wong. Trajectories of Limitations in Activities of Daily Living among Older Adults in Mexico. Under review in *Disability & Health.*
Importance of Diabetes and Obesity

Among Mexican population 65+ in 2012:
(National Health Survey, ENSANUT)

- Prevalence of self-reported diabetes was 41%

- Overweight and obesity:
  - Overweight 40.2%
  - Obese 30%
  - Abdominal obesity 82.4%
Probability of Incidence of Diabetes by Body Weight, 2012

Risk of new diabetes is 2.6 and 1.8 times higher for obese and overweight people relative to those with normal weight in 2001.

Projected Prevalence of Diabetes 2012 to 2050
Population aged 50 and older, FEM-Mexico

- Scenario 1, No reduction in diabetes incidence
- Scenario 2, 25% reduction in diabetes incidence

Projected Population Ages 50+ with Diabetes, years 2012 to 2050, FEM-Mexico

- **Scenario 1, No reduction in diabetes incidence**
- **Scenario 2, 25% reduction in diabetes incidence**

Difference: 4.6 millions

Conclusion

- MHAS/ENASEM has analytical power for studies of health transitions.
- Policy makers can use knowledge of health and mortality transitions to project the future needs of older adults.
- Clearly, availability of longitudinal, national data is driving the generation of this line of research.
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