MURCIA TWIN REGISTRY

The Murcia Twin Registry (MTR) is a population-based register of adult twins in the Region of Murcia (Spain). Started in 2007.
To contribute to the analyses and understanding of factors involved in the development of health related behaviors and perceptions.

To establish the initial bases for a long term longitudinal study focused on the evolution of complex behavioral traits during the aging process.

General goals

Major interests

- Health-related lifestyles
- Health-related quality of life
- Health promotion and disease prevention behaviors
- Menopause
- Aging
SAMPLE CHARACTERISTICS

General characteristics of the MTR

- Only females (up to now).
- Born between 1940 and 1967.
- Rural Mediterranean background.
- General population.
- Twins are being contacted every two years.
- New pairs are included in the registry as they enter their 40s.

Actual sample data

- Females born between 1940 and 1967
- First wave 2007 (N = 874) Estimated 85% of the twins in the Region
- Response rate of those contacted: 95.9%
- MZ: 46%; DZ: 54%
- Second wave 2009 (N = 300 in process)
DATA COLLECTION (2007)

Data collection

- Telephone interview.
- Mean age: 51.4 (SD: 7.6). Range: 40 – 67

Variables related to HRQL

- Quality of life (EQ-5D)
  Descriptive system
  (Mobility, Self-Care, Usual activities, Pain/Discomfort & Anxiety/Depression)
  EQ-5D Index
- Self-rated health
- Medical history (Main illnesses)
- Actual use of health services (Primary and intensive care)
- Use of prescription and non-prescription medication
- BMI
Data collection
- Face-to-face interview.
- Blood sample
- Mean age: 51.9 (SD: 7.3). Range: 42 – 69

Variables related to HRQL
- HR Quality of Life (EQ-5D)
  - Descriptive system, EQ-5D Index, EQ VAS
- Self-rated health
- Medical history (Main illnesses)
- Actual use of health services (Primary and intensive care)
- use of prescription and non-prescription medication
- BMI
- Menopause related Quality of Life
- Sleep quality and disturbances
- State/Trait Depression
EQ-5D Descriptive system (2007)

Data collection 2007 (N = 866 women)  Mean age: 51.4 (SD:7.6; Range: 40-67)
Data collection 2007 (N = 866 women)  Mean age: 51.4 (SD: 7.6; Range: 40-67)

Proportion of variance explained by additive genetic (A), common (C) and specific environmental factors (E)
EQ-5D INDEX (2007)

Estimation of variance components

Mean values by age group

EQ-5D Index

56.9%
43.1%
EQ-5D Descriptive system (2009)

Data collection 2009 (N = 286 women)  Mean age: 51.9 (SD:7.3; Range: 42-69)

0% 20% 40% 60% 80% 100%

Anxiety/Depression
Pain/Discomfort
Usual Activities
Self-Care
Mobility

No problems  Some problems  Extreme problems
Estimation of variance components

Mean values by age group

EQ VAS (2009)
Murcia Twin Registry

Additional data collection

University of Murcia
Regional Health Council

- 2010
  - Male and OS twins. First contact

- BIOBANK
  - National DNA Bank

- IN PROCESS
  - Second wave of data collection in female twins
Additional data collection

University of Murcia
Regional Health Council

Twins medical records

Male and OS twins. First contact

2010

BIOBANK
National DNA Bank

IN PROCESS

Additional variables

IN PROCESS

Additional samples
(No twins)
Breast and colorectal cancer

IN PROCESS

Second wave of data collection in female twins
Murcia Twin Registry

University of Murcia
Regional Health Council

Future Projection

BIOBANK (Males)

KEEP DATA COLLECTION BIANNUALLY

Genetic analyses

Longitudinal analyses

Open to possibilities

COLLABORATION

Keep data collection biannually

Open to possibilities
MURCIA TWIN REGISTRY

TO SHOW THEM THAT THEIR EFFORT IS WORTHWHILE