Malmö Osteoporosis Prospective Risk Assessment cohort (OPRA)

SND-ID: ext0266-1.

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Associated documentation
List of publicationsOPRA.pdf *(523.04 KB)*

Alternative title
OPRA

Creator/Principal investigator(s)
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Description

In OPRA, a total of 1,044 women (response rate 65%) underwent baseline investigation (1995-1999). Enrollment was continuous throughout the year to avoid seasonal bias. All women were 75 years at inclusion, community dwelling and Swedish citizens resident in Malmö; no exclusion criteria were applied. Additional investigations were performed after 5- and 10-years.

The investigations included bone mineral density (BMD) and body composition measurements, anthropometrics and BioDex isokinetic muscle force. Questionnaires provide information on lifestyle, health, food/nutrition and hormonal function. Validated instruments for outcome (SF-36, EQ5D and Qualeffo-radius), ADL-function and mental status are also available. Information on adult fractures sustained prior to inclusion was collected and information on incident fractures was continuously registered until October 2012 (~15 years) through the X-rays files at the Radiology Department, Malmö, Skåne University Hospital. Blood and urine samples were collected.

Extensive phenotyping includes: bone turnover markers, FRAX probability scores, a quantitative frailty index, kidney function (eGFR), serum biomarkers including the multiplex biomarker panel from OLINK (Multiplex CVD II),
GWAS genotyping has been performed (Illumina Human Omni-Express Exome Beadchip).

The longitudinal design makes this homogeneous cohort unique in enabling determination of genetic and long-term changes in risk factors and their influence on outcome with a minimum of cofounders. The cohort represents an important resource with which to understand skeletal integrity, containing as it does, now 90-year old women who have survived and are free of any fracture and women with one or multiple fractures.

Purpose:
The OPRA cohort was designed to enable identification of gene variants and other associated risk factors related to bone loss and fracture in elderly women already at an age when fracture incidence begins to increase.

Data contains personal data

Yes

Sensitive personal data

Yes

Type of personal data

Medical data

Code key exists

Yes

Language

English

Unit of analysis

Individual

Time Method

Cross-section

Longitudinal

Sampling procedure

Probability

During the recruitment period (1995–'99) n=1604 randomly selected women were invited by letter one week after their 75th birthday, to attend investigation. This sample represents 33% of all women of this age living in Malmö during the study.

Time period(s) investigated

1995 – 1999

Biobank is connected to the study

Yes

Number of individuals/objects

1044

Response rate/participation rate

65%

Data format / data structure

Numeric

Data collection 1

- Mode of collection: Self-administered questionnaire
- Time period(s) for data collection: 1995–ongoing

- Source of the data: Population group, Biological samples

Data collection 2

- Mode of collection: Observation
- Time period(s) for data collection: 1995–ongoing
- Source of the data: Population group

Data collection 3

- Mode of collection: Measurements and tests
- Time period(s) for data collection: 1995–ongoing
- Source of the data: Biological samples

Geographic spread

Geographic description: The OPRA participants were randomly selected from the Malmö city files.

Responsible department/unit

Department of Clinical Sciences

Funding

- Funding agency: Swedish Research Council
- Funding agency's reference number: K2015-52X-14691-13-4

Ethics Review

Lund - Ref. 2014/804

Research area

[Medical and health sciences](#) (Standard för svensk indelning av forskningsämnen 2011)

[Health](#) (CESSDA Topic Classification)

Keywords

[Activities of daily living](#), [Blood specimen collection](#), [Body composition](#), [Skeleton](#), [Longitudinal studies](#), [Urine specimen collection](#), [Women](#), [Phenotype](#), [Bone density](#), [Anthropology](#), [Cohorts.se](#)

Publications

Ringsberg K, Gerdhem P, Johansson J, Obrant KJ. Is there a relationship between balance, gait performance and muscular strength in 75-year-old women?. Age Ageing. 1999 May;28(3):289-93.

Accessibility level

Access to data through an external actor
Access to data is restricted

Contact for questions about the data

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Related research data in SND's catalogue

[The PEAK-25 cohort](#)

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