

Menopause research: observational studies

Long-term observational studies with many decades of follow-up have looked at menopausal and postmenopausal health.

The Women's Health Initiative Observational Study

- Assessed new risk indicators and biomarkers for disease in 93,676 postmenopausal women. Women were followed for 6–10 years and started in 1992. Since 2005 the study has continued with extension studies with annual data collection.

Major clinical outcomes studied:

coronary heart disease, stroke, breast cancer, colorectal cancer, endometrial cancer, ovarian cancer, osteoporotic fractures, diabetes and total mortality.

The Million Women Study

- Assessed 1,084,110 women recruited between 1996 and 2001 using the UK NHS Breast Screening Programme (NHSBSP), about half of whom had ever used hormone therapy.

Major clinical outcome studied: effect of hormone therapy on breast cancer risk. Other health outcomes included the effects of obesity, parity and lifestyle.

The Nurses' Health Study

- Involves 275,000 participants (now including female and male nurses) and started in 1976.

Cohort members receive follow-up questionnaires with questions about diseases and health-related topics, including smoking, hormone use and menopausal status. Biological samples are also collected.

The French E3N Prospective Cohort Study (E3N)

- Involves nearly 100,000 women teachers born between 1925 and 1950 and started in 1990.

Cohort members receive follow-up questionnaires with questions about general and lifestyle characteristics, hormone therapy, reproductive factors and medical events. Biological samples are also collected.

An observational study is one in which individuals are observed without intervention or manipulation. Cohort studies and case control studies are two types of observational studies.

The Study of Women's Health Across the Nation (SWAN)

- Involves 3,302 women enrolled between 1996 and 1997.

Data include doctor visits, medical conditions, medications, treatments, medical procedures, relationships, smoking and menopause-related information such as age at pre-, peri- and postmenopause, self-attitudes, feelings and common physical problems associated with menopause.

Australian Longitudinal Study on Women's Health (ALSWH)

- Involves 57,000 Australian women and started in 1996.

ALSWH survey data are linked with a wide range of administrative data (Medicare, Pharmaceutical Benefits Scheme, hospital admissions, cancer registries, etc.).

International Collaboration for a Life Course Approach to Reproductive Health and Chronic Disease Events (InterLACE)

- A global research collaboration pooling individual-level data from more than 830,000 women from 26 observational studies across 11 countries, to advance understanding of reproductive health across the life course in relation to chronic disease risk.

Overall, 55% of the women are Caucasian and 36% Chinese; other ethnicities include Japanese (6.1%), other Asians (0.8%), African American/Black (0.9%), Middle Eastern (0.1%), Hispanic/Latino (0.1%), and Other (0.5%).

Further information

Australian Longitudinal Study on Women's Health www.alswh.org.au

E3N <https://www.e3n.fr>

NICE Glossary <https://www.nice.org.uk/glossary>

InterLACE: International Collaboration for a Life Course Approach to Reproductive Health and Chronic Disease Events <https://public-health.uq.edu.au/interlace>

The Million Women Study <http://www.millionwomenstudy.org/introduction>

The Nurses' Health Study <http://www.nurseshealthstudy.org>

SWAN <https://www.swanstudy.org>

The Women's Health Initiative <https://www.whi.org>