



LYDIA
OSTEOPOROSIS
PROJECT



Queen Margaret University
EDINBURGH

The Lydia Osteoporosis Project: Implications for living well with osteoporosis

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EANS**

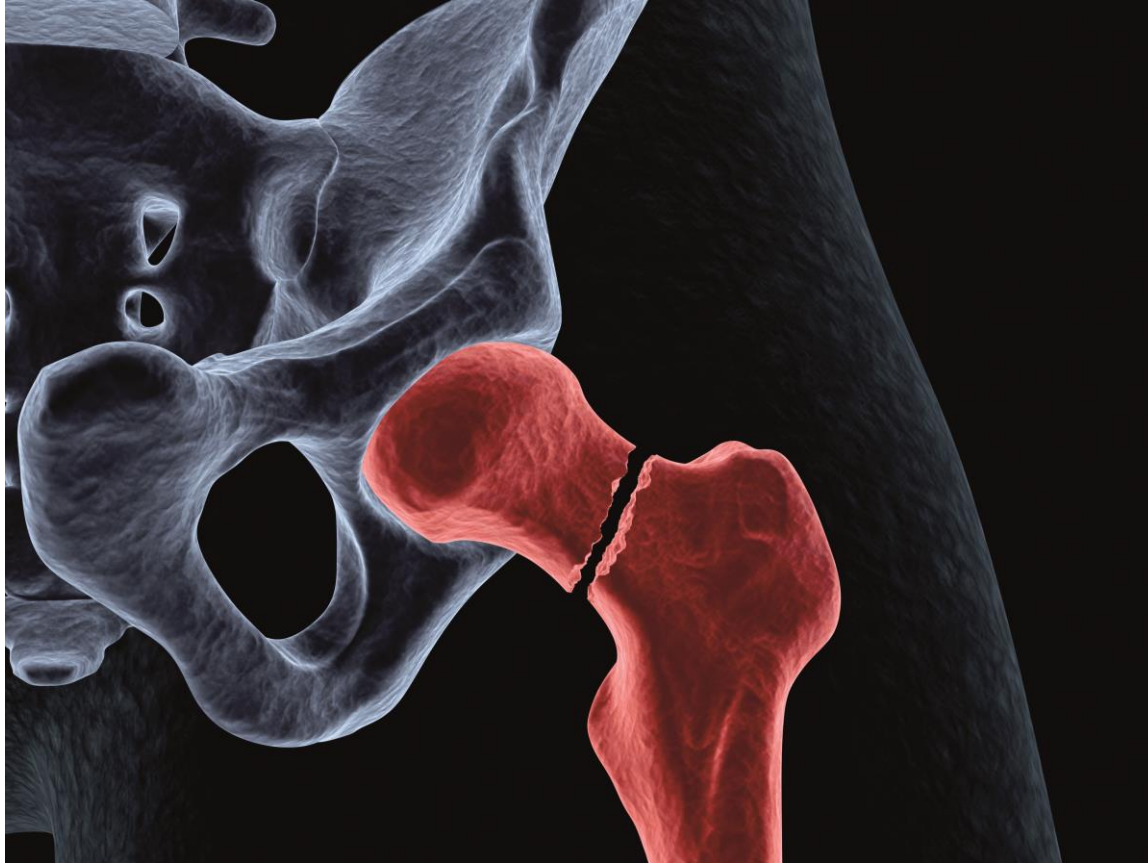
Senior Lecturer, PI and PM LOP

LOP Team Members- Pearson C., O'May F., Tropea S., Irvine L.,
Berg J., Rush R.

Aims and purpose of project

Project acknowledgements

- To increase awareness of osteoporosis in frontline staff and investigate implications of disease for acute care, moving and handling
- To explore older people's perspectives on living with osteoporosis and implications for care
- To develop, implement, evaluate and disseminate education for frontline staff to enhance care
- Why the work is important ...



Osteoporosis increases fracture risk

iStock image ©

Osteoporosis- large public health problem!

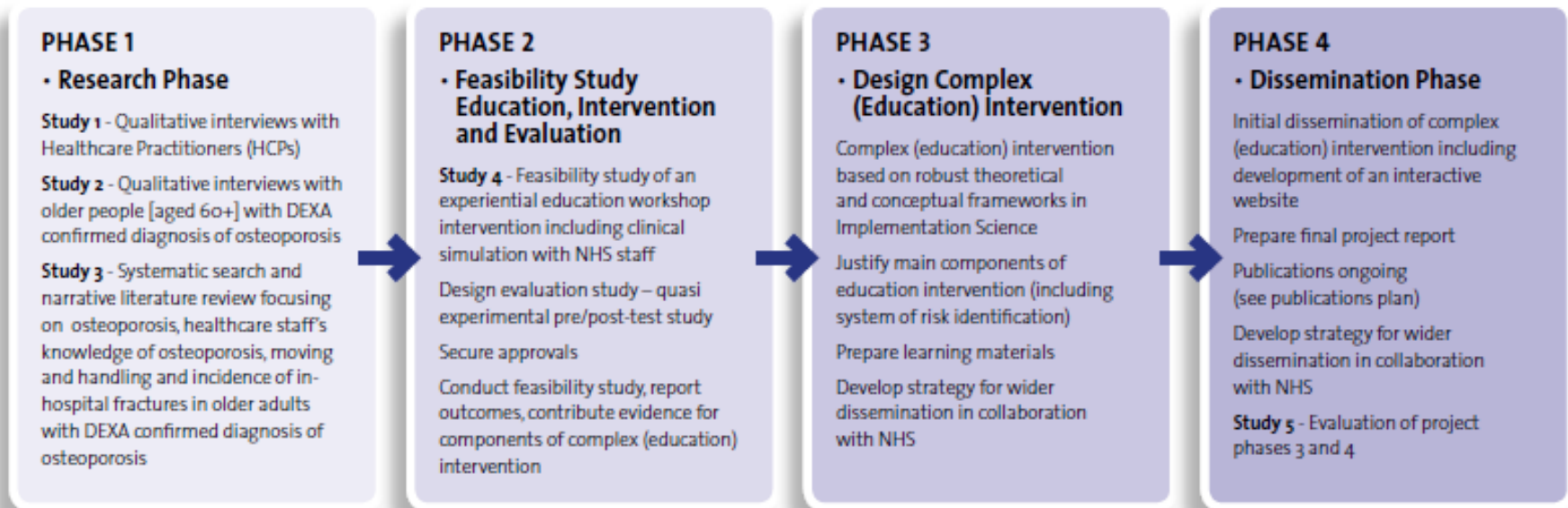
- Ageing population, incidence increases with age, rapidly escalating ...
- Affects over 3 million in UK, quarter million in Scotland
- Causes increased risk of fracture
- Hidden/ often silent presentation until first fracture, often missed!
- 1 in 2 women and 1 in 5 men over age 50 will suffer a fracture/ break a bone... (NOS 2017)
- Scotland, fractures incidence around 20 in 1000 women and less than 9 in 1000 men over age 50 (SIGN 2015)
- Osteoporosis leads to porous bones fracture easily, consequences severe, morbidities, reduced QOL and death (predominantly hip fractures)

Burdens arising from Osteoporosis

- 1,150 die per month in UK after hip fracture (Breaking Point Report, 2010)
- Males over 70 years have poorest hip fracture outcomes.
- Over 70,000 hip fractures per year in UK
 - 6000 hospital admissions per year with hip fracture in Scotland (SHFA 2016)
 - Rest of UK, 4% hip fractures IN HOSPITAL
 - Nearly 2000 hip fractures per year or 5 EVERY DAY (NHFA 2016)
- Acute management hip fracture £73 million per annum, Scotland.
- Urgent need to promote bone health across lifespan.
- Screening and referral.

Project Design: 4 phase sequential exploratory mixed methods

Figure 1: The Overall Design for the Lydia Osteoporosis Project



Selected findings



1. Limited understanding of how to promote bone health
2. Prevalence underestimated
3. Complicated, largely silent presentation, delayed and missed diagnosis
4. Severe consequences
5. Practice implications, limited understanding
6. Moving & handling best viewed as complex intervention
7. Value of clinical simulation & Technology Enhanced Learning

Bone health across Lifespan



www.lydiaosteoporosis.com

Exciting developments to address osteoporosis

Extracts from the www.lydiaosteoporosis.com website



The screenshot shows the home page of the Lydia Osteoporosis Project website. The header includes navigation links for HOME, OSTEOPOROSIS, ARTICLES & EVENTS, ABOUT US, and CONTACT US. A search bar is also present. Below the header, there is a navigation bar with options like 'Not registered yet?', 'Register Now', 'Log Out', 'Home', 'About Us', 'Articles', 'Events', and 'Contact Us'. The main content area features a large image of a human skeleton with the text 'ABOUT OSTEOPOROSIS'. Below this, there are sections for 'What is osteoporosis?', 'How big a problem is it?', and 'What is the impact of osteoporosis on people's health?'. A 'LATEST ARTICLES' section is also visible, featuring a thumbnail for 'Fracture Healing Techniques'.

ABOUT OSTEOPOROSIS

What is osteoporosis?

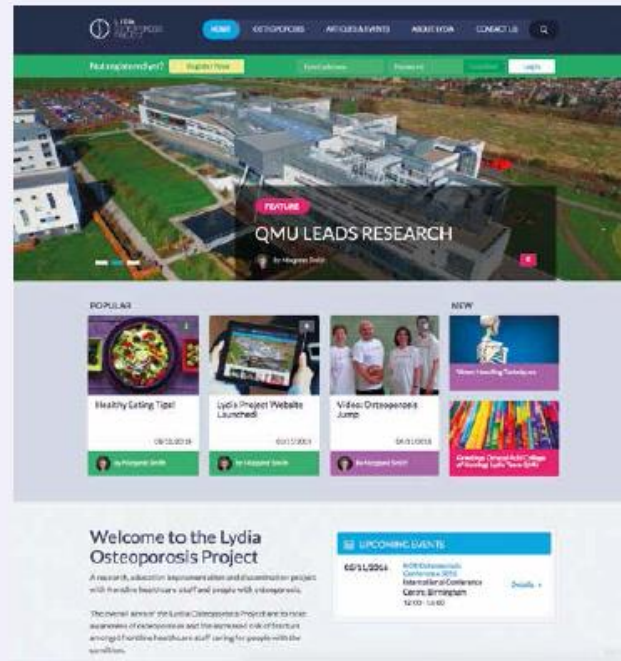
Osteoporosis is a disease that attacks bones with the spine being the most frequently affected. Followed by the ribs, wrists, and other sites. It alters bone structure, bones become more porous (more space is left), bones become more fragile and brittle and break more easily. The most common sites of fracture are the spine, hip, and wrist. Fractures related to osteoporosis involving the spine are just as a fall from a standing height, or fall.

How big a problem is it?

Osteoporosis is a common bone disease that affects over 7 million people in the UK. It is costing £23,000 in Scotland and accounts for around 300,000 fractures per year. In the UK, 10% of the population, 100 million people, have osteoporosis. It is a common condition in the elderly of all ethnic groups. In the UK, osteoporosis is the most common cause of fracture in the elderly. The most common sites of fracture are the spine, hip, and wrist. Fractures related to osteoporosis involving the spine are just as a fall from a standing height, or fall.

What is the impact of osteoporosis on people's health?

Osteoporosis is associated with higher rates of lower back and fractured ribs of breast (10% of cases). A fracture associated with osteoporosis is often associated with other health problems. Fractures involving the spine can be particularly serious as they can lead to chronic back pain and disability. Fractures involving the hip can lead to long-term disability and increased mortality. Fractures involving the wrist can lead to long-term disability and increased mortality.



The screenshot shows a research update on the Lydia Osteoporosis Project website. The header is the same as the previous screenshot. The main content area features a large image of a modern building complex with the text 'QMU LEADS RESEARCH'. Below this, there is a 'POPULAR' section with four featured articles: 'Healthy Eating Tips', 'Lydia Project Website Launched', 'Video: Osteoporosis Jump', and 'NSW'. A 'UPCOMING EVENTS' section is also visible, listing an event for 6th & 7th October 2024: 'ACR 2024 International Conference on Geriatric Care, Birmingham 10:00 - 14:00'.

QMU LEADS RESEARCH

POPULAR

- Healthy Eating Tips
- Lydia Project Website Launched
- Video: Osteoporosis Jump
- NSW

UPCOMING EVENTS

- 6th & 7th October 2024: ACR 2024 International Conference on Geriatric Care, Birmingham 10:00 - 14:00

Implications

- Major advances in Medicine and Biosciences
- Implementation Science: Action Research & Evaluation assisting in translating knowledge into practice- LOP 2





[http://eresearch.qmu.ac.uk/4419/1/
4419.pdf](http://eresearch.qmu.ac.uk/4419/1/4419.pdf)

Selected References

- Coulter Smith M., O'May F., Tropea S., Berg J. 2016 a Framing moving and handling as a complex healthcare intervention within the acute care of older people with osteoporosis: A qualitative study *Journal of Clinical Nursing* 25, 2906–2920, doi: 10.1111/jocn.13344 <http://eresearch.qmu.ac.uk/4418/> [Accessed 22/10/2016]
- Coulter Smith M., Pearson C., et al 2016 The Final Report for the Lydia Osteoporosis Project. Unpublished monograph available from QMU eResearch repository <http://eresearch.qmu.ac.uk/4419/> [Accessed 22/10/2016]
- Lydia Osteoporosis Project Website <http://www.lydiaosteoporosis.com> [Accessed 21/10/2016]
- van Merriënboër J. J.G., Kirschner P. A. 2013 *Ten Steps to Complex Learning. A Systematic Approach to Four-component Instructional Design*. 2nd edition. New York, Routledge.