

## Hip fracture rates decline during 20-year period

Age-standardized incidence of hip fractures dropped by 27% among women and 20% among men in Norway from 1999 to 2019, with the rising number of hip prostheses accounting for nearly 20% of this decline, according to study data.

Study investigator **Helena K. Kjeldgaard, PhD**, a postdoctoral research fellow at the Norwegian Institute of Public Health, said hip fracture rates have declined in recent decades in many countries, but the future hip fracture burden is expected to increase due to the aging of the population.



“Part of the declining [hip fracture] incidence rates [can be explained by] the increasing removal of hips ... due to total hip replacements.”

**Helena K. Kjeldgaard, PhD**



Kjeldgaard is a postdoctoral research fellow at the Norwegian Institute of Public Health.

“Understanding the drivers behind the declining hip fracture trend is the key to taking actions that can counteract the increasing burden,” Kjeldgaard told Healio.

For the study, Kjeldgaard and colleagues examined data on hip fractures in Norway from 1999 to 2019 from the Norwegian Epidemiologic Osteoporosis Studies hip fracture database and used official population tables from Statistics Norway for population-size data. Additionally, they acquired primary total hip replacements for any cause except hip fracture from the Norwegian Arthroplasty Register from 1989 to 2019, and calculated the annual age-standardized incidence rates of hip fracture by sex from 1999 to 2019.

“The hip fracture rates in a scenario with no hip prostheses were calculated by subtracting 0.5 persons from the population at risk for each prevalent hip prosthesis, considering that each person has two hips at risk of fracture,” the researchers wrote. “We estimated how much of the decline could be attributed to the increased prevalence of hip prostheses.”

Data indicated a decrease in age-standardized hip fracture incidence of 27% in women and 20% in men from 1999 to 2019. For those younger than 70 years, rates were stable, whereas for those aged 70 years and older, the rates fell.

When researchers excluded replaced hips from the population at risk, they observed higher incidence rates, a figure they described as considerably higher at older ages. They wrote that the increased prevalence of hip prostheses over the time period explained roughly 18% of the hip fracture rate decline — 20% among women and 11% among men.

“In this paper, we introduce a novel factor to explain part of the declining incidence rates, namely the increasing removal of hips from the population due to total hip replacements for coxarthrosis and other hip conditions,” Kjeldgaard said. “We found that the impact was substantial and could explain almost one-fifth of the decline over the past 2 decades in Norway.”

**Read more about**

- [hip fracture](#)
- [hip prosthesis](#)
- [fracture injury](#)
- [osteoporosis](#)

**Sign Up for Email**

Get the latest news and education delivered to your inbox

Email address

Specialty

**Account Information** 

**Healio.com** 

**Legal** 

© 2022 Healio All Rights Reserved.

**Follow Healio**

