HOSPITAL In-Patient Enquiry (HIPE) data shows that hip fractures in Ireland have doubled in patients over 60 years of age from 1,509 cases in 1990 to 3,202 cases in 2002.\(^3\)

By the year 2031, forecasts predict that the number of citizens who are aged over 65 years will have doubled to between 858,000 and 873,000.\(^4\) It could be surmised that the rate of osteoporotic fractures will rise concurrently.

The European Commission recommends that the prevention of osteoporosis should become “a major priority in the ongoing education and training of health professionals.”

The first clinical sign of osteoporosis may be a low impact Colles’ fracture in mid-life. Feldstein et al\(^1\) stated that less than half (46%) of women who sustained suspected osteoporosis related fractures, such as a Colles’ fracture, received treatment or education in the six months following the fracture to prevent another fracture occurring as recommended in clinical guidelines.\(^2\)

**The study**

A quantitative, descriptive survey was conducted via questionnaire with 128 nurses and midwives in a rural general hospital in the north west of Ireland. The questionnaire was completed in two sections.

Section two contained an opportunity for staff to state if they were interested in attending education sessions and what topics they would like included. One question also asked staff if they personally had taken any steps to prevent osteoporosis,
thus eliciting any lifestyle factors that staff themselves might have implemented to prevent the disease.

Results
- Almost three-quarters of respondents could correctly identify the calcium intake recommended by the Irish Osteoporosis Society (IOS). Of those who stated they were personally taking steps to prevent osteoporosis:
  - 15 had increased calcium in their diet
  - 10 had increased their milk/dairy intake
  - Six had taken calcium supplements
  - Eight had changed their diets to eat healthily.

In total, 39 out of the 54 respondents had made lifestyle changes. These results signify that the most identifiable change made by respondents in the prevention of osteoporosis was to their diet.

With regard to general knowledge of osteoporosis, a high level of knowledge was evident. More than three-quarters of respondents (76.6%) were aware that without preventative measures half the population of Irish women would suffer an osteoporosis-related fracture during their lifetime.

Almost half of the respondents (42.2%) reported taking steps to prevent the disease. Of these two reported swimming, which has no documented effect on Bone Mineral Density (BMD), one was taking fish oils supplements commonly taken for osteoarthritis not osteoporosis and 22 specified exercise, but not which type they did.

Increasing vegetable intake may have a marginal effect on calcium levels, as may a general vitamin supplement, but neither is specific to osteoporosis. The majority of the respondents (85.9%) knew osteoporosis affected men and women and three-quarters (75%) were aware that there were treatments for osteoporosis after it developed, showing a high level of knowledge in these areas. This may indicate the respondents’ focus on the treatment of osteoporosis and subsequent fractures, i.e. secondary prevention, rather than an emphasis on education to prevent the disease and minimise its effects, i.e. health promotion.

Media influence

One interesting revelation of this study comes from the response to question 11, the sources of information on osteoporosis. In the present study, those who reported receiving information on osteoporosis cited newspapers/magazines as the top source (59.1%), followed by formal education programmes (40.9%) then television (18.2%).

If newspapers/magazines and television were combined then 77.3% (n=51) of nurses and midwives received their information from media sources, as opposed to a formal education session. This is a worrying finding as the media sources may not be reliable or based on the most recent evidence. It also means that nurses and midwives as a resource are not being utilised for health education.

However, almost all (93%) of the respondents identified a need for further education on the subject of osteoporosis, suggesting recognition of the role they could play in the education of clients (see table for results).

The more knowledgeable nurses and midwives were the ones who reported having received information previously or who knew someone with the disease. The author is part of a group in the north west that are addressing the deficit in knowledge regarding falls and osteoporosis prevention among not only nurses and midwives, but also among all healthcare workers.

Where are we now?

A fall/fracture prevention programme had been devised by a multidisciplinary group and is being led out by the CNME in Sligo/Leitrim and Donegal.

It is hoped to build on the initial knowledge gained in this programme to enable all care workers to educate both themselves and their clients regarding the prevention and treatment of osteoporosis.

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References