



Public Affairs
University of Massachusetts Medical
School
55 Lake Avenue North
Worcester, MA 01655
508-856-2000 (office)
508-856-3797 (fax)

School of Medicine
Graduate School of Biomedical Sciences
Graduate School of Nursing

NEWS **RELEASE**

Results published in *Osteoporosis International*

Most Women Unaware of Risk for Debilitating Fractures

Landmark International Study of More than 60,000 Women Highlights Need for Public Education about Osteoporosis Risk Factors and Treatment

WORCESTER, Mass.— Underscoring what researchers call a serious international public health concern, results from the Global Longitudinal Study of Osteoporosis in Women (GLOW) showed that among women at an elevated level of risk for osteoporosis-associated fractures, there is a failure to perceive the implications of having important risk factors. For example, among postmenopausal women from 10 countries in Europe, North America and Australia diagnosed with osteoporosis, a condition putting them at high risk for fractures, only 43% thought their risk of a fracture was higher than that of other women their age. Additionally, only one in three (33%) women in GLOW who reported two or more major risk factors for fracture perceived themselves as being at higher risk for fracture than their age-matched peers.

This latest study from GLOW, which is based at the Center for Outcomes Research at the University of Massachusetts Medical School, was published today in the journal *Osteoporosis International* and included more than 60,000 postmenopausal women in 10 countries.

“We’ve found that many women aren’t making the connection between their risk factors and the serious consequences of fractures,” said the lead author of the paper, Ethel Siris, MD, GLOW investigator and Director of the Toni Stabile Osteoporosis Center of the Columbia University Medical Center, New York-Presbyterian Hospital. “Without a clear understanding of their risks, women cannot begin to protect themselves from fracture.”

One in two women will suffer an osteoporosis-related fracture after age 50; these fractures often carry with them chronic pain, reduced mobility, loss of independence, and especially in the case of hip fracture, an increased risk of death. Because the likelihood of fractures increases substantially with older age, fracture numbers are projected to rise as the population ages. Osteoporosis-related fractures are an international public health problem; in addition to the human suffering associated with these fractures, they are also the source of enormous health care costs.

Improved education of both physicians and postmenopausal women about osteoporosis risk factors is urgently needed, according to the study authors. Osteoporosis causes bones to become fragile and therefore more likely to break. If left untreated, the disease can progress painlessly until a fracture occurs. Several risk factors for fractures have been identified and should be considered by physicians treating women age 55 and over:

- older age
- low weight
- parental hip fracture
- personal history of fracture (clavicle, arm, wrist, spine, rib, hip, pelvis, upper leg, lower leg, ankle) since age 45
- two or more falls in the past year
- current use of cortisone or prednisone (steroids often prescribed for a number of medical conditions)
- rheumatoid arthritis
- cigarette smoking
- consumption of three or more alcoholic beverages daily.

Other risk factors include a variety of medical conditions and medications. Although tools for diagnosis and risk assessment, including bone density testing and the World Health Organization FRAX fracture risk assessment tool, are widely available, the connection between identified risk factors and serious fracture outcomes is not being made by a majority of women who are at the highest risk. Since many fractures can be prevented by appropriate treatment, it is important that elevated risk be recognized.

“We hope the insight we obtain from GLOW will help physicians and patients work together to both identify those at risk for fracture and to enhance understanding of the meaning of that risk,”

said Dr. Siris. “Education is critical if we are to reduce the burden of fractures worldwide.”

Study Details

GLOW is a prospective, international cohort study of women 55 years of age and older who visited their primary care physician during the 2 years prior to enrollment in the study. Over 60,000 women were recruited by more than 700 primary care physicians in 17 cities in 10 countries (Australia, Belgium, Canada, France, Germany, Italy, Netherlands, Spain, United Kingdom and United States.) GLOW is gathering information on osteoporosis risk factors, treatments, patient behaviors, and fracture outcomes over a 5-year period. Self-perceived risk of fracture was assessed using a five-point scale ranging from “much lower” to “much higher” risk than other women of the same age.

GLOW in Barcelona, Spain

Of the 25,300 European women enrolled in GLOW, 2910 were from Barcelona. Almost one third (32%) of these women reported an osteoporosis diagnosis, 27% had a previous fracture, 15% were low weight, 38% reported recent falls, and 18% a parental hip fracture. Despite the high prevalence of risk factors, only 43% of women with two or more major risk factors perceived themselves to be at higher risk of a fracture than their peers. This failure by women to appreciate their personal risk of fracture presents a barrier to them receiving appropriate management and safe and effective treatments.

Sponsors

GLOW is supported by a grant from The Alliance for Better Bone Health (formerly sanofi-aventis and P&G Pharmaceuticals, now sanofi-aventis and Warner Chilcott) and is being directed by The Center for Outcomes Research, University of Massachusetts Medical School.

About the Center for Outcomes Research (COR)

COR is based at the University of Massachusetts, Worcester, Massachusetts. The mission of COR is to collect and evaluate data that reflect real-world practices and outcomes and to provide physicians with confidential reports that allow comparison of their practices to evidence-based performance standards. For more information, please visit: www.outcomes.org