Researchers from Norway have uncovered an association between sleep problems and increased risk of fibromyalgia in women. The risk of fibromyalgia increased with severity of sleep problems, and the association was stronger among middle-aged and older women than among younger women. Results of the prospective study, based on ten years of data, appear in *Arthritis & Rheumatism*, a journal published by Wiley-Blackwell on behalf of the American College of Rheumatology (ACR).

Experts estimate that fibromyalgia -- a chronic musculoskeletal pain syndrome -- affects more than 5 million people over the age of 18 in the U.S., with the general adult population prevalence at 3% to 5%. Studies have shown that the syndrome onset typically occurs in middle age and up to 90% of those with fibromyalgia are women. While previous research has found that insomnia, nocturnal awakening, and fatigue are common symptoms in patients with fibromyalgia, it is unknown whether poor sleep habits contribute to the development of this pain syndrome.

Drs. Paul Mork and Tom Nilsen from the Norwegian University of Science and Technology (NTNU) investigated the impact of sleep problems on risk of fibromyalgia in a population of women in Norway. Female participants aged 20 and older who had participated in a large population-based health study (the HUNT study; [http://www.ntnu.edu/hunt](http://www.ntnu.edu/hunt)) by answering a health-related questionnaire and undergoing clinical examination were included in the investigation. The researchers selected 12,350 women who were free of musculoskeletal pain and movement disorders for the current study.

"Our findings indicate a strong association between sleep disturbance and fibromyalgia risk in adult women," said Dr. Mork. "We found a dose-response relation, where women who often reported sleep problems had a greater risk of fibromyalgia than those who never experienced sleep problems."

Results show that at follow-up, 327 women had developed fibromyalgia -- representing an incidence proportion of 2.6% during 10 years. The adjusted relative risk for women who reported having sleep problems "often" or "always" was 5.41 among women over 45 years of age and 2.98 among those between 20 and 44 years. The authors suggest that further studies are needed to investigate whether early detection and treatment of sleep disturbance reduces the risk of fibromyalgia in women.

More information: Sleep Problems and Risk of Fibromyalgia: Longitudinal Data from the Norwegian HUNT Study. Paul J Mork and Tom IL Nilsen. *Arthritis & Rheumatism*; Published Online: November 14, 2011 ([DOI: 10.1002/art.33346](https://doi.org/10.1002/art.33346)).