

Chronic Inflammatory Diseases: Impact and Burden



Advantage Hers focuses the definition of chronic inflammatory diseases on:

- Rheumatoid arthritis
- Axial spondyloarthritis (including ankylosing spondylitis and non-radiographic axial spondyloarthritis)
- Psoriatic arthritis
- Psoriasis

Did you know?

People with these chronic inflammatory diseases are at risk of developing another related condition.²⁻⁶



Causes of these chronic inflammatory diseases¹

These chronic inflammatory diseases are caused by long-term inflammation, lasting months to years, which stems from the immune system fighting off harmful stimuli.



Potential impacts of these diseases^{1,2,7-17}

- Joint damage
- Loss of function
- Reduced quality of life
- Increased risk of depression, anxiety and stress
- Increased risk of diabetes or heart disease



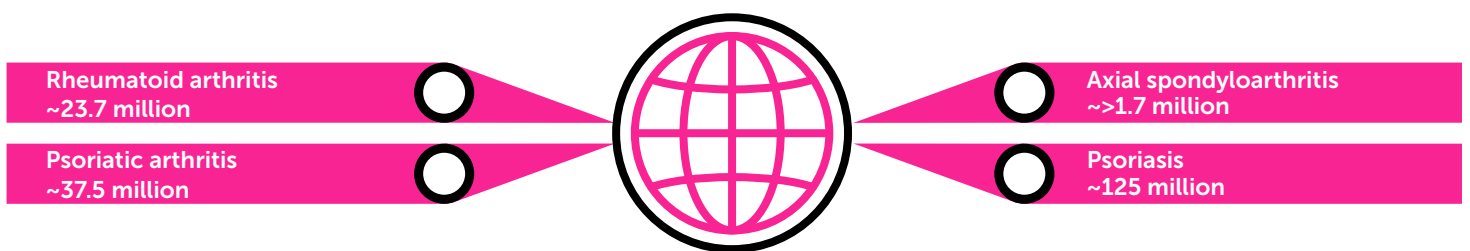
Common symptoms of these diseases¹

Pain, joint damage, constant fatigue, gastrointestinal complications and frequent infection.

Did you know?

Chronic diseases can exacerbate symptoms of depression, and depressive disorders can lead to chronic diseases.¹⁸

These chronic inflammatory diseases affect >180 million people worldwide¹⁹⁻²¹



Women are particularly impacted by these chronic inflammatory diseases

Rheumatoid arthritis is 3 times more common in women than in men.²²



It's important anyone living with these chronic inflammatory diseases works with their specialist to develop a long-term disease game plan that is tailored for their individual needs.



Women with psoriasis experience a greater feeling of stigmatization and are more likely to suffer stress and loneliness than men.^{23,24}

Compared to men, women with axial spondyloarthritis can:^{6,24-28}

- Experience greater delays to diagnosis
- Experience greater fatigue
- Be less active as a result
- Experience greater pain, anxiety and stress

Women often have limited information on how to best manage their condition throughout their lives.²⁹

#AdvantageHers

 Inspired by patients.
Driven by science.

References

1. Pahwa R, Jialal I. Chronic Inflammation. StatPearls Publishing. Available at: <https://www.ncbi.nlm.nih.gov/books/NBK493173/>. Accessed January 2020.
2. Rosenbaum JT, et al. Insight into the Quality of Life of Patients with Ankylosing Spondylitis: Real-World Data from a US-Based Life Impact Survey. *Rheumatol Ther*. 2019; 6(3):353–367.
3. Armstrong EJ, et al. Psoriasis and major adverse cardiovascular events: a systematic review and meta-analysis of observational studies. *J Am Heart Assoc*. 2013;2(2):e000062.
4. Coates LC, et al. Group for Research and Assessment of Psoriasis and Psoriatic Arthritis 2015 Treatment Recommendations for Psoriatic Arthritis. *Arthritis Rheumatol*. 2016;68(5):1060-1071.
5. Crowson CS, Liao KP, Davis JM, et al. Rheumatoid Arthritis and Cardiovascular Disease. *Am Heart J*. 2013;166(4): 622–628.
6. van der Horst-Bruinsma IE, Nurmohamed MT, Landewé RB. Comorbidities in patients with spondyloarthritis. *Rheum Dis Clin North Am*. 2012;38(3):523-538.
7. Picchianti-Diamanti A et al. Health-related quality of life and disability in patients with rheumatoid early rheumatoid and early psoriatic arthritis treated with etanercept. *Qual Life Res*. 2010;19:821–826.
8. Salaffi F et al. The health-related quality of life in rheumatoid arthritis, ankylosing spondylitis, and psoriatic arthritis: a comparison with a selected sample of healthy people. *Health Qual Life Outcomes*. 2009;7:25.
9. Nas K et al. The effect of gender on disease activity, functional index and quality of life in patients with Axial SPA. The data of TLAFF-NETWORK PSA study. *Ann Rheum Dis* 2019; 78(Suppl 2):920–921. Abstract FR10456.
10. Slobodin G, Reyhan I, Avshovich N, et al. Recently diagnosed axial spondyloarthritis: gender differences and factors related to delay in diagnosis. *Clin Rheumatol*. 2011;30(8):1075-1080.
11. Tournadre A, Pereira B, Lhoste A, et al. Differences Between Women and Men With Recent-Onset Axial Spondyloarthritis: Results From a Prospective Multicenter French Cohort. *Arthritis Care Res (Hoboken)*. 2013;65(9):1482-1489.
12. Lee W et al. Are there gender differences in severity of ankylosing spondylitis? Results from the PSOAS cohort. *Ann Rheum Dis*. 2007;66:633–638.
13. Eder L et al. Gender Difference in Disease Expression, Radiographic Damage and Disability Among Patients With Psoriatic Arthritis. *Ann Rheum Dis*. 2013;72(4):578–582.
14. Weigle N and McBane S. Psoriasis. *Am Fam Physician*. 2013;87(9):626–633.
15. Dowlatshahi EA. The Prevalence and Odds of Depressive Symptoms and Clinical Depression in Psoriasis Patients: A Systematic Review and Meta-Analysis. *J Invest Dermatol*. 2014;134:1542–1551.
16. Xiao J et al. Prevalence of myocardial infarction in patients with psoriasis in central China. *JEADV*. 2009;23(11):1311–1315.
17. Armstrong A et al. Quality of life and work productivity impairment among psoriasis patients: findings from the National Psoriasis Foundation survey data 2003–2011. *PLoS One*. 2012;7(12):e52935.
18. National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention. (2009). "The Power of Prevention: Chronic disease...the public health challenge of the 21st Century." Available at: <https://www.cdc.gov/chronicdisease/pdf/2009-power-of-prevention.pdf>. Accessed January 2020.
19. World Health Organization. "The Global Burden of Disease 2004 Update." Available at: https://www.who.int/healthinfo/global_burden_disease/GBD_report_2004update_full.pdf. Accessed January 2020.
20. National Psoriasis Foundation. "Statistics." Available at: <https://www.psoriasis.org/content/statistics>. Accessed January 2020.
21. Reveille JD, et al. Prevalence of axial spondyloarthritis in the United States: estimates from a cross-sectional survey. *Arthritis Care Res (Hoboken)*. 2012;64(6):905-910.
22. Gerosa M, Schioppo T, Meroni PL. Challenges and treatment options for rheumatoid arthritis during pregnancy. *Expert Opin Pharmacother*. 2016;17(11):1539–1547.
23. Hawro M, et al. Lesions on the back of hands and female gender predispose to stigmatization in patients with psoriasis. *J Am Acad Dermatol*. 2017;76(4):648–654.e2.
24. LEO Innovation Lab and The Happiness Research Institute. World Psoriasis Happiness Report October 2017. Available at: <https://psoriasis-happiness-report/static/documents/world-psoriasis-happiness-report-2017.pdf>. Accessed January 2020.
25. Osterhaus JT, Purcaru O. Discriminant validity, responsiveness and reliability of the arthritis-specific Work Productivity Survey assessing workplace and household productivity within and outside the home in patients with axial spondyloarthritis, including nonradiographic axial spondyloarthritis and ankylosing spondylitis. *Arthritis Res Ther*. 2014;16(4):164.
26. Rusman T, Nurmohamed M, Denderen JV, et al. Female gender is associated with a poorer response to TNF inhibitors in ankylosing spondylitis. *Annals of the Rheumatic Diseases* 2017;76(2):354-355.
27. Rusman T, van Vollenhoven RF, van der Horst-Bruinsma IE. Gender Differences in Axial Spondyloarthritis: Women Are Not So Lucky. *Curr Rheumatol Rep*. 2018;20(6):35.
28. Mancuso CA, Rincon M, et al. Psychosocial variables and fatigue: a longitudinal study comparing individuals with rheumatoid arthritis and healthy controls. *J Rheumatol*. 2006;33(8):1496-1502.
29. Tincani A, Taylor P, Fischer-Betz R, et al. Fears and misconceptions of women with chronic rheumatic diseases on their journey to motherhood. *Annals of the Rheumatic Diseases*. 2018;77(2):866.