

Morningside Graduate School of Biomedical Sciences

## Morningside Graduate School of Biomedical Sciences Clinical & Population Health Research Program

Announces the PhD Thesis Defense of

## **DIVYA SHRIDHARMURTHY**

## Prescribed Medications and Healthcare Resource Utilization in Reproductive-Age Women and Men with Rheumatic Disease

Tuesday, November 15, 2022 at 3:30 p.m. via Zoom Meeting

Axial spondyloarthritis (axSpA), rheumatoid arthritis (RA), and psoriatic arthritis (PsA) are the most prevalent forms of chronic immune-mediated inflammatory arthritis, affecting approximately 0.3-1.4% of adults in the US. These rheumatic conditions have an early age of onset and may have a significant impact on women and men of reproductive ages, particularly during pregnancy and the postpartum period. Active disease can be found in about 60-80% of pregnant women, and high disease activity is associated with maternal complications and adverse pregnancy outcomes including miscarriage, premature birth, and postpartum depression. Therefore, receiving rheumatologic care prior to conception and throughout pregnancy is desirable. Despite this, research documenting the extent to which women are cared for by rheumatologists during pregnancy, medication use, and the risk of postpartum depression (PPD) in women with rheumatic disease (RD) is limited. Using the IBM® MarketScan<sup>®</sup> Commercial Claims and Encounters Database, this dissertation described sex differences in time to treatment initiation of biologics, and evaluated healthcare utilization, prescribed medications, and the risk of developing PPD among reproductive-age women with axSpA, RA or PsA. Overall, women experienced a delay in biologic treatment initiation compared to men. The prevalence of PPD in women with RD was higher compared to those without any RD. Yet, prescribed medications, and receipt of rheumatologic care during pregnancy was low. Findings from this dissertation provide foundational knowledge to inform efforts to improve care for women with rheumatic disease during pregnancy, potentially through patient education, increased access, screening and timely referrals to rheumatologists and mental health care specialists through enhanced care coordination of providers.

> Mentor Shao-Hsien Liu, PhD

Dissertation Exam Committee Robert Goldberg, PhD (Chair) Matthew Alcusky, PhD, PharmD Mara Epstein, ScD Jonathan Kay, MD Alexis R. Ogdie-Beatty, MD, MSCE (University of Pennsylvania) - External Member