

Let's Talk About Sleep: Correlations of Self-Reported Sleep, Actigraphy, and Disease Activity in Patients with Rheumatoid Arthritis

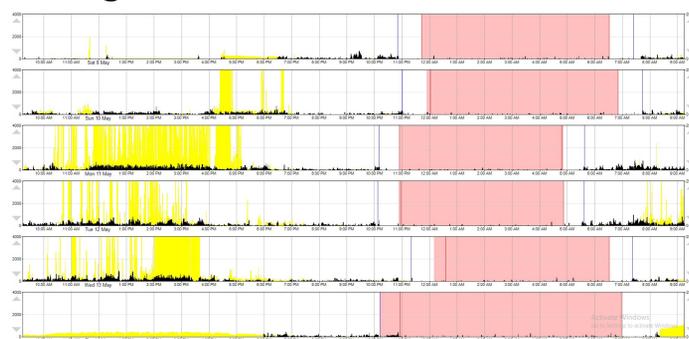
Shelby Rader¹; Ava Cox²; Anna Frances Weeks²; L.A. Fowler, PhD¹; Jeanine Stratton, PhD²; Gulzar Merchant, MD³; Melanie Cozad, PhD⁴
 University of South Carolina School of Medicine Greenville¹, Furman University², Prisma Health Upstate Rheumatology Specialists³,
 University of South Carolina Arnold School of Public Health⁴

Background

- Poor sleep is a frequently reported but under-investigated complaint among patients with rheumatoid arthritis (RA).
- Lack of use of sleep measures with clinical care makes diagnosis of sleep issues difficult.

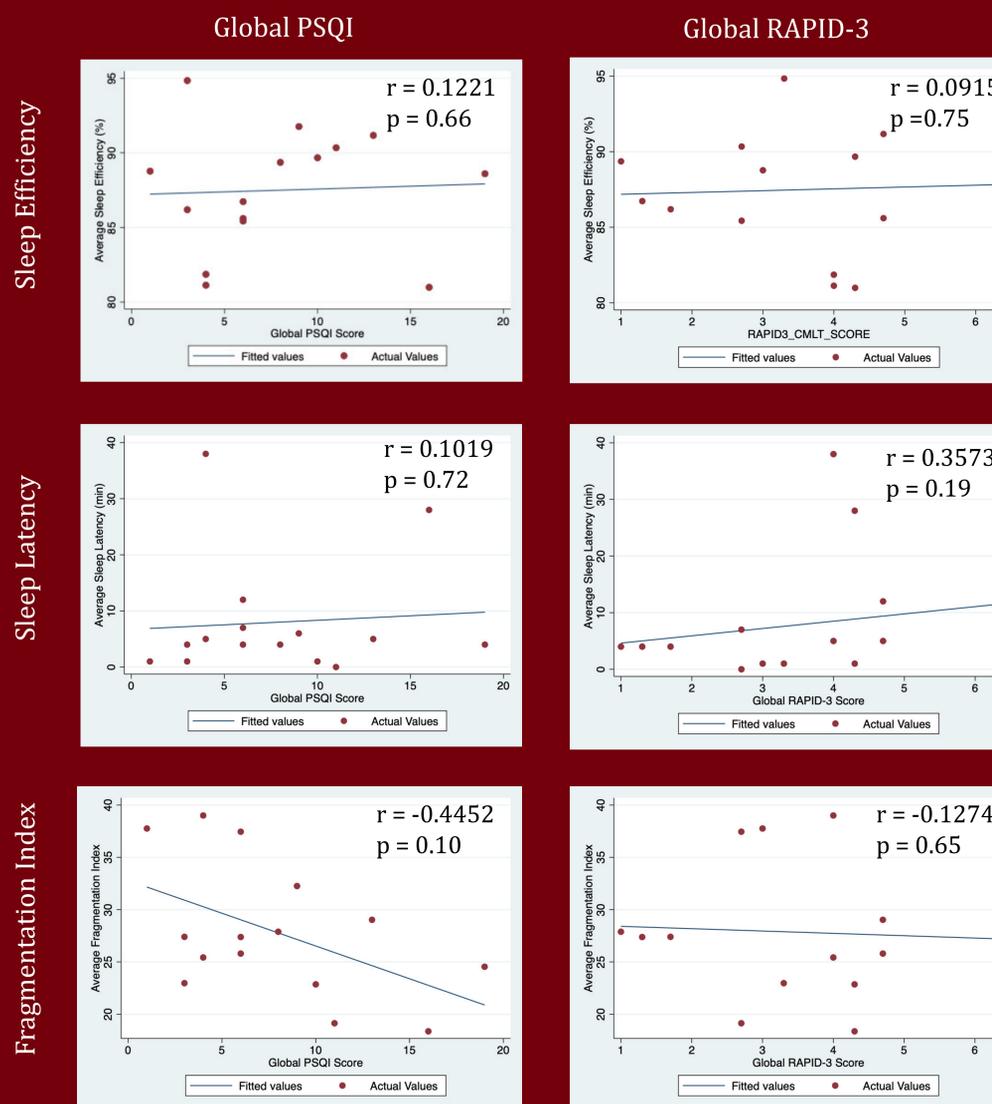
Methodology

- Prospective, cross-sectional, study. A sample size of 15 patients with RA was recruited through convenience sampling.
- Participants self-reported sleep quality using the Pittsburgh Sleep Quality Index (PSQI) and disease activity using the Routine Assessment of Patient Index Data 3 (RAPID-3).
- Patients' sleep quality was also measured by actigraphy (i.e. wrist motion, output below) using the MotionWatch 8.



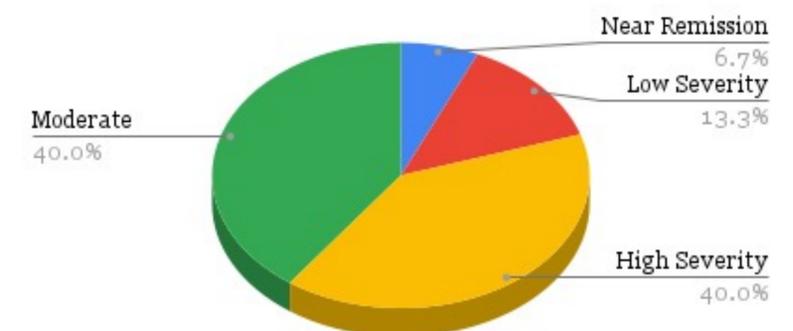
- Actigraphy measures of sleep efficiency, latency, and fragmentation were averaged over 6 nights
- Actigraphy measurements were correlated to PSQI and RAPID-3 scores through Spearman correlations .

Are self-reported measures of sleep and disease activity related to actigraphy?



Self-reported measures demonstrate low, non-significant correlation with actigraphy suggesting it may capture complementary clinical information.

RA Severity in Sample



Global RAPID-3 scores range from 0-1 (near remission), 1.3-2.0 (low severity), 2.3-4.0 (moderate severity), and 4.3-10 (high severity).

Clinical Implications

- Actigraphy may be a useful tool in facilitating patient-rheumatologist communication about sleep issues.
- Further research is needed to determine actigraphy's value in clinically identifying sleep disorders.

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Author Email: srader@email.sc.edu