# Fear of Cancer Recurrence and Sleep in Couples at the First Post-Treatment Mammogram for Early-Stage Breast Cancer

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BACKGROUND: Sleep disturbance is common in cancer survivors and its prevalence is greatest in individuals with breast cancer (BC). Emerging evidence points to fear of cancer recurrence (FCR) as a factor underlying impaired sleep in cancer survivors. However, limitations of prior work include:

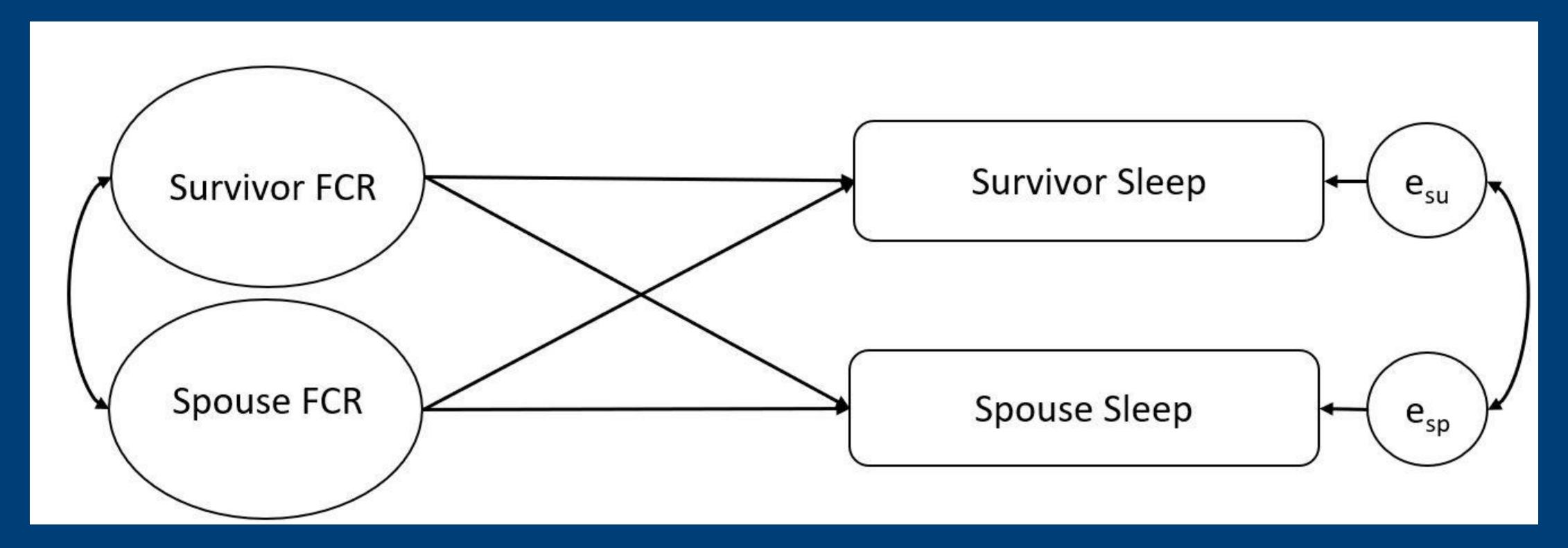
- Use of global, retrospective reports of sleep
- No focus on the link between FCR and sleep among spouses of survivors
- No study of these links as couples encounter real-life triggers (e.g., posttreatment mammograms)

### **METHODS:**

- 1. Couples coping with early-stage BC (N=57 couples; 114 paired individuals) reported sleep duration, quality, sleep onset latency, and wake after sleep onset each morning for 21 consecutive days spanning survivors' first post-treatment mammogram.
- 2. Three validated measures of global FCR were used to form latent survivor and spouse FCR factors.
- 3. Average daily sleep as well as sleep on the eve of the mammogram were regressed on both survivor and spouse FCR.



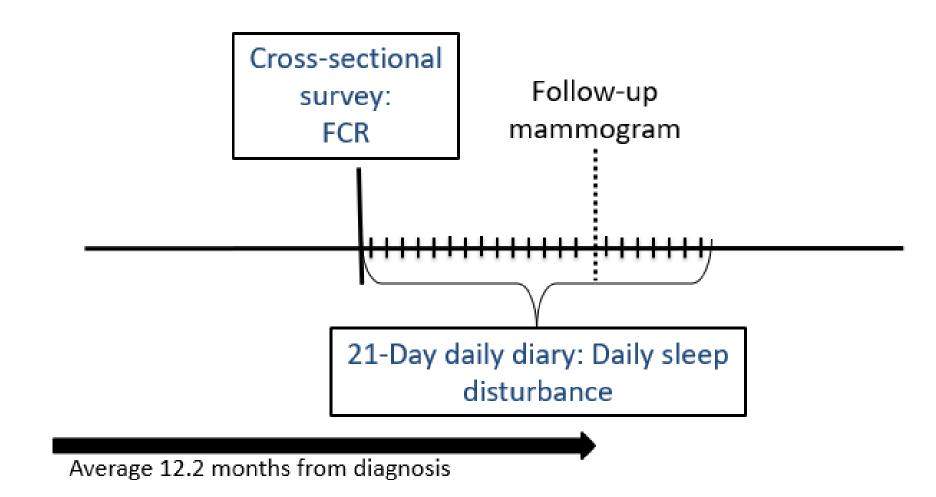
# Fear of cancer recurrence and sleep disturbance are associated, both individually and across partners.



Actor-partner interdependence modeling – associations between a survivor's FCR and her own sleep and with her spouse's sleep were estimated simultaneously in each model.







### **RESULTS:**

# Average daily sleep:

- 1. Survivor FCR

  Survivor sleep: Reduced sleep

  duration & quality

  Spouse sleep: Greater sleep onset
- 2. Spouse FCR

  Spouse sleep: Reduced sleep
  duration

## Eve of the mammogram:

- 1. Survivor FCR

  Survivor sleep: Reduced sleep

  duration & quality

  Spouse sleep: Greater sleep onset

  latency
- 2. Spouse FCR

  Survivor sleep: Greater sleep onset latency and wake after sleep onset Spouse sleep: Reduced sleep duration & quality

Findings address gaps in knowledge on FCR and sleep, which has known implications for health and mortality.