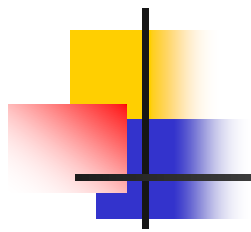




**BC Cancer Agency
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EVALUATION OF A SLEEP INTERVENTION FOR CANCER PATIENTS EXPERIENCING SLEEP-WAKE DISTURBANCES: A PILOT STUDY



Team Members and Authors

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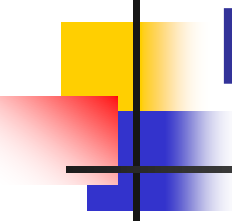
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Acknowledgements & History Leading to Pilot Study

How it all started.....in 2006.



Outline of Talk

1. Prevalence of Sleep-Wake Disturbances in the Oncology Population
2. Story of the study
3. Results: Baseline Demographics and Descriptive Analysis; Effect of Sleep Intervention: Preliminary Results



Insomnia in Population with Cancer

- Sleep-wake disturbances, particularly insomnia, are commonly experienced by 30 – 75% of cancer patients (Yamamoto, 2010).

Background:

Interventions for Insomnia

- Berger (2009) discovered that few interventions that address sleep–wake disturbances have been demonstrated to be effective.
- More research is needed.



Innovative Sleep Intervention

Sleep Intervention adapted from:
Singh, Ranjiv N. (1998) *Self-Healing:
Powerful Techniques*. Health Psychology
Associates Inc., London, ON, Canada.
(pp. 51 & 52).

Purpose



- To evaluate the feasibility and efficacy of a new, self-administered sleep intervention that will be taught to oncology patients in the Radiation Therapy Ambulatory Care Unit (RT ACU) setting at the BCCA-VC.



Hypothesis #1

- The sleep intervention, when practiced daily, will result in improvements in patients' sleep latency, sleep duration, subjective sleep quality, daytime dysfunction, sleep disturbance, sleep medication and habitual sleep efficiency.



Hypothesis #2

- The sleep intervention will be quickly and easily learned by oncology patients in the ambulatory care setting of an oncology centre within the existing model of care.



Time Line

Time 1 (Baseline)

- 1) Pittsburgh Sleep Quality Index (PSQI)
- 2) Mini Mental State Exam (MMSE)
- 3) Demographic Form
- 4) State Trait Anxiety Inventory (STAI Form Y)
- 5) Sleep Diary (take home and use daily for 30 days).
- 6) Taught Sleep Intervention and given script to take home and use daily for 30 days.



Time 2 (post intervention)

Day 30

- PSQI
- STAI Form Y
- Hand in Sleep Diary

Day 31 to 60

Focus Group Interview

- Gather info on how they found learning and using the sleep intervention and what would help to maintain its use.

Design

Setting and Sample


- Vancouver Centre of the BC Cancer Agency in the RT ACU, the Radiation Therapy Support Centre (RTSC) and Patient Review Clinic (PRC).
- Thirty six participants self-identified as experiencing a sleep-wake disturbance with all forms of cancer diagnoses.

Data Analysis



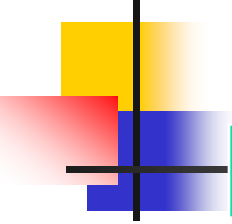
- As the study is still in progress, 20/32 full data sets have been collected and analyzed. The following preliminary results represent descriptive analysis of all 32 participants at baseline.

Baseline Demographics and Descriptive Analysis (N=32)



Demographic		
Age	30 - 78 years	Mean= 55.13 years
Gender	Male Female	4 (12.5%) 28 (87.5%)
Types of Cancer	Breast Gynea Colorectal Prostate Other	62.5% 9.4% 9.4% 6.2% 12.5%

Baseline Demographics and Descriptive Analysis (N=32)



Demographic		
Treatment Status (Last 6 Months)	Surgery	24 (75%)
	Radiation Therapy	21 (65.6%)
	Chemotherapy	10 (31.3%)
	Hormonal Therapy	8 (25%)
Medication for Sleep	Yes	13 (40.6%)
Sleep with partner?	Yes	15 (47%)
Does this disturb your sleep?	Yes	15 (47%)



Definition of PSQI

- The PSQI is a self-rated questionnaire which assesses sleep quality and disturbances over a one-month interval.
- The 19-item PSQI generates seven component scores. These add up to **Total PSQI score**. (Buysse et al, 1989)



Definition of PSQI

(7 component scores)

- Subjective sleep quality
- Sleep latency
- Sleep duration
- Habitual sleep efficiency
- Sleep disturbance
- Use of sleeping medication
- Daytime dysfunction

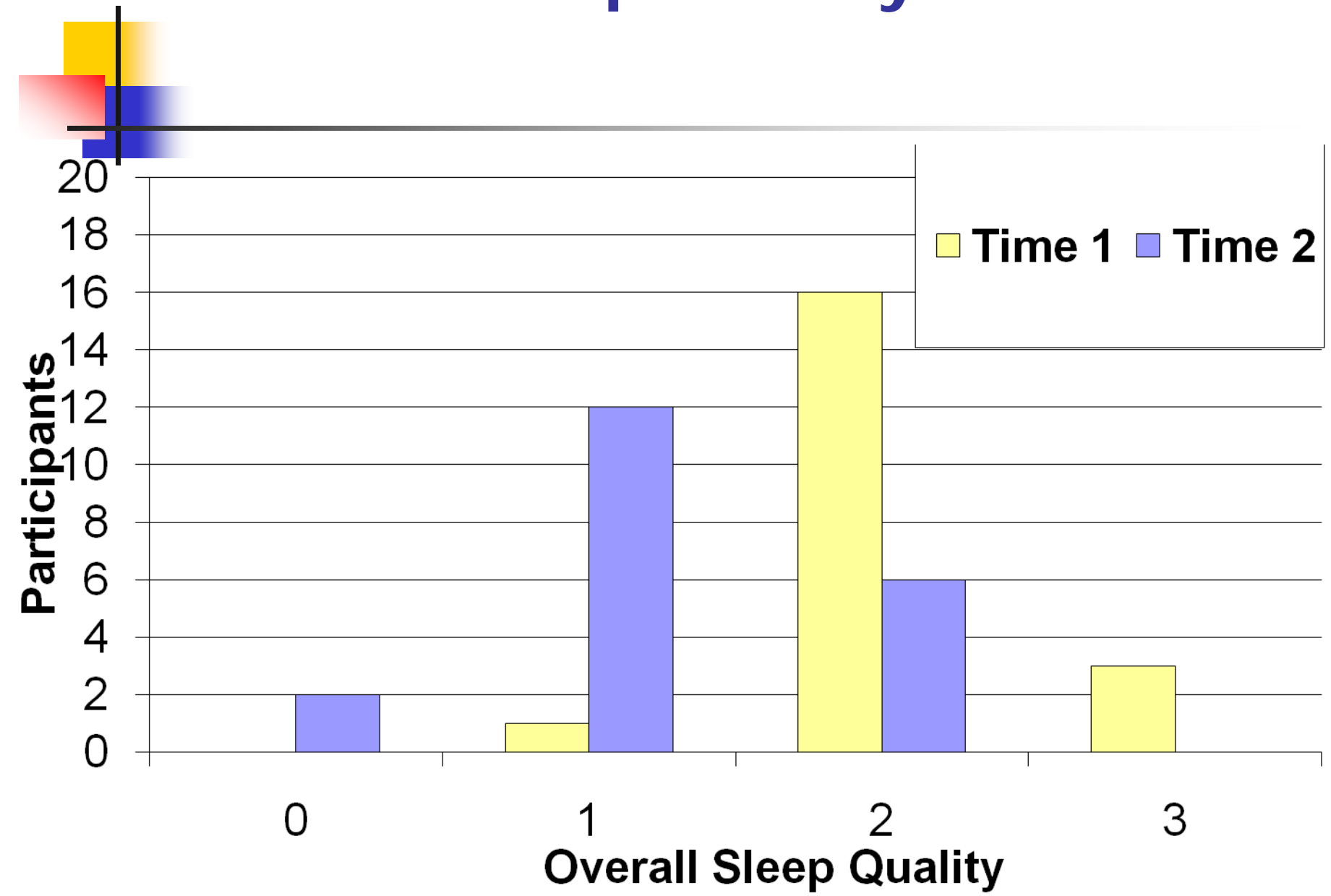
Effect of the Sleep Intervention: Preliminary Results N=20



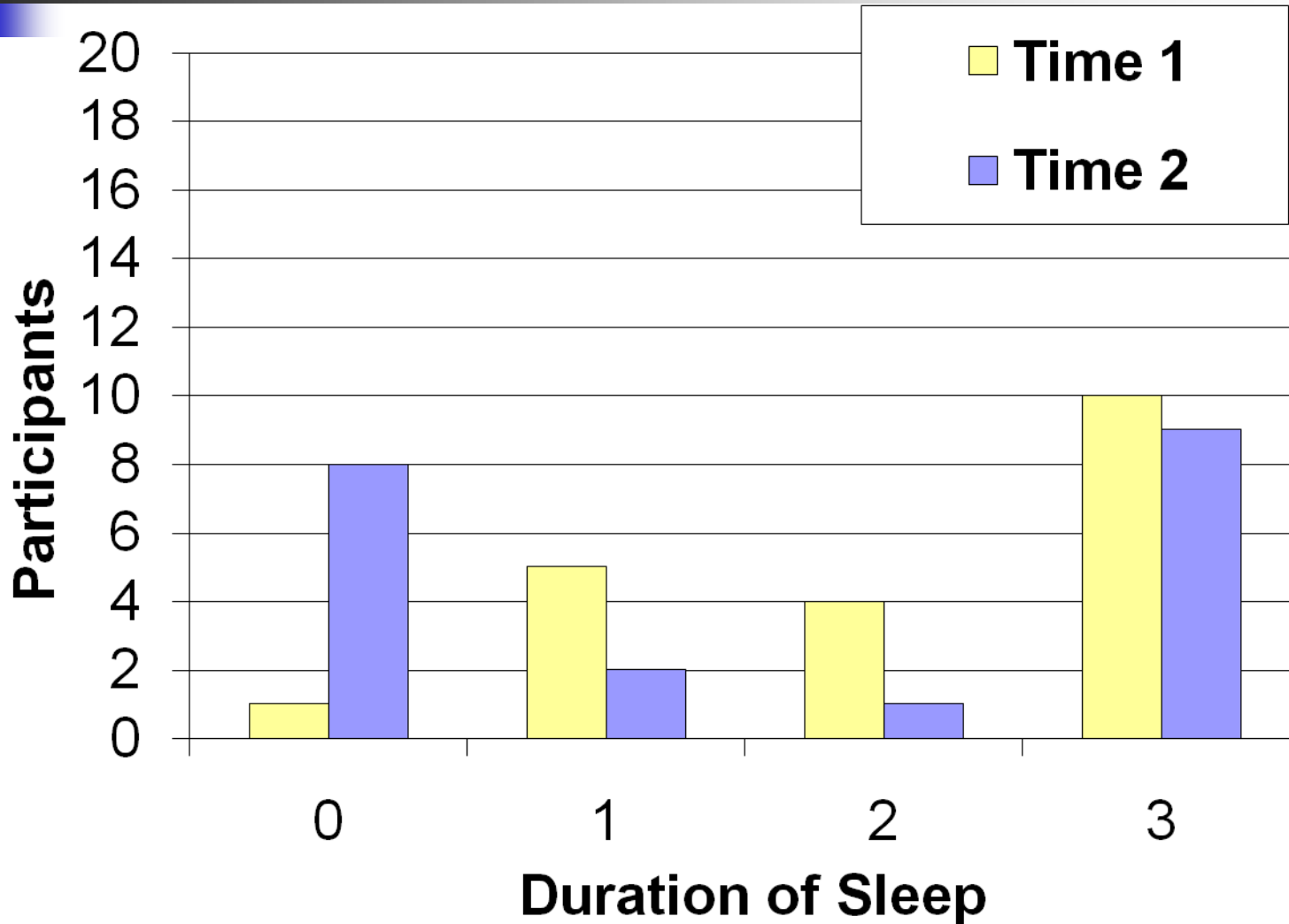
PSQI administered Baseline (Day 1) and post intervention (Day 30). Preliminary analysis revealed **significant differences** pre-post intervention on:

- **3/7 component scores of the PSQI**
- **Total PSQI score**

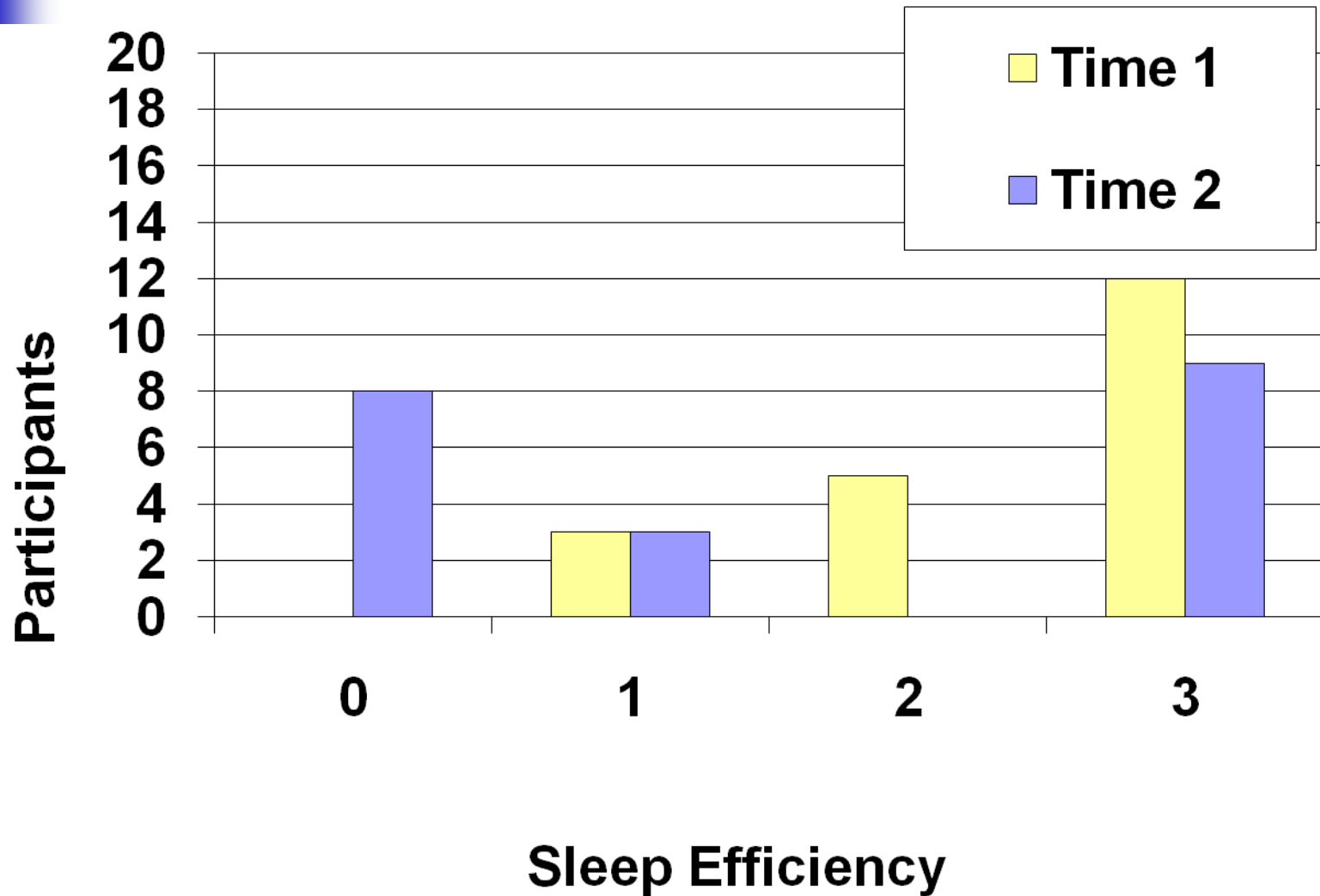
Overall Sleep Quality



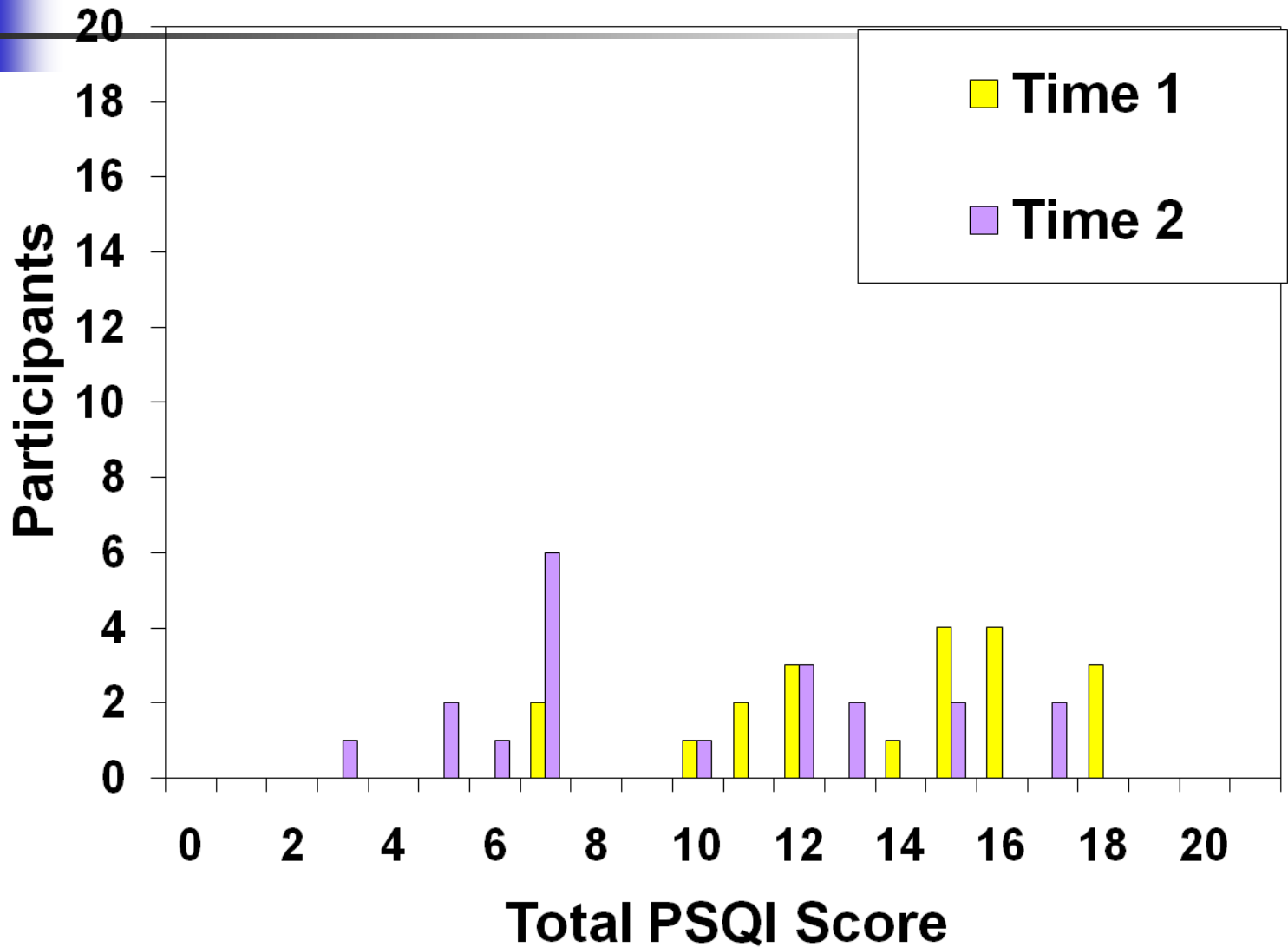
Duration of Sleep



Sleep Efficiency



Total PSQI Score





Discussion

Preliminary analysis has demonstrated significant improvement in

1. total PSQI score
2. subjective sleep efficiency
3. sleep duration
4. subjective sleep quality.

Additional data from the remaining 10 participants will be analyzed to confirm this significant effect.



Conclusion

- holds promise as a cost-effective and minimally invasive treatment alternative
- may address common, distressing and frequently overlooked sleep problems in a clinical oncology setting.
- could become a valuable addition to symptom management guidelines for sleep-wake disturbances.



IMAGINE....

Special Thanks to....





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