

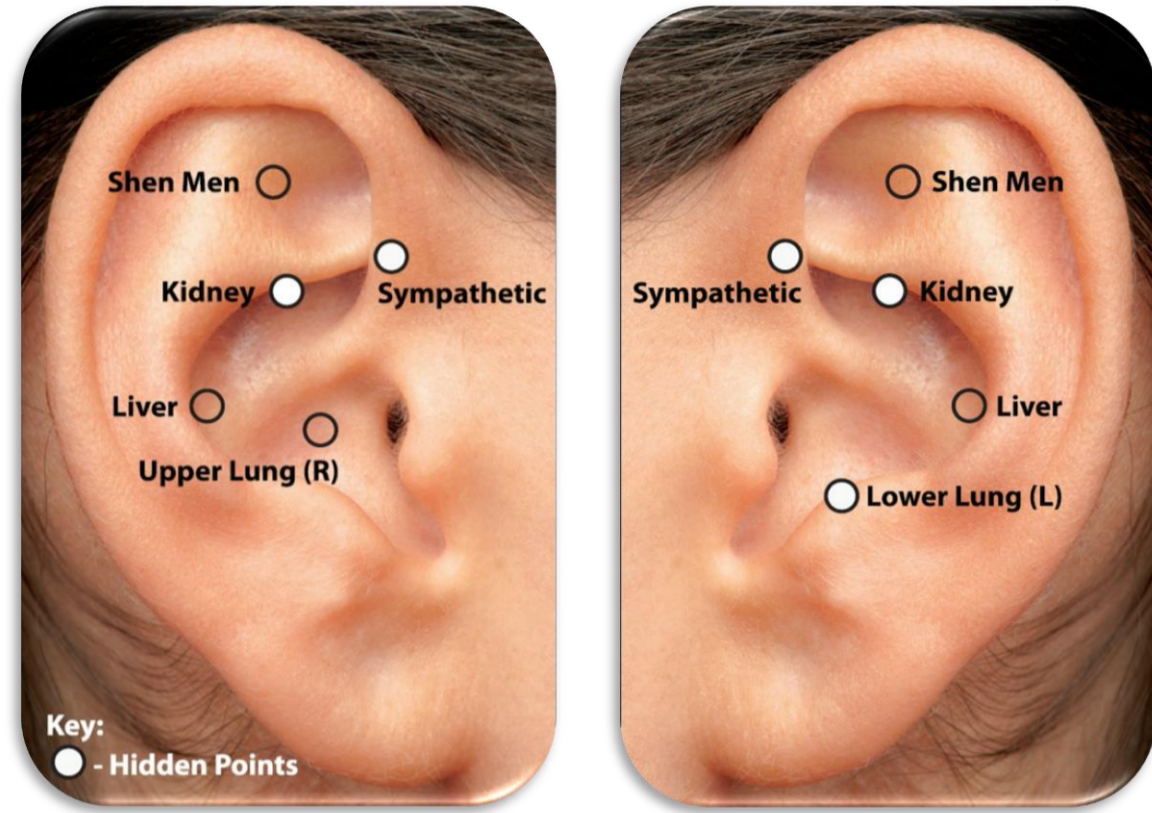
# NADA ear acupuncture and breast cancer treatment-related hot flushes & night sweats (HF&NS): evaluating 10 years of service data

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## Introduction

Following research into using the NADA ear acupuncture protocol to manage breast cancer treatment-related hot flushes and night sweats (HF&NS), we offered this as a service to breast cancer survivors who had cancer treatment at Mount Vernon Cancer Centre. After 10 years, we evaluated the service.



The NADA acupuncture protocol is a standardised treatment that uses 5 acupuncture points on the surface of the ear. It is designed for use in a group setting. In the UK, it can be delivered by licensed acupuncturists and non-acupuncturists who are trained and annually assessed by NADA UK.

Photos courtesy of NADA UK

## Key Questions

- What outcomes are reported by service users?
- How do these compare to our research findings?

## Treatments

### Eligibility criteria for Service Users

- Women age  $\geq 35$  years diagnosed with early breast cancer
- Without relapse or metastatic disease
- $\geq 6$  months post active treatment (surgery, chemotherapy, radiotherapy)
- Taking adjuvant hormonal therapy  $\geq 6$  months
- Experiencing HF&NS  $\geq 3$  months
- Self-reporting an average of  $\geq 4$  HF&NS per 24-hour period.

### Treatment schedule

Service users:

- Attended an intake interview (1 hour) to assess HF&NS and wellbeing
- Completed a baseline hot flush diary (2 weeks) before starting treatment
- Attended weekly for 8 treatments (to be completed in 10 weeks maximum).

### Acupuncture protocols

- NADA protocol delivered in small groups of up to 5 women
- Administered by NADA UK trained non-acupuncturists: 1 nurse, 1 shiatsu practitioner, 2 complementary therapists.

### Measurements

- Hot Flush Diaries** – measured HF&NS frequency and severity over a 2-week period
- Women's Health Questionnaire (WHQ)** – measured 9 domains of physical and emotional wellbeing associated with the menopause transition
- Problem Rating Scale (PRS)** – measured how bothersome women found their HF&NS.
- Measures were administered at :
  - Baseline** – at the intake interview, 2 weeks prior to treatment
  - EOT** – end of 8 treatments
  - EOT+4** – 4 weeks after EOT
  - EOT+18** – 18 weeks after EOT.

## Results

### Service use and questionnaire return

- Of 271 referrals from December 2005 to September 2015:
  - 54 withdrew or were withdrawn prior to receiving treatment
  - 4 commenced treatment, but did not complete any questionnaires
- Of the remaining 213 women for whom some paperwork exists:
  - 9 did not start treatment after having an intake interview
  - 12 had  $<4$  HF&NS per day, making them ineligible
  - 5 did not complete a baseline diary
  - 39 completed only a baseline diary
  - 3 completed diaries at baseline and EOT+18 only
- 145 services users provided evaluable data, which we compare below with results from our research (see Publications <sup>†</sup> below).

### Comparing hot flush frequency

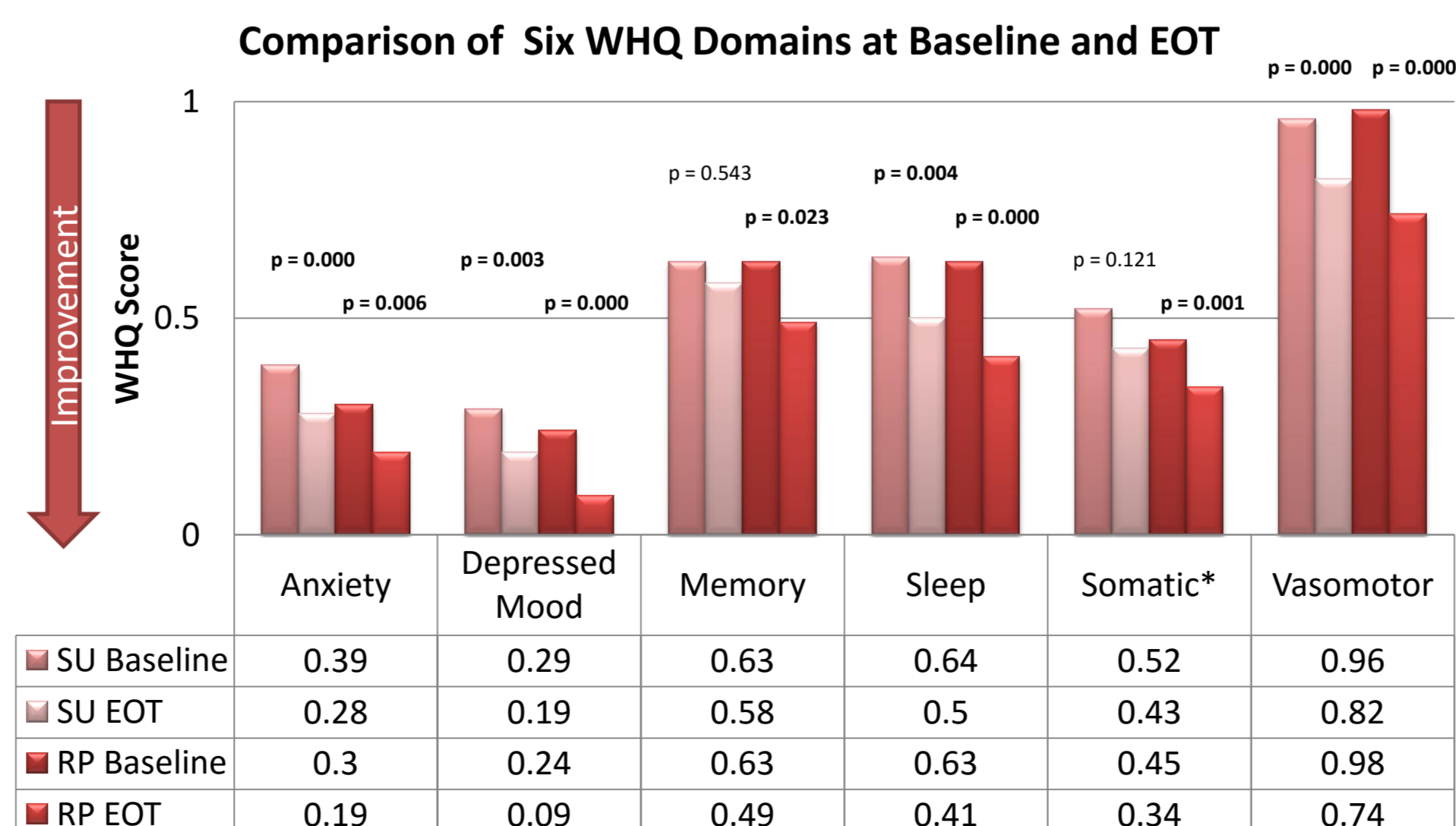
- The mean number of HF&NS at baseline were:
  - 11.3 per day (std dev = 5.3) for Service Users [SU] (n=145)
  - 10.5 per day (std dev = 5.3) for Research Participants [RP] (n= 51)
- Reductions in frequency for both groups were significant at all time points
- There was no significant difference between groups at each time point.

### Comparison of Mean % Reduction in Hot Flush Frequency

Change over baseline at		N =	Mean % Reduction	95% CI Lower	95% CI Upper
EOT	SU	137	42.8	37.3	47.9
	RP	47	35.9	25.4	45.4
EOT+4	SU	116	46.8	39.1	53.4
	RP	45	37.5	25.4	47.6
EOT+18	SU	99	44.8	32.5	54.8
	RP	38	37.1	24.8	47.4

### Comparing Women's Health Questionnaire results

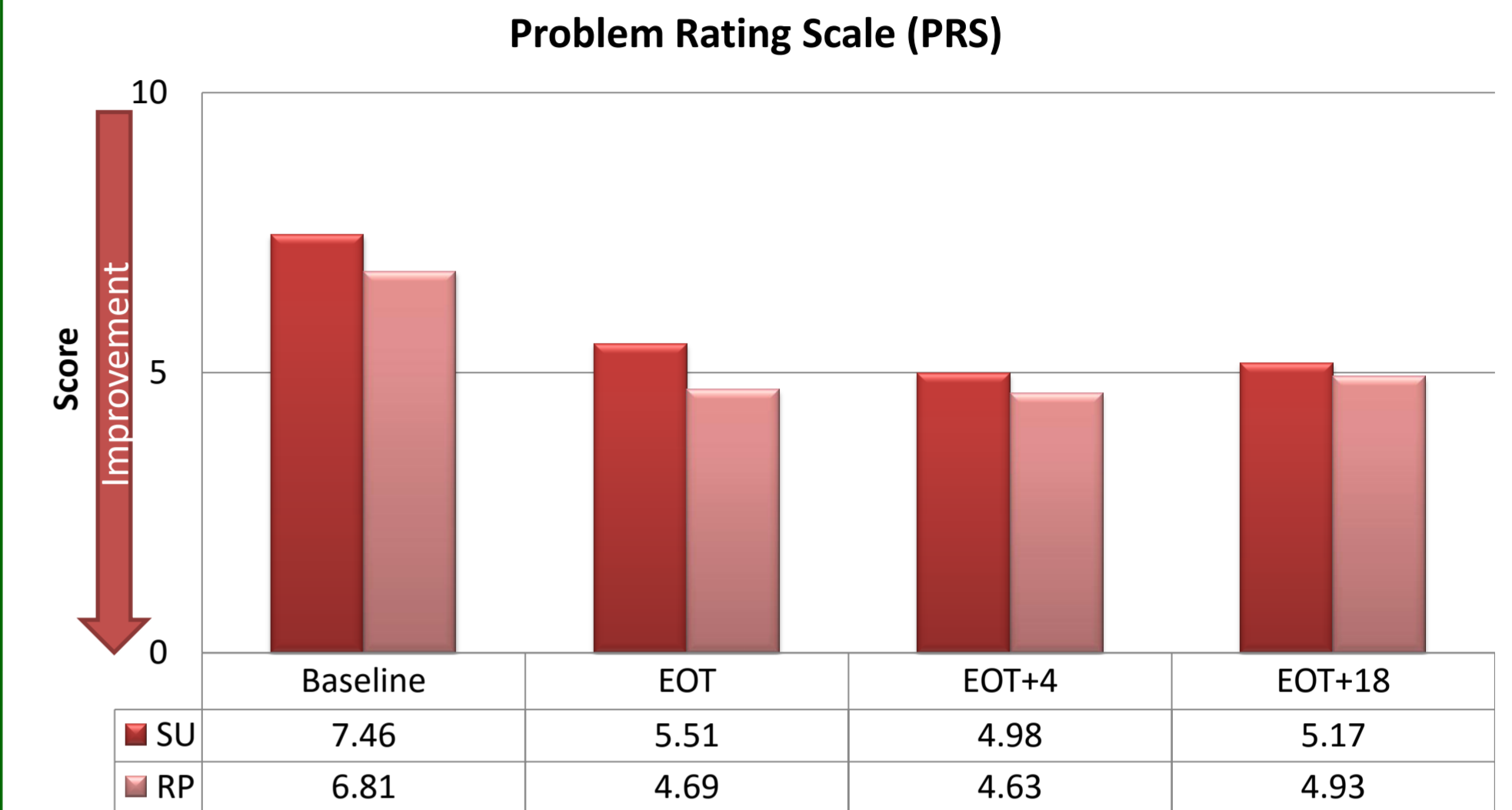
At EOT, SU showed significant improvement in four of the nine WHQ domains: Anxiety/Fears, Depressed Mood, Sleep Problems and Vasomotor Symptoms. These scores were similar to those of the RP, with similar levels of improvement. Unlike RP, SU did not report significant improvement in Memory/Concentration or Somatic Symptoms.



\* Somatic = Backache/pain, Dizzy spells, Frequent urination, Headache, Nausea, Tiredness, Pins and Needles

### Comparing Problem Rating Scale (PRS) results

PRS scores were similar for both groups at each measurement point. All changes within groups across time were significant (paired *t* test). Clinical significance (a change of 2 points) was nearly attained within each group for all measurement points over baseline.



## Discussion

- Of 187 SU who commenced treatment, only 8 (4.3%) did not complete all 8 treatments
- Questionnaire completion and return were disappointing for SU
- Data for SU and RP were remarkably consistent at EOT
- Both groups achieved clinical significance at nearly all time points for reduction of both of HF&NS.

## Conclusion

This evaluation shows that outcomes for Service Users and Research Participants can be similar. While completion of treatment was high amongst Service Users, processes for referral and data collection require improvement.



## Publications

- de Valois B, Young TE, Robinson N et al (2012) NADA ear acupuncture for breast cancer treatment-related hot flashes and night sweats: an observational study. *Medical Acupuncture*. 24(4):256-268 <sup>†</sup>
- Walker G, de Valois B, Young T et al (2007) Ear acupuncture for hot flushes - the perceptions of women with breast cancer. *Complementary Therapies in Clinical Practice* 13(4):250-7
- de Valois, B (2006) Serenity, patience, wisdom, courage, acceptance: reflections on the NADA protocol. *European Journal of Oriental Medicine*, 5(3):44-49

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