Menopause: from social meanings to psychological interventions

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Menopause: from social meanings to psychological interventions

- Definitions
- Social and historical meanings
- The biomedical model
- A cognitive model of hot flushes and night sweats (HFNS)
- Cognitive behavioural interventions (MENOS1 and 2 and EVA trials) and testing the cognitive model
Menopause definitions

- Last menstrual period average age 50-51 (4+ years duration)
- Menstrual criteria: pre, peri, postmenopause
- Hormonal criteria: ↓ oestradiol (550>80pmol/l) ↑ FSH (above 30 iu/l)
- Associated with vasomotor symptoms - hot flushes and night sweats
- Occurring in the context of midlife psychosocial changes and changes with age
Hypothalamic-pituitary ovarian axis
Hormonal regulation pathway from the brain to the ovary
<table>
<thead>
<tr>
<th>Stage</th>
<th>-5</th>
<th>-4</th>
<th>-3b</th>
<th>-3a</th>
<th>-2</th>
<th>-1</th>
<th>+1a</th>
<th>+1b</th>
<th>+1c</th>
<th>+2</th>
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<tbody>
<tr>
<td>Terminology</td>
<td><strong>REPRODUCTIVE</strong></td>
<td><strong>MENOPAUSAL TRANSITION</strong></td>
<td><strong>POSTMENOPAUSE</strong></td>
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<td>Early</td>
<td>Peak</td>
<td>Late</td>
<td>Early</td>
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<td></td>
<td></td>
<td></td>
<td><strong>Perimenopause</strong></td>
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<tr>
<td>Duration</td>
<td>variable</td>
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<td>1-3 years</td>
<td>2 years (1+1)</td>
<td>3-6 years</td>
<td>Remaining lifespan</td>
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<tr>
<td>Menstrual Cycle</td>
<td>Variable to regular</td>
<td>Regular</td>
<td>Regular</td>
<td>Subtle changes in Flow/Length</td>
<td>Variable Length</td>
<td>Persistent ≥7-day difference in length of consecutive cycles</td>
<td>Interval of amenorrhea of ≥60 days</td>
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<td><strong>SUPPORTIVE CRITERIA</strong></td>
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<td>Endocrine</td>
<td>FSH</td>
<td>Low</td>
<td>Low</td>
<td>Variable</td>
<td>Variable</td>
<td>&gt;25 IU/L**</td>
<td>Variable</td>
<td>Stabilizes</td>
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<td>AMH</td>
<td>Low</td>
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<td>Inhibin B</td>
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<td>Antral Follicle Count</td>
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<td>Low</td>
<td>Very Low</td>
<td>Very Low</td>
<td>Stabilizes</td>
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<tr>
<td>Symptoms</td>
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<td>Vasomotor symptoms Likely</td>
<td>Vasomotor symptoms Likely</td>
<td>Increasing symptoms of urogenital atrophy</td>
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</table>

* Blood draw on cycle days 2-5  
** Approximate expected level based on assays using current international pituitary standard

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Harlow et al Stages of reproductive aging workshop (STRAW). Menopause 2012
Additional medical and lay terms

- ‘Climacteric syndrome’
- ‘Menopause syndrome’ include hot flushes, loss of libido, depression, anxiety, irritability, poor memory, loss of concentration, mood swings, insomnia, tiredness, aching limbs, loss of energy and dry skin etc....
- ‘Midlife Crisis’
- ‘The Change’
Social and historical meanings

- Early theories (Roman times until C18) associated retained menstrual blood with physical, sexual and emotional decline
- C19 psychoanalysis – a neurosis inevitable mourning of loss of femininity and sexuality
- C19 psychiatry - menopause seen as a time of emotional vulnerability and the diagnosis of ‘involutional melancholia’
- C20 gynaecology - HRT and the ‘oestrogen deficiency disease’ – biomedical model
- Late C20 and early C21 - menopause as a risk factor for later disease e.g. CHD, dementia…
- Feminist/social constructionist perspectives
An ‘oestrogen deficiency disease’, a cluster of physical and emotional symptoms to be ‘treated’ by HRT

- Robert Wilson ‘Feminine Forever’ (1966) claimed that this ‘youth pill’ (oestrogen) could avert 26 psychological and physical complaints.

- The menopausal woman was ‘an unstable oestrogen starved’ woman who is responsible for ‘untold misery of alcoholism, drug addiction, divorce and broken homes’.

- ‘No woman can escape the horror of this living decay….even the most valiant woman can no longer hide the fact that she is, in effect, no longer a woman’.
Let’s look at the evidence for the biomedical model

- Epidemiological studies: are psychological problems more prevalent during the menopause?
- Cross-cultural studies: is the experience universal?
- Qualitative studies - what do women think?
- HRT outcomes – does it work?
Epidemiological and prospective studies

- Mood and well-being
  - Still controversial with polarised debates
  - Overall not much change and improvement after menopause
  - Some evidence of increase for 10% of women during perimenopause
  - Psychosocial factors stronger predictors than hormonal factors, e.g. employment, socioeconomic status, marital status, life stress, as well as beliefs about menopause
Midlife peak in common mental disorders: prevalence of high GHQ scores by gender and age

Lang et al 2010 Psychological Medicine
Prevalence of high GHQ scores for women by age and income
Prevalence of high GHQ scores for men by age and income
Menopause across cultures

- Considerable differences across cultures
- More problematic in Western cultures, associated with more negative attitudes
- Hot flushes less prevalent in some countries e.g. India, Japan and China
- Culture includes attitudes to older women, social meanings and attributions to menopause but also lifestyle (diet, exercise), socioeconomic and reproductive differences (Hunter et al 2009, Climacteric)
- So the western experience of menopause is not universal
What do women think about menopause?
Qualitative study of 50 UK women

Six main themes:

- Bodily changes – hot flushes, night sweats
- Non event: continuation of the self
- No more periods!
- Change in reproductive stage – happens earlier
- Sign of ageing
- Staving off the unknown: uncertainty relating to negative social discourses

Therefore both positive and negative images

(Hunter & O’Dea 1997)
Hormone Replacement Therapy (HRT) Propective Studies 2002-2003

- **Women’s Health Initiative** (2002): Found links between HRT use and breast cancer, heart disease and stroke; trial stopped
- **Million Women Study** (2003): HRT use led to increased significant risk of breast cancer, particularly oestrogen-progestagen
- **Nurses Health Study** (2000): HRT use associated with increased risk of stroke
Decline in use of hormone therapy among postmenopausal women in the United Kingdom

Usha Menon, MRCOG; Matthew Burnell, PhD; Aarti Sharma, MRCOG; Aleksandra Gentry-Maharaj, PhD; Lindsay Fraser, BSc; Andy Ryan, PhD; Mahesh Parmar, PhD; Myra Hunter, PhD; and Ian Jacobs, FRCOG, for the UKCTOCS Group

(Menon et al, Menopause Vol 14(3 Pt 1), 2007)
Polarised debates in media and scientific community

‘HRT does more harm than good’ Daily Mail September 2002

Studies ‘put many women off HRT’

Many women are scared off hormone replacement therapy by studies into its long-term effects, research suggests.

A survey shows 58% of women stopped taking HRT after the results of a major trial were published in 2002.

Treatment of menopausal symptoms: what shall we do now?

During the past few years, many women and doctors have revised their opinions of hormone replacement therapy (HRT) for menopausal symptoms, and a substantial number of individuals have discontinued its use because of concerns about side effects. Numerous alternatives to HRT are promoted, and assessment of the quality of evidence about the safety and effectiveness of these compounds can be difficult. In this review, we summarise the data from studies addressing the efficacy, risks, and benefits of frequently prescribed treatments, and offer evidence-based clinical guidelines for the management of menopausal symptoms. Although few comparative studies exist, oestrogen alone or combinations of oestrogen and progesterone are likely to be the most effective treatments for menopausal hot flushes and vaginal dryness. Tibolone is as effective as HRT; however, and might also improve libido. For those who wish to avoid hormonal treatments, there are few effective options. Selective serotonin reuptake inhibitors might be effective (in the very short term (less than 12 weeks) and are well tolerated. There is not enough evidence that any of the complementary therapies available are any better than placebo for menopausal vasomotor symptoms, and few safety data exist.

Nonhormonal Therapies for Menopausal Hot Flashes

Systematic Review and Meta-analysis

Heidi D. Nelson, MD, MPH
Kimberly K. Vesco, MD
Elizabeth Haney, MD
Rongwei Fu, PhD
Anne Nedrow, MD
Jill Miller, MD
Christina N. Miranda Wi
Linda Hum

Context Concern regarding the adverse effects of menopausal symptoms has led to increased interest in nonhormonal alternatives to treat menopausal hot flushes.

Objective To assess the efficacy and safety of nonhormonal hot flushes by reviewing systematic reviews and meta-analyses.

Data Sources MEDLINE (1966 to 2007), Cochrane Library (1997 to 2007), and other sources (eg, reports, book chapters).

Search Strategy See Table 1.

Results The majority of the evidence is from studies with small samples and the included systematic reviews are of low methodologic quality.

Conclusion Although the evidence for nonhormonal therapy is limited, some evidence suggests that interventions, including vitamin D, soy, and black cohosh, may be effective in controlling menopausal hot flushes.

Review Article

Complementary and Alternative Therapies for the Management of Menopause-Related Symptoms

A Systematic Evidence Review

Anne Nedrow, MD; Jill Miller, MD; Miranda Wi, PhD; Peggy Nygren, MA; Lacie Hoyt Huffman, MS; Heidi D. Nelson, MD, MPH

Black Cohosh Extract 160mg

180 tablets our price £5.99
369 tablets our price £16.99

Popular in the USA, Black Cohosh is used to relieve symptoms associated with menopausal hormonal imbalance. It is well thought of by the brain as serotonin is known to improve depression, menopausal women expect this to help benefit from this popular supplement.

Our Black Cohosh tablets are a great n
To summarise...

- Negative social meanings draw on historical and biomedical perspectives resulting in an overattribution of ‘symptoms’ and negative attitudes to the menopause.

- The evidence from prospective, cross-cultural and outcome studies of HRT challenge the biomedical model.

- However, negative beliefs about menopause are prevalent and impact on women’s experience (Ayers, Forshaw & Hunter. *Maturitas* 2010, 65; 28–36)
Menopause: from social meanings to psychological interventions

- Hot flushes and night sweats: a cognitive model
- Hot flushes and night sweats: cognitive behavioural interventions (MENOS1 and 2 and EVA trials)
- Testing the cognitive model
Hot flushes and night sweats

- Heat and sweating on face, torso, variable lasting several minutes; highly variable
- 60-70% women during menopause transition lasting on average 4 years, problematic for 20%
- Negative impact on sleep, social engagement and quality of life
- Exact cause unknown; rate of change of oestrogen lowers threshold for HFNS and some evidence from lab studies that stress also lowers the threshold for flushing
Measurement of hot flushes and night sweats

- Subjective frequency (diaries and questionnaires)

- Ambulatory sternal skin conductance (SSC) provides physiological measure of frequency

- Problem-rating or interference (Hot flush Rating Scale, Hunter et al 1995) tends to be used as a main outcome in clinical trials as it is associated with QOL and help-seeking
Sternal skin conductance trace of hot flushes
Bahr monitor (Simplex Sci.)
Psychological studies

- Evidence that paced breathing can be beneficial (Irvin et al 1996; Wijma et al 1997)
- Triggers identified in 50% HF e.g. stimulants, rushing
- Associated with general stress and with anxiety (before menopause) (Freeman et al 2005; Hunter et al 2009)
- Negative beliefs about menopause (MRQ) associated with NFNS Problem rating (Rendall et al 2008; Hunter & Haqqani 2011)
- Cognitive reactions (lack of control, embarrassed, unattractive) associated with HFNS distress (Reynolds 2000; Hunter & Rendall 2007)
- CBT promising results in exploratory trials with well women (Hunter & Liao 1996) and breast cancer patients (Hunter et al 2010)
Hot flush beliefs and behaviours

- Hot Flush Beliefs Scale (Rendall, Simmons, Hunter, 2008 Maturitas) three main cognitive reactions:
  - **Social anxiety/embarrassment**
  - Perceived **lack of control** over hot flushes
  - Negative **beliefs about sleep** and night sweats

- Hot Flush Behaviour Scale (Hunter et al 2011 Menopause)
  - **Avoidance**
  - Cooling (safety?) behaviours
  - **Positive behaviours** (accepting, breathing, humour)
  - Social embarrassment associated with avoidance
  - Positive behaviours with more control and neutral/positive beliefs
A cognitive model of hot flushes and night sweats


Information input
- Oestrogen Withdrawal
- Menopause status
- Hot flush threshold
- Triggers

Detection & attribution
- Perceived hot flush
  - Frequency
- Selective attention
  - Body focus
- Stress negative affectivity

Cognitive appraisal
- Problem-rating
- Beliefs: Menopause
  - Hot flushes
- Mood
  - Depression
  - Anxiety

Behaviour
- Behavioural reactions
- Help seeking
<table>
<thead>
<tr>
<th>Stage of Model</th>
<th>Mechanism</th>
<th>Intervention component</th>
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<tbody>
<tr>
<td>Information input</td>
<td>Raise physiological HF threshold</td>
<td>Paced breathing</td>
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<tr>
<td></td>
<td>Reduce triggers</td>
<td>Stress management</td>
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<td></td>
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<td>Monitor and modify triggers</td>
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<tr>
<td>Symptom perception</td>
<td>Shift attentional focus</td>
<td>Paced breathing</td>
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<tr>
<td></td>
<td>Improve mood</td>
<td>Stress management</td>
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<tr>
<td></td>
<td>Increase accurate attribution of sensations</td>
<td>Cognitive therapy</td>
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<td></td>
<td></td>
<td>Provide information about aetiology, causes and impacts of HF/NS and menopause</td>
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<tr>
<td>Cognitive appraisal</td>
<td>Change negative automatic thoughts and beliefs about HF/NS, sleep and menopause</td>
<td>Provide information about aetiology, causes and impacts of HF/NS and menopause</td>
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<td>Improve mood</td>
<td>Cognitive therapy</td>
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<tr>
<td></td>
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<td>Stress management</td>
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<tr>
<td>Behaviour</td>
<td>Improve relaxation skills</td>
<td>Paced breathing</td>
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<td>Increase acceptance of HF/NS</td>
<td>Behavioural experiments, e.g. communication and reducing avoidance</td>
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<td>Increase self-efficacy in coping with HF/NS</td>
<td>Sleep hygiene</td>
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<td></td>
<td>Change sleep habits</td>
<td>Sleep hygiene</td>
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</table>
Testing the cognitive model

Cross-sectional studies testing model hypotheses

Comparing perceived HF & physiological patterns and SEM

Clinical trials
Does the CBT intervention work?

- MENOS 1
  Breast cancer patients

- MENOS 2
  Well women

Process studies

Modelling mediators and moderators
Symptom perception: study of ambulatory HFNS

- Compared subjective reports and physiological HFNS in 140 women; 1248 subjective and 1996 physiologically defined HFNS
- Hypothesized that bodily focus and mood would predict over-reporting
- 37% HFNS were concordant, 47% under-reported and 16% over-reported, suggesting higher rates of under-reporting than over-reporting.
- Somatic amplification and smoking predicted over-reporting (Stefanopoulou and Hunter, submitted)
Structural equation modelling to predict HFNS Problem rating

MENOS 2 baseline data (n=140)
Variables: Personality (optimism, somatic amplification), mood (perceived stress, depressed mood, anxiety), HFNS beliefs and HFNS frequency, problem-rating and 24-hour sternal skin conductance monitoring.

**Results:** Somatic amplification, stress and anxiety predicted HFNS problem-rating but only via their impact on HFNS beliefs. HFNS frequency, smoking and alcohol intake also predicted problem rating. The final SEM explained 53.2% of the variance in problem rating.

**Conclusions:** Findings support the influence of psychological factors on experience of HFNS at the level of symptom perception and cognitive appraisal of HFNS.

(Hunter & Chilcot, J Psychosom Res in press)
SEM (trimmed) testing a cognitive model of HFNS. Standardised estimates are shown. All paths are significant.
CBT clinical trials

- **MENOS1** RCT comparing Group CBT with usual care for breast cancer patients with subjective and physiological measures (SSC 24 hour monitor) (Mann et al *Lancet Oncology* 2012 13(3):309–318)

- **MENOS2** RCT comparing Group CBT with Self-Help CBT and usual care with subjective and physiological measures (SSC 24 hour monitor) in the community (Ayers et al *Menopause* 2012; 19,7:749-759)

- **EVA** RCT Group CBT compared to exercise, exercise plus CBT and usual care in Dutch trial (Duijts et al *J Clin Oncology* 2012: 30 [33]: 4124-4133)
Cognitive behavioural intervention

4 x 2 hour sessions or 6 x 1.5 hours 6-10 women

Aims: To reduce the problem-rating of HFNS

- Psychoeducation about HFNS and menopause
- Monitoring HFNS, identifying precipitants
- Paced breathing for stress and HFNS
- Cognitive therapy for stress and beliefs about HFNS and menopause
-Behavioural expts and strategies
- Focus on night sweats and sleep

Manualised, ppt presentations, CDs and homework sheets
Typical Vicious Cycle

**Behaviour**
Avoid situations, hide face, use fan, Open windows, nap in the day, stop what I’m doing until it passes

**Physical Symptoms**
Heat, sweaty, palpitations, red face, breathless, nausea, tingling

**Feelings**
Embarrassed, ashamed, anxious, angry, trapped, frustrated, out of control

**Thoughts**
People will think something is wrong with me, I’ll never get back to sleep, My body is letting me down, I look old unattractive, I can’t cope!
MENOS 2 RCT of Group CBT for well women who have menopause symptoms

Screened= 295
Randomised=140

Interview and Randomisation
Pre-treatment assessment

Group CBT
N=48
Post-treatment Assessment N=46
6-8 weeks later
Follow up N=39
6 months post randomisation

Self-help CBT
N=47
Post-treatment Assessment N=40
6-8 weeks later
Follow up N=32
6 months post randomisation

Control
N=45
Assessment N=43
6-8 weeks later
Follow up N=40
6 months post randomisation
Cognitive behavioural interventions

Group CBT
- Delivered by a Clinical Psychologist in four 2 hour sessions, once a week for 4 weeks to groups of 6-10 women

Guided Self Help CBT
- Given same information and CD as group
- Sessions were guided using initial interview and two telephone contacts
Recruitment

- 140 women
- Aged 18 plus
- Problematic HF/NS for at least 1 month
- Minimum of 10 HF/NS a week
- From: South London Doctor’s surgeries, breast screening clinics, websites etc.
Measures

- **Primary outcome:** The Hot Flush Problem Rating
- **Secondary outcomes:** Hot flush frequency (subjective and physiological, anxiety and depressed mood (Women’s Health Questionnaire), Health related QOL SF-36
- **Mediators:**
  - Hot Flush Beliefs and behaviours
  - Rosenberg’s Self-Esteem Scale
  - The Perceived Stress Scale
  - The Somatic Amplification Scale

- Treatments and use of services (6 and 26 wks only)
- Qualitative Interviews – perceptions of symptom change and thoughts about CBT (26 wks only)
Sociodemographics and hot flush measures

- Mean age 53 years (SD=5.4)
- Mostly married or cohabiting (76%)
- Ethnicity 82% white British
- Education: up to 16 yrs 33%; above 16 yrs 67%
- 40% perimenopausal, 60% postmenopausal

- Average 63 (sd=49) HF/NS per week
- Problem rating average 5.9 (sd=2.3) (1-10)
- Mean symptom duration was 3.9 years (SD=3.0), ranging from 2 months to 31 years
Results

- **HF/NS Problem rating**
  Sign group differences for both Group CBT and Self help CBT compared with usual care at 6 and 26 weeks

  **Effect sizes:**
  - Group CBT: 1.18 (CI 1.36-2.88)
  - Self-Help CBT: 1.41 (CI 1.29-2.86)

- **HF/NS Frequency**
  Frequency reduced: no sign for HF but sign group difference for NS

- Improvements in mood and QOL at 6 weeks for both Group and Self Help CBT; emotional and physical functioning improvements 26 weeks for Group CBT.

- Sign changes in HFNS beliefs and behaviours apart from cooling behaviours – investigating moderators and mediators.
Percentage of participants with a clinically significant improvement on hot flush problem rating (2 point reduction) at 6 and 26 weeks post randomisation

<table>
<thead>
<tr>
<th>Group</th>
<th>% who had a clinically significant reduction at 6 weeks</th>
<th>% who had a clinically significant reduction at 26 weeks</th>
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<tbody>
<tr>
<td>Group</td>
<td>70%</td>
<td>60%</td>
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<tr>
<td>Self help</td>
<td>80%</td>
<td>80%</td>
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<tr>
<td>Control</td>
<td>40%</td>
<td>40%</td>
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</table>
Conclusions

- These results suggest that both Group and Self Help CBT may be viable alternatives to medical treatments.
- Both treatments are brief, acceptable, have sustained effects and Group CBT particularly had additional impact on QOL.
- Significant reductions in Problem Rating and some improvements in subjective NS frequency.
- Recent analysis of physiological monitor data using revised pattern recognition showed small but significant reduction in physiological HF frequency for CBT versus usual care (Stefanopoulou & Hunter Menopause, in press).
- Physiological and cognitive appraisal changes suggested
MENOS 1: RCT of Group CBT for women who have menopause symptoms following breast cancer treatment

Mann et al (2012)

Recruitment (278)

Screening for eligibility (101)

Randomised N = 96

CBT 1-6
n = 49

Usual care
n = 47

n=43 Post-treat n=45

n=40 6 mth follow up n=40

Cancer Research UK project grant
ISRCTN13771934
MENOS 1 Sample and clinical characteristics

- Age: 54 (sd=8) years
- Ethnicity: 85% white; 2% Asian; 9% Black; 3% other
- Education: 16yrs or more 65%
- 57% working; 59% living with partner; 63% had had children
- 52% premenopausal at diagnosis
- Approx 3 years (SD=3.5) since Br Ca diagnosis
- 41% mastectomy; 66% chemotherapy; 80% radiotherapy; 86% endocrine treatments
Hot flushes and night sweats at baseline

- Average duration: 26 mths (SD=39)
- Frequency of HF/NS: 70 (sd=39) per week
- Problem-rating (1-10): 6.32 (sd=2.23)
- 33% had taken HRT in past
MENOS1 Results

- Sign effect of Group CBT compared to usual care in reducing problem rating of menopausal symptoms
- Sign improvement in depressed mood (WHQ), sleep and QOL (SF36) maintained improvements at 6 months
- **Effect size 1.19** at 9 weeks and 1.07 at 26 weeks
- No sign change in physiological measure nor overall frequency of HF/NS
- No CBT related adverse events
- Suggest changes in symptom perception/cognitive appraisal rather than physiological level.
MENOS 1 Percent showing clinically significant reduction in Hot Flush problem rating
EVA: RCT Group CBT compared to exercise, exercise plus CBT and usual care (Duijts et al 2012)

- 422 premenopausal breast cancer patients randomised
  - CBT n=109  PE n=104
  - CBT/PE n=106  Usual care n=103.
- Reassessed at 12 weeks and 6 months

Results:
- Sign reduction in HFNS Problem Rating for CBT and CBT/PE groups but not for PE or usual care at 12 weeks and 6 months
- Effect sizes ranges from 0.39-0.56.
- Some problems with compliance in all groups but support the MENOS findings
A cognitive model of hot flushes and night sweats

Information input

- Oestrogen Withdrawal
- Menopause status
- Hot flush threshold
- Triggers

Detection & attribution

- Perceived hot flush Frequency
- Selective attention
- Body focus
- Stress negative affectivity
- Mood
- Depression
- Anxiety

Cognitive appraisal

- Problem-rating Severity
- Control and Social beliefs
- Hot flushes

Behaviour

- Behavioural reactions
- Help seeking

MENOS 1 and 2 qualitative interviews: women’s reaction to the CBT using IPA

TOTAL (n=50)

MENOS 1 participants (n=20) Nov 2009-Mar 2010

10 interviews (main analysis)

10 Interview (validation)

MENOS 2 participants (n=30) Nov 2009-Aug 2010

Group CBT (15 interviews)

Self-Help (15 interviews)

Main analysis (10 Interviews)

Validation (5 Interviews)

Main analysis (10 Interviews)

Validation (5 Interviews)

Summary of main themes and sub themes (MENOS 1 & 2)

**Theme 1: Making sense of symptom change**
- Real or perceptual?
- Understanding causes/own contribution

**Theme 2: Improved coping and confidence**
- Restored sense of control
- Acceptance through knowledge

**Theme 3: Acknowledge/challenge the menopause taboo**

**Theme 4: Social support versus independent learning**
- Support and understanding
- Social comparisons
- Motivation, autonomy and flexibility

**Theme 5: Tailoring the treatment to individual needs**
- Goals relevant to my situation
- Selected treatment strategies
Qualitative interviews:

- Results were consistent with the results of the MENOS 1 and 2 trials
- Through treatment, women changed their relationship to their symptoms
- Improved coping (using information, paced breathing and strategies) associated with a restored sense of control
- Acceptance seemed to be central to improved experience (staying with the hot flush symptoms, rather than avoiding)
- Women experienced beneficial changes which extended beyond their HFNS symptoms
Current trials and future directions

- Developing cCBT with Dutch group for breast cancer patients (Aaronson & Cuijpers)
- MANCAN RCT of self help CBT for men with HFNS following treatment for prostate cancer (Yousaf, Stefanopoulou, Hunter in progress)
- Investigating role of attentional bias in ABM studies (Stefanopoulou, Cobeanu, Hunter in progress)
- Plan to run training for staff in Group CBT

Thank you