

National Association for Holistic Aromatherapy

# BEYOND AROMATICS 2025

## AROMATHERAPY CONFERENCE



**Live Presenter:**  
**Marian Reven**

**Aromatherapy and the Experiences of  
Women in the Appalachian Coal Camp**

October 23-25, 2025

# Disclosures

- No conflict of interest to report
- **Funding** provided by the Faith Community Nurse Outreach in West Virginia, United States
- **Human subjects' protection:** This study is approved by the West Virginia University Institutional Review Board (IRB) #2307817802 with expedited status and expiration 1/8/2029.

# Learning outcomes

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## Formulate

Formulate next steps to incorporate findings from research studies into your practice

## Apply

Apply knowledge gained through this study to an aromatherapy consult or encounter

## Recognize

Recognize one opportunity for sharing aromatic interventions that can raise impact in your area

# The story: Aromatherapy & Sleep

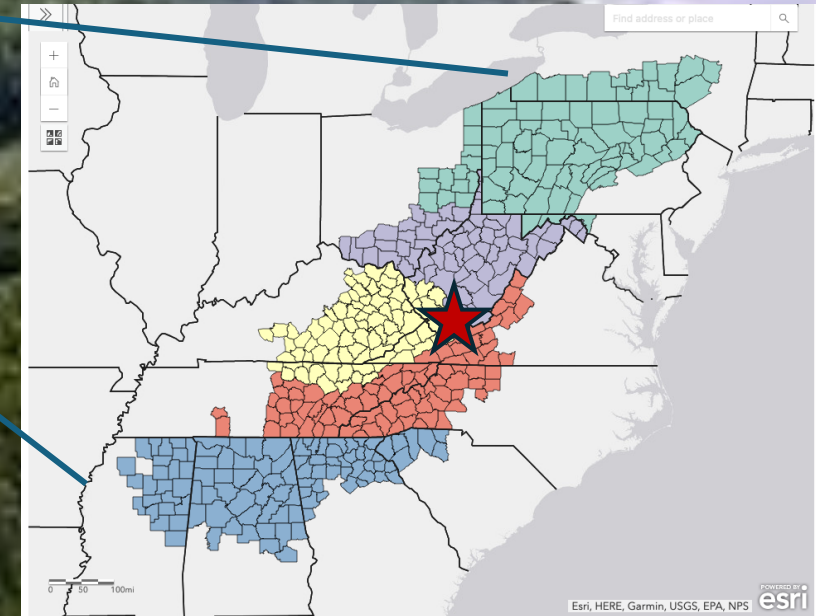
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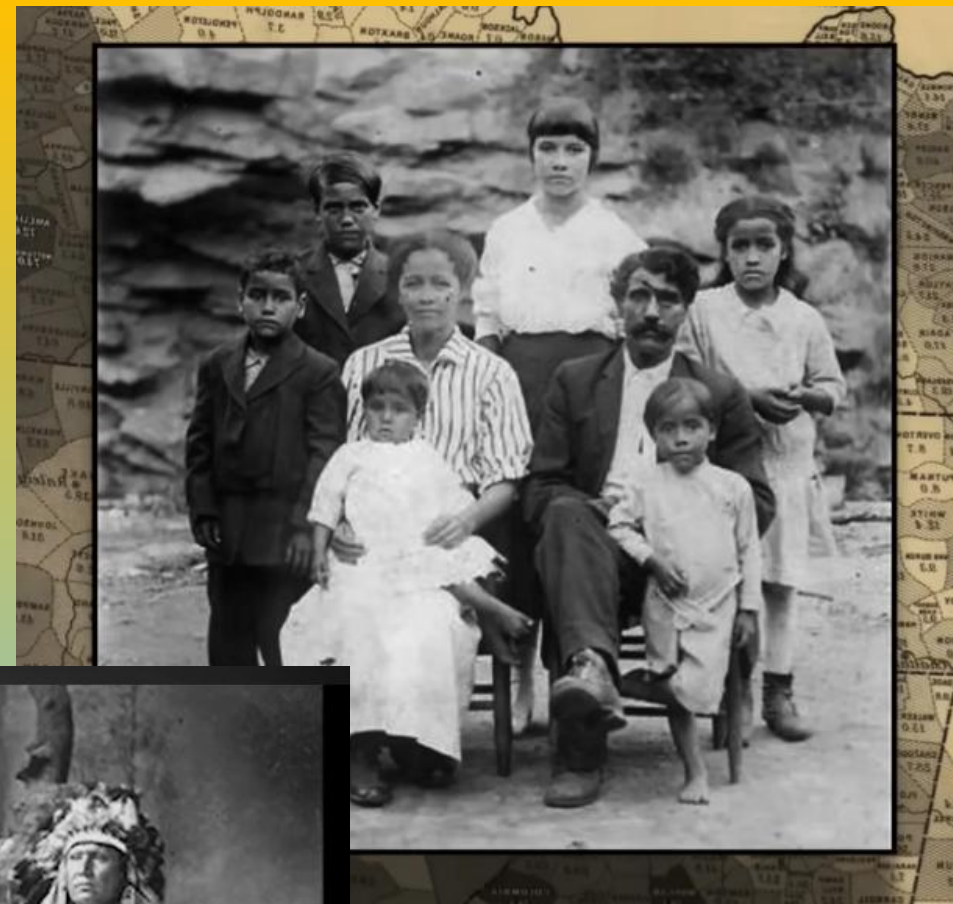
**INVITATION**



**ACTION**



# Appalachia, United States



- European:  
    Scotch-Irish
- Native tribal:  
    Cherokee
- Special race:  
    Melungeon





[https://en.wikipedia.org/wiki/Welch,\\_West\\_Virginia](https://en.wikipedia.org/wiki/Welch,_West_Virginia)

**Sept 2023-Dec 2024**

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# Legacy in the coal camps

From depressed to apocalyptic conditions

Coal county residents suffer

cancers

obesity related illnesses

heart disease

diabetes

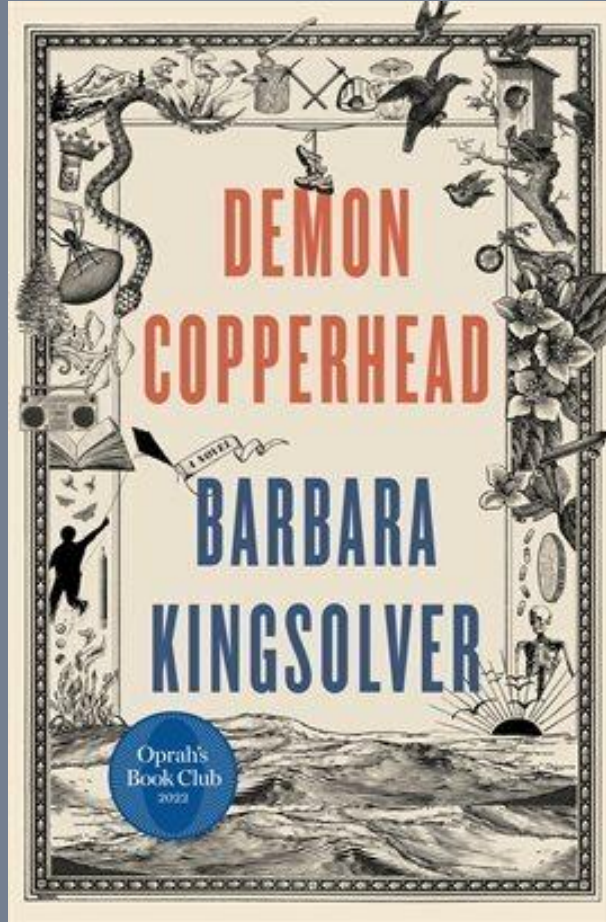
smoking

opioid abuse

“Job losses and poverty are the fertile ground in which drug abuse grows. . . many of our people have simply given up looking for jobs. They have lost their homes, their cars, their dreams and their hope.” Bill Raney, president of West Virginia Coal Association



A coal train moves through Thurmond, WV, once a prosperous coal mining town, now abandoned. Photo: [kartografia](#) via Flickr CC



# Highlanders

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- Books by Horace Kephart
- Superstitious
- Suspicious
- Self-sufficient

# Appalachian Conjuring

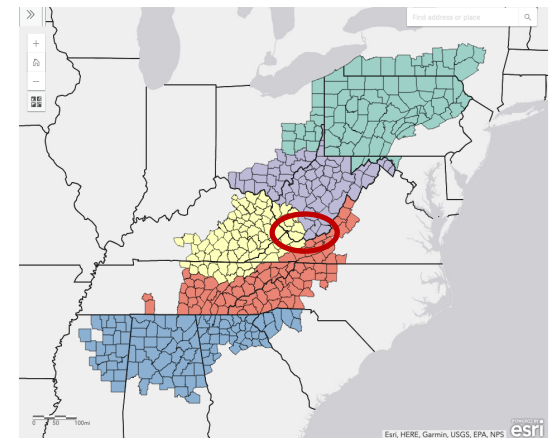
**100 Spells, Conjurings, Healings And  
Folk Practices from Modern Day Appalachian Witches  
And Granny Women Magick Descendants**

# McDowell County, WV, USA (535 mi<sup>2</sup>)

<https://www.census.gov/quickfacts/fact/table/mcdowellcountywestvirginia/PST045224>



- Population approx. 17, 439 with steady decline (1950 = 100,000)
- Female 46.8%
- 65 and older 23.6%
- White 88.8%
- Black 9.5%
- Household income, median, \$29,980
- 34.8 minutes, mean travel time to anything...



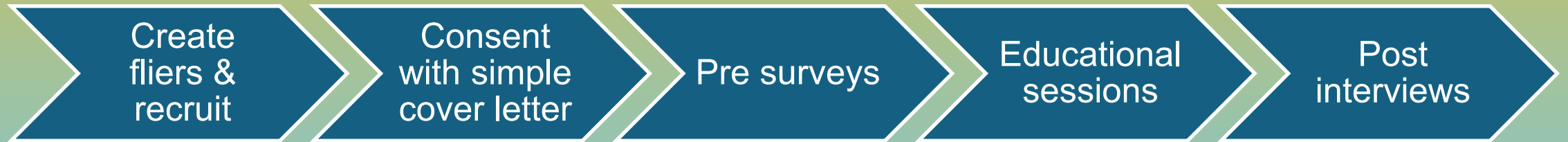


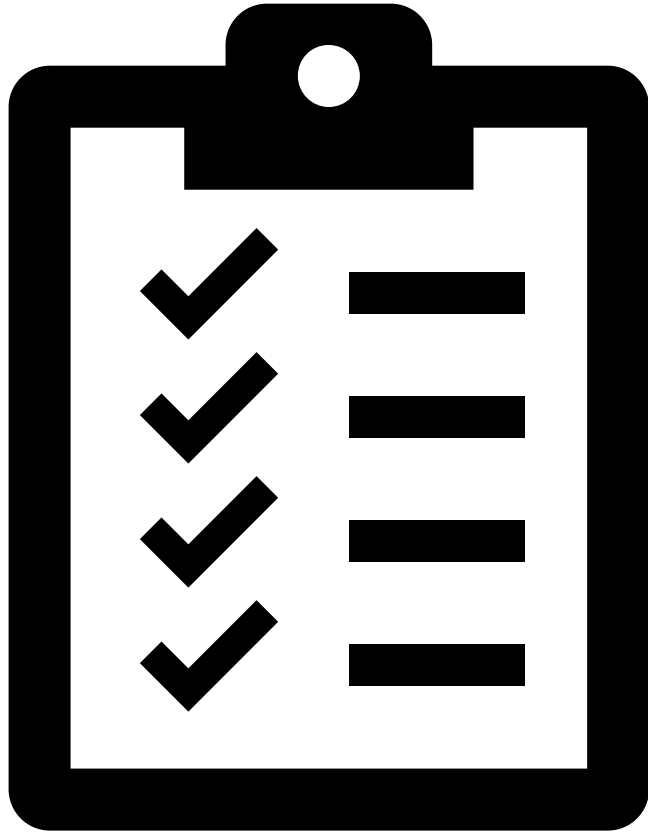


# Methods

Quantitative & Qualitative

# Flow of this project





# Baseline Info

Pittsburgh Sleep Quality Index (PSQI)

Valid and reliable instrument

Demographic survey

Researcher made

Previous exposure and influences related to aromatherapy and essential oils

Informed by research and TREATS/ARQAT

# Description of study participants

## DEMOGRAPHICS

Age: > 60 years, 7 of 9 (78%)

Race: 5 White, 3 Black, 1 Mixed

Education: 7 Highschool or equiv. 1 Some college, 1 College

Employment: 3 Working, 3 Retired, 3 declined to answer

Income per year: 4 <\$20k, 1 \$21-30k, 3 <\$40k, 1 >\$41k

## PREVIOUS USE

Previous use of EOs: 5 Yes, 3 No, 1 Not sure

Other complementary: 3 Yes, 6 No

Problems with smell: 2 Yes, 7 No

Allergies: 4 Yes, 5 No

Chronic illness: 6 Yes, 3 No

# PSQI (Quantitative)

19-question test

Score from 0-21

0 = better sleep quality

21 = worse sleep quality

1. Duration (hours)
2. Disturbance (bothersome)
3. Latency (How many min to fall asleep)
4. Daytime dysfunction
5. Efficiency (combo of factors)
6. Quality (Subjective)
7. Medication use

# Results: PSQI

Overall PSQI: Avg. 11.2, range of 5-16 (Moderate)

Average amount of sleep per night: 4.36 hours

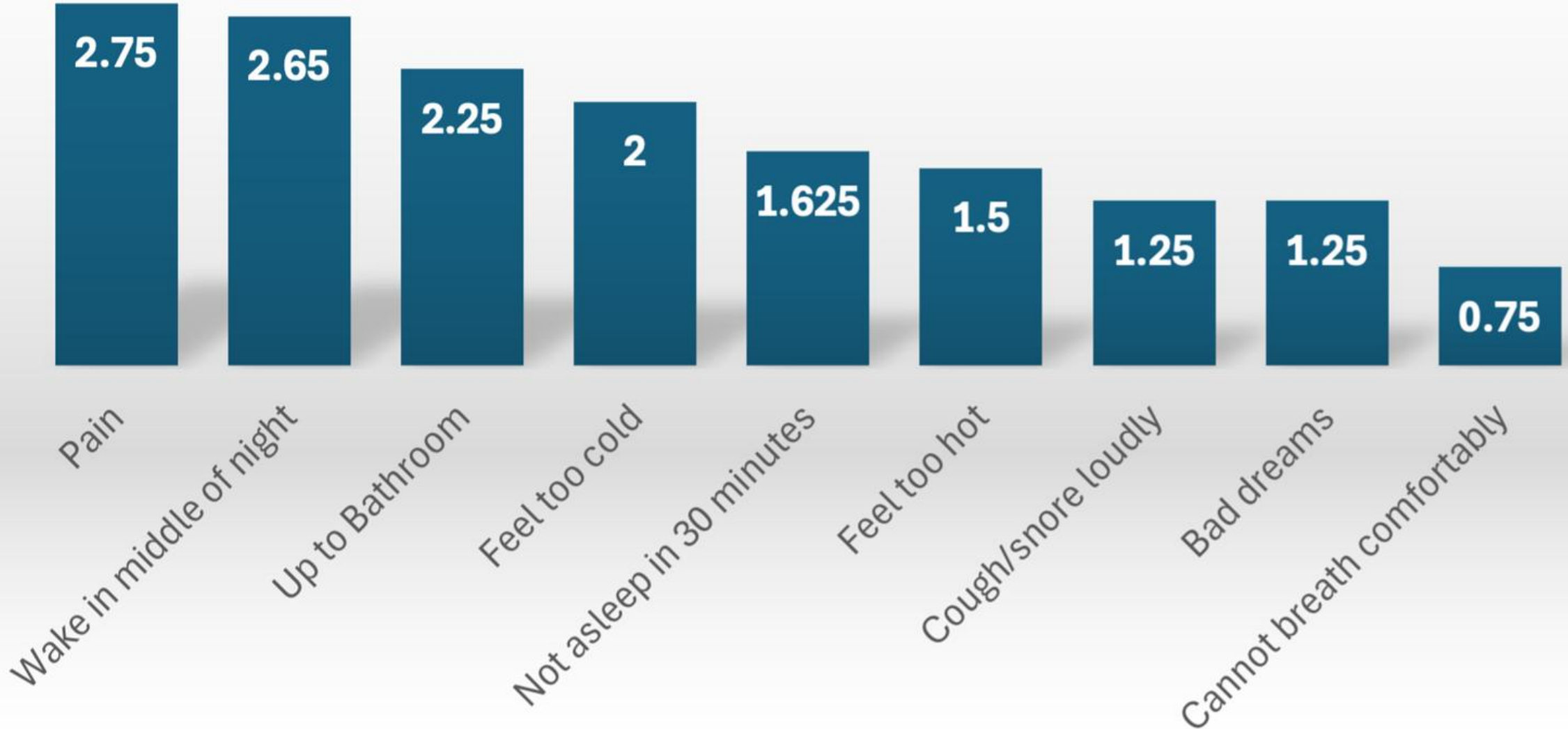
Average time to sleep: 37.22 minutes

Meds: 2 frequent, 3 occasional, 4 no meds

Sleep disturbances – next slide



PSQI Q2: **Sleep disturbances** 1-4 scale  
How many times in the past month have you...



# Review of Literature: Focus on Sleep

- Since 2005 understanding of sleep as vital to health has accelerated
- Sleep that is peaceful and orderly is most restorative
- Pre sleep arousal is a problem
  - Electric lighting, shift work, increased travel, and loneliness & isolation
- Emotional upset, pain, and breathing issues
- Evidence suggest women have more difficulty sleeping
  - Demographic differences include separation, widowhood, and occupation, higher rates of depression, and low postmenopausal estrogen levels
- Appalachia women disproportionately affected
  - Health disparities, rural and isolated communities, illness, sleep problems



# Aromatherapy

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What are the possibilities?



# Aromatherapy Kit

## Products in the Aromatherapy & Essential oil-based kit (AEOBP)

3-5 ml of the following essential oils:

Lavender, Bulgarian (*Lavandula angustifolia*)

Peppermint (*Mentha x piperita*)

Sweet Orange (*Citrus sinensis*)

Blends:

2 oz Happy Dreams Lotion

5 ml That's Better Massage Blend

Deep Breathe (aroma inhaler and roller bottle)

Emotional Trauma (aroma inhaler and roller bottle)

Additional:

Essential Oil Basics Booklet (Eden Clark, 2016)

4 oz Fractionate Coconut oil (*Cocos nucifera*)

Two (2) 3ml Roller bottles

Three (3) Blank aroma inhalers

Six (6) Pipettes

Six (6) Scent strips

One (1) Clay stone

One (1) 5 ml bottle







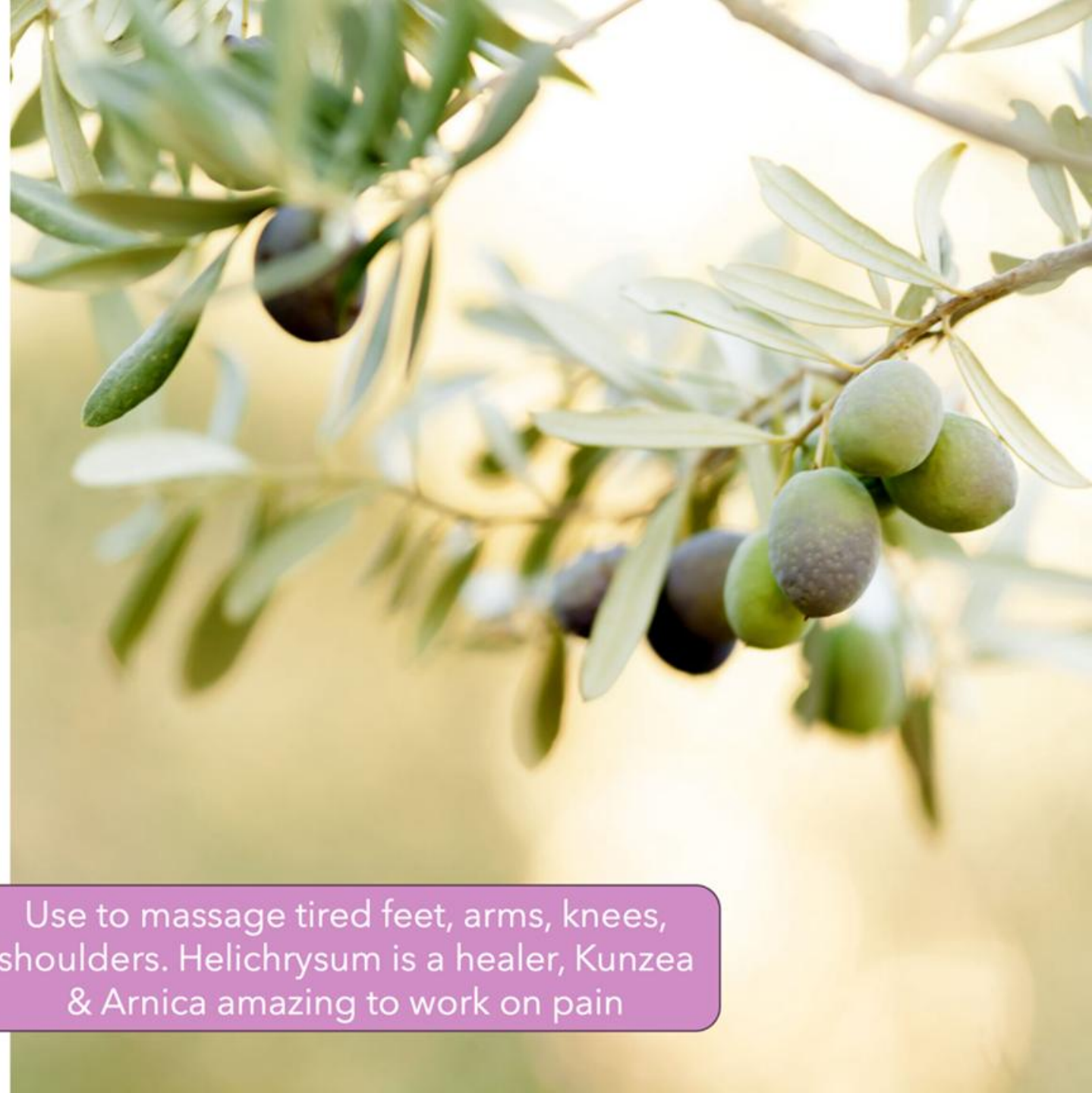
## 2 oz. Happy Dreams Lotion

- + A pure essential oil blend designed to encourage peaceful slumber. It is good to use on hands, face, neck, and chest. Arms, legs, and feet are also great as you will smell it and it will gently permeate your skin.
- + Ingredients: Rosmarinus officinalis (Rosemary) Oleoresin, Tetrasodium EDTA, Citric Acid. Lavandula angustifolia (Lavender), Citrus aurantium L. ssp. amara engl (Petitgrain), and Citrus sinensis (Sweet Orange) Essential Oils. Base is lotion.

## 5 ml That's Better Massage Oil

- + *Cocos nucifera* (Frac. Coconut Oil).  
*Helichrysum italicum* var *serotinum*  
([Helichrysum](#)), *Kunzea ambigua* ([Kunzea](#)),  
Arnica Montana  
([Arnica](#)), Sunflower Oil

Use to massage tired feet, arms, knees, shoulders. Helichrysum is a healer, Kunzea & Arnica amazing to work on pain



# Deep Breath

- + (aroma inhaler and roller bottle) - Picea mariana (**Canadian Black Spruce**), Boswellia serrata (**Indian Frankincense**), Agonis fragrans (Australian **Fragonia™**), Ocimum basilicum (**Sweet Basil**), Bursera graveolens (**Palo Santo**), and Hyssopus officinalis var decumbens (**Hyssop**), Cocos nucifera (Frac. Coconut Oil in roller bottle)



Complex blend designed to support the respiratory tract and not only help with breathing but also trigger the brain to feel nourished

# Emotional Trauma

- + (aroma inhaler and roller bottle) - Citrus aurantium L. ssp. amara engl (Petitgrain bigarade), Melaleuca quinquenervia CT nerolidol (Nerolina), Citrus sinensis (Sweet Orange), Citrus aurantium var. amara (Bitter Orange), and Angelica archangelica (Angelica Root), (Cocos nucifera Frac. Coconut Oil in roller bottle)

Nature's Gift website, "Readers of our blog may remember when one of our staffers was held up at gunpoint. Although she was unharmed, physically, she was haunted by visions of the gunman's face. We gave her a bit of a blend we were working on for our local Hospice, for severe anxiety, and for the first time since the assault she was able to relax and sleep."

**WARNING:** Because of its Angelica Root content, this blend is a photosensitizer. Please reserve it for use in a diffuser, inhaler, or aromatherapy jewelry. We highly recommend its use in an "aromastick" or personal inhaler. We have carefully calculated the dilution of the anointing oil to prevent sun damage, but I would still avoid exposure to sunlight or ultraviolet light for 8 hours after application.



## AROMATHERAPY & SLEEP

**Directions for using your aromatherapy and this logbook:  
Follow these steps over the next 30 days:**

1. Use your Aromatherapy products as directed
2. Use the Logbook daily to track what you are using and how you are using it
3. Reach out to Marnie or Stephanie with any questions
4. Enjoy!

## AROMATHERAPY & SLEEP

Day \_\_\_\_\_

Please place a check mark or X on the line each time you use your aromatherapy products today

- I used my Happy Dreams Lotion today
- I used my "That's Better" Massage Blend today
- I used my Deep Breathe Aroma Inhaler today
- I used my Deep Breathe Roller Bottle today
- I used my Emotional Trauma Aroma Inhaler today
- I used my Emotional Trauma Roller Bottle today

- I used my essential oil of Lavender today
- I used my essential oil of Peppermint today
- I used my essential oil of Orange today

- I used the special blend I made today
- I used another special blend I made today

Comments: (example: I used my Breathe aroma inhaler because)

One time each day place an X on the line under "I feel as comfortable as possible today"

I feel as comfortable as possible today and slept \_\_\_\_\_ hours

Strongly disagree

Strongly agree

Comments:

- + Track what you use
- + No need to use everything everyday
- + No right or wrong way
- + If you miss a day, pick it up the next day



# Results

Interviewing

# Interviews (Qualitative)

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- After one month of using aromatherapy
- **Interviews** – ranged from 12 to 47 minutes, average 29 minutes
- **Research question:** How do women in rural Appalachia describe their sleep before and after a month of using Aromatherapy and Essential oil Based Products (AEOBP)
- **Kolcaba's theory of comfort contexts:**
  - Physical
  - Environmental
  - Psychospiritual
  - Sociocultural
- **Script:** 6 questions with flexibility
- **Zoom recordings and transcripts**

# Contexts defined

**Physical** pertaining to bodily sensations, homeostatic mechanisms, immune function, bodily positions.

**Environmental** pertaining to the external background of human experience (temperature, light, sound, odor, color, furniture, landscape etc.).

**Psychospiritual** pertaining to internal awareness of self, including self-esteem, identity, sexuality, meaning in one's life, and one's understood relationship to a higher order of being.

**Sociocultural** pertaining to interpersonal family and societal relationships (finances, teaching, healthcare personnel etc.) Also, to family traditions, rituals, and religious practices.

**Physical** pertaining to bodily sensations, homeostatic mechanisms, immune function, bodily positions

## **Disturbances**

Aches & pains

Bathroom trips

Need for medications to sleep

## **Influence of Aromatherapy**

Physical problems of fibromyalgia are helped. "That's Better" muscle rub is very helpful. Used on temple for HA and on lower back.

"With aromatherapy I go to the restroom and go back to sleep."



# Sleep quality

- PHYSICAL: "With this therapy when I wake up, I don't be so tired."... "And to be able to just relax, because...you can sleep but what kind of sleep are you sleeping?" before [using aromatherapy] I could sleep all day, but it wasn't a relaxing sleep."

**Environmental** pertaining to the external background of human experience (temperature, light, sound, odor, color, furniture, landscape etc.)

### **Disturbances**

- Too hot
- Too cold
- Bed not comfortable
- Smells

### **Influence of Aromatherapy**

- "The smells themselves can draw you in and be therapeutic."
- "Not distracted by other smells." Diffuses Lavender in small home and everyone is affected.
- Diffuses in the office—sweet orange.

**Psychospiritual** pertaining to internal awareness of self, including self-esteem, identity, sexuality, meaning in one's life, and one's understood relationship to a higher order of being.

Adding the Peaceful Dreams hand lotion to her nighttime ritual.

Is dreaming more: "But I notice I been dreaming more and it do relax me." About the dreams, she remembers "bits and pieces."

The power of an aroma

The process of talking about this whole experience brought back a strong memory for participant 5. She recounts someone breaking into her house and amid the fear and recovery from this traumatic event she experienced an aroma that she believes was sent from God to calm and soothe her. This association was very powerful for her, she says "It took away fear."

**Sociocultural** pertaining to interpersonal family and societal relationships (finances, teaching, healthcare personnel etc.) Also, to family traditions, rituals, and religious practices.

### **Disturbances**

- Nervous in crowds

### **Influence of Aromatherapy**

- Peppermint is calming for when out in a crowd

No participants said that family or friends (outside those doing th study with them) had any comments or problems with them trying aromatherapy

# Rituals/ Influence of Aromatherapy

Warm bath, warm bed, lights dim, reading a book

“Using aromatherapy brought it all together”

Watch TV until gets sleepy

“Keeps all EOs on her coffee table. About peppermint “It just smells good and makes me feel kind of happy.” Adding the Peaceful dreams hand lotion to her nighttime ritual.

Medication to sleep

The aromatherapy helps her go to sleep. The sleeping meds help her stay asleep. “Its [aromatherapy] magic!”

Be more cautious about drinking sodas and being on electronics close to bedtime. Several women gained insights into the detrimental effects of these habits/rituals.

# Feedback & Takeaways

## What worked & what to change

- Choice of EOs was great
- Booklet was well received
- No one mentioned using the Deep Breath inhaler or aroma pendant
- Frankincense was requested
- Collateral benefits were positive! Participants gained insights into sleep

## Thoughts for the next round

- Try to be in person
- Allow participants input on kit
- No need for logbook
- Education sessions shorter
- Provide diffuser
- Customize as able

# Future Action

- Vision a part of your aromatherapy practice as research
- Use TREATS <https://www.arqat.org/the-treats-checklist>
  - Case study
    - Submit to the Case Study Collaborative <https://www.ijpha.com/case-study-collaborative>
  - Small interventional study
    - See if ethical review is needed and if doing it is feasible
  - Start with the end in mind
    - Consider the journal and requirements to publish
  - Methods
    - Qualitative research
    - Quantitative research
    - Mixed

# Thank you & Questions

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- Contact:
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or [marianreven@gmail.com](mailto:marianreven@gmail.com)
- [www.ARQAT.org](http://www.ARQAT.org)



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