

Feasibility and Acceptability of Integrative Therapy for Management of Symptoms in Persons with Pulmonary Hypertension



THE OHIO STATE UNIVERSITY
COLLEGE OF NURSING

Tania Von Visger, APRN, PhD (c), CCNS, PCCN^{1,2}; Susan E. Thrane, Ph.D., RN¹; Maryanna D. Klatt, Ph.D.²; Annette DeVito Dabbs, Ph.D., RN³; Linda L. Chlan, Ph.D., RN, FAAN⁴; Mary Beth Happ, PhD, RN, FGSA, FAAN¹

The Ohio State University College of Nursing¹, The Ohio State University Wexner Medical Center², The University of Pittsburgh School of Nursing³, Mayo Clinic Department of Nursing⁴

Purpose:

- To describe the study design for feasibility and acceptability testing of Urban Zen Integrative Therapy (UZIT) for symptoms management for persons with Pulmonary Hypertension (PH)
- To delineate the intervention fidelity for UZIT – a multi-modal, integrative therapy behavioral intervention

Background:

- Persons with the life-limiting cardiopulmonary disease face many symptom management challenges.
- Increased symptom burden including chest pain, anxiety, nausea, insomnia, dyspnea, dizziness, and fatigue can impair patients' ability to manage and adhere to medical treatments leading to reduced quality of life.

Proposed Intervention & Sample:

- 6 sessions delivered individually over 6-8 weeks
- 20 community dwelling adults with PH

Feasibility Testing:

Feasibility will be determined by:

- Recruitment rate (>40% recruited from those approached)
- Enrollment rate (>two /month)
- Home practice (> 1/week)
- Retention rate (>70% of participants remaining at study completion)

Acceptability Testing:

Acceptability will be determined by:

- Participants' evaluation of the UZIT program (composite mean System Usability Scale score > 5, scale 1-7)
- Session completion rate (at least 5 of 6 sessions [83% attendance] by the participants retained at the study end)
- An exploratory qualitative assessment to determine specific components of the UZIT preferred by adults with PH

Intervention Fidelity Plan:

Strategies to maximize consistency of UZIT intervention delivery and dose:

- Manualized research intervention protocol
- Standardized training & re-training
- Quality audit using standardized criteria (25% of sessions)
- Research process evaluation

Intervention Protocol:

Component	Amount of time	Details
<ul style="list-style-type: none">Introduction and explanation of the UZIT sessionSymptoms assessment (survey and verbal)Essential Oil selection	Essential Oils (5 minutes)	<ul style="list-style-type: none">Collection of Symptom DiaryComplete pre-treatment questionnairesEssential Oil selection:<ul style="list-style-type: none">Lavender OilLemon OilPeppermint Oil
Mindful Movements (Sitting on a chair; lying on a yoga mat) & Breathe Awareness Exercises	At least 6 of 8 Mindful Movements (10 minutes)	<ul style="list-style-type: none">Flex and point the feetSpread and scrunch the toesMake circle with feetSqueeze and open handsCircle the wristExtend and flex the wristFlex and extend the elbowRotate arms in sockets (internal rotation, external rotation, One in and one out)
Restorative Poses & Breathe Awareness Exercises	At least 1 of Restorative Poses (20 minutes)	<ul style="list-style-type: none">Supported Relaxation Pose for breath exercisesSupported Reclined Cobbler's Pose: Variation 1Side Child's Pose with Full Prop Set Up
Body Awareness Meditation	Meditation (20 minutes)	<ul style="list-style-type: none">Tier One: Basic Body Awareness Meditation from Head downTier Two: Body Awareness Meditation for anxietyTier Two: Body Awareness Meditation for nauseaTier Three: Complete Body Awareness Meditation
Reiki Application	Reiki Application (20 minutes)	<ul style="list-style-type: none">Seated Reiki sessionLying down Reiki session (while patient is in restorative poses)Systematic hand placement from head to toes
Transitioning out of Restorative Poses	(5 minutes)	<ul style="list-style-type: none">Allow rest and re-energize for travel to home
<ul style="list-style-type: none">Session ConclusionDebriefingSymptoms Assessment (survey)	(5 minutes)	<ul style="list-style-type: none">Semi-structured InterviewAnswer questions & clarify practiceHome practice assignment & Essential Oil supplyProvide Symptom Diary for next weekReminder of next week appointmentComplete questionnaires

Note: Arrows indicate that the components may be co-applied.

Intervention Quality Checklist:

Component	Yes	No	Comments
Introduced self to begin therapeutic relationship			
Explained the overall plan of the UZIT session			
Explained rationales for each essential oil use			
Suggested appropriate essential oil based on symptom			
Administered 1-3 drops of essential oil in a cotton pad and placed 1 inch from the nose			
Explained and demonstrated each mindful movement			
Instructed participant mindful breathing technique			
Provided positive encouragement and constructive feedback to participant			
Explained and demonstrated restorative position			
Explained the process of body-awareness meditation			
Assisted and adjusted participant's pose to comfortable position			
Evaluated participant's comfort level by asking			
Administered Reiki in a systematic manner (head to toe)			
Guided participant to change position slowly			
Gave participant specific instruction for home practice			
Reminded participant to document in home diary			

Urban Zen Integrative Therapy (UZIT):



- Essential Oil
- Gentle Movement
- Restorative poses
- Guided body scanning meditation
- Reiki Therapy

Conclusions:

- Behavioral intervention research using mind-body integrative therapy with multi-modal components is challenged by many threats to study's internal validity.
- Intervention fidelity monitoring is important to the internal validity of a study.

References:

- Bellig AJ et al. (2004). Health Psychology, American Psychological Association, 23(5); 443-451.
- Carter, A. M. et al. (2013). Contemporary Clinical Trials, 35(2); 40-47.
- Derry, HM et al. (2015). Psycho-Oncology, 24 (8); 985-966.
- Gearing, RE et al. (2011). Clinical Psychology Review, 31 (1); 79-88.
- Wyatt, G. et al (2010) Cancer Nursing, 33(5); 331-342.

Financial Support:

- Jonas Nurse Leaders Scholars Program 2014-2016. Jonas Center for Nursing Excellence
- American Association of Colleges of Nursing
- Sigma Theta Tau International Epsilon Chapter Research Grant Award

<https://u.osu.edu/von-visger.2/>

