

Brief Mindfulness Meditation for Depression and Anxiety Symptoms in Patients Undergoing Dialysis: *A Randomized Control Trial*



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Study Summary



- RCT set in urban dialysis unit
- 41 dialysis patients with depression/anxiety symptoms
- Randomly assigned to intervention (n=21) or TAU (n=20)
- 8 weeks, 3 times a week, 10-15 minutes chairside meditation
- Outcomes
 - 1^o: Feasibility – enrolment rates, completion rates, tolerability
 - 2^o: Depression & anxiety scores – PHQ-9 & GAD-7

Premise



- Depression & anxiety symptoms affect 50% of dialysis patients
 - Lower quality of life, increased dialysis non-adherence, suicidality, medical comorbidity and mortality
- Management generally inadequate
 - Low detection rates, limited access to psychotherapy, polypharmacy, minimal literature on effective treatments
- Alternative, effective, scalable strategies needed

Mindfulness Meditation



**Moment-to-moment
Non-judgmental
Awareness**

- Effective in several psychiatric conditions
 - Depression, anxiety, SUD
- Effective in several chronic physical illnesses
 - Psoriasis, breast/gyne cancer, IBD, DM, CAD, transplant
- Not tested in dialysis population

Methods



- Recruitment at Jewish General Hospital dialysis unit – 2016
- Inclusion criteria:
 - English or French
 - Scores of ≥ 6 on PHQ-9 and/or GAD- 7 scales
- Exclusion criteria:
 - Cognitive impairment (abnormal Mini-Cog)
 - Current psychosis
 - Acute suicidal ideation with intent
- Randomized 1:1

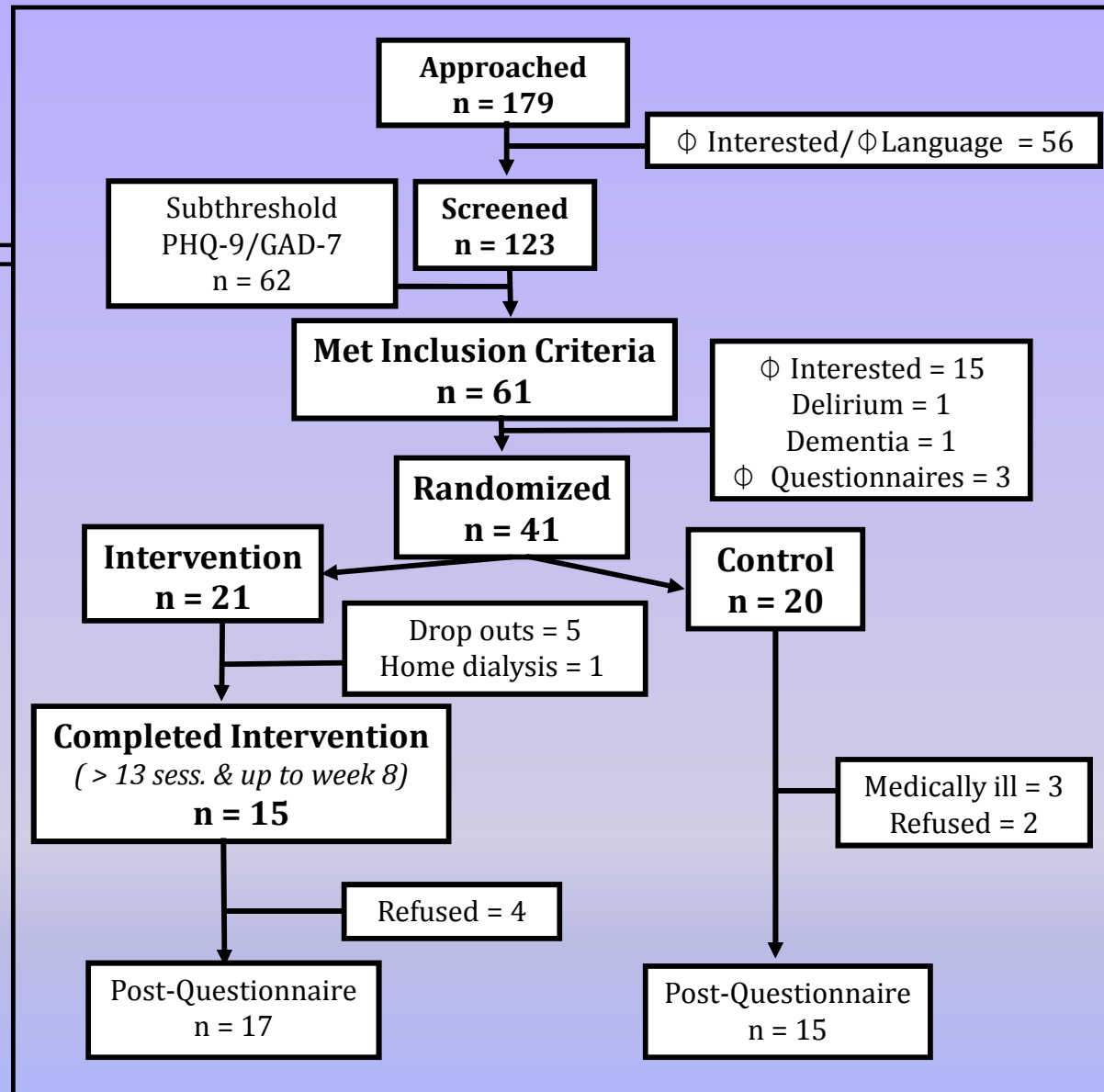
Intervention



- Chairside meditations 3 times a week, 10-15 minutes, for 8 weeks
 - *Body scan*
 - *Guided meditation*
 - *Silent meditation*
 - *Gentle arm movements*
- Brief check-ins before & after
- Home practice encouraged

Both groups received psychoeducational literature on depression & anxiety & local resources

Results



Results



Participant Data	Total Sample (n=41) Mean±SD	Intervention (n=21) Mean±SD	TAU (n=20) Mean±SD
<i>Demographic Information</i>			
Female	33 %	33 %	35 %
Age	65 ± 13	66 ± 13	64 ± 1 4
Married/common law	49 %	43 %	55 %
Non-White	51 %	48 %	55 %
Living with family	50 %	50 %	50 %
University	37 %	38 %	35 %
<i>Medical History</i>			
Number of medical problems	10 ± 4	11±4	10±4
Hypertension	85 %	91 %	80 %
Diabetes	63 %	52 %	75 %
Coronary artery disease	44 %	52 %	35 %
CHF / arrhythmia / PVD - each	32 %	43 %	20 %
Respiratory illness	29 %	33 %	25 %
Number of current medications	13 ± 5	14±4	12±5
Psychotropic medications	46 %	48 %	45 %
<i>Habits</i>			
Smoking	12 %	14 %	10 %
Alcohol /drugs	9 %	10 %	10 %

Results - Feasibility



- 71% retention rate
 - Mean number of sessions = 20/24 (82% of sessions)
 - Home practice average = 3 days a week x 14 minutes
- Meditation tolerability **8/10**
 - Guided meditation > gentle arm movements
- No adverse events
 - 10 participants admitted to hospital

Results - Effectiveness



Measure	Intervention Group			TAU Group			Stats	
	Pre n=21	Post n=17	Change n=17	Pre n=20	Post n=15	Change n=15	p	d
PHQ-9	12.7 ± 4.2	9.6 ± 4.9	-3.0 ± 3.9	11.9 ± 5.8	7.8 ± 5.1	-2.0 ± 4.7	p=0.45	0.13
GAD-7	6.2 ± 5.1	6.1 ± 4.7	-0.9 ± 4.6	6.1 ± 5.8	3.5 ± 2.1	-0.8 ± 4.8	p=0.91	0.35

Subjective Reports

Courage, Hope, Dignity,
Self-confidence, Strength

Discussion



- Underpowered?
- Inclusion of milder psychiatric symptomatology?
- Inclusion of severely medically ill patients?
- Lack of cognitive component of intervention?
- Lack of qualitative questionnaires?

Conclusion



Need for depression & anxiety treatments in dialysis patients

Barriers to usual treatments

- Additional appointments
- Polypharmacy
- Limited effectiveness

Meditation seems promising

- Scalable
- Feasible
- Enjoyable

Recommend larger studies

- N=60
- PHQ-9 > 10
- Qualitative scales
- Cognitive component

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Thank you



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