Is Reiki More Effective than Placebo?
Sonia Zadro, PhD Candidate, Bond University, Australia.

Why study whether Reiki is more effective than placebo?

1. **To ease the socio-economic burden of health.**
2. **The use of CAM and Reiki is increasing**
3. **Growing evidence Reiki is more effective than placebo in non-human living systems:**

Reducing noise-induced microvascular damage in rats (Baldwin and Schwartz, 2006), Improving heart-rate homeostasis in rats (Baldwin et al., 2008), Increasing survival of directly irradiated cells (Mothersill et al., 2013), Increasing photon emission of intervertebral cells in mice and increasing collagen 11 and aggrecan in mice (Kent et al., 2020), Reducing postoperative pain in female dogs undergoing elective minimally invasive.

4. **Energy Medicine or Biofield Science is not accepted by mainstream medicine.**

Reiki is a biofield therapy part of biofield science. The Biofield is an organising energy field of any living system which regulates and helps maintain the biological system (Rubik et al., 2015). It is thought information flows within and between various levels of the organism through the biofield and complex systems are understood as a whole and the whole can influence the parts. (Rubik et al., 2015).

Resistance to Biofield Therapy: (1) Causal Mechanisms not well understood yet. (11) Some think Biofield Science incongruent mainstream medicine. (111) Subtle energies seen as pseudoscience. (1V) Biofields are often viewed as a life force behind consciousness – this is rejected by mainstream medicine.

When is Reiki Effective: How much, How often, what conditions, experience/training practitioner, how unwell the client?

Method: Systematic Review 8 databases 26 studies met inclusion criteria (adult, hands on, placebo controlled, standardised outcome measures).

SR Assessments: Cochrane ROB 2 assessment tool assessing 6 ROB domains and GRADE criteria to assess overall level of evidence in each area: LOW, MODERATE OR HIGH level of evidence.

RESULTS

Mental Health

Clinically Relevant Anxiety

GRADE: MODERATE to HIGH

Study	Results Between groups P Value and Effect Size d = 0.2 (Small) 0.5 (Medium) 0.8 (Large).	ROB 2
Cinar et al. (2022) Fibromyalgia	**Post 4th trt Reiki sig lower than placebo for state anxiety (p=0.005) and trait anxiety (p=0.003). Mental Health dimension (QoLscale) p=0.018**	Some concerns
Baldwin, et al. (2017) Knee Replacement Surgery	**No sig comparison made due to small sample size of control. Within grp Reiki sig p=0.004 and Placebo NS.d (Reiki over placebo)= 0.93**	Some Concerns
Dressen & Singg (1998) Chronically ill and in pain.	**Reiki sig >placebo (no p value) State Anx p=0.0001 (pre/post) d= 1.36 >placebo. Trait Anx p=0.0001 (pre/post) d=1.07 >placebo.**	Some Concerns

3/3 studies showed significant outcomes.

Baldwin did not directly compare Reiki and placebo and this is why not HIGH overall.

For 2 studies effect sizes could be calculated and showed large effect sizes (d=0.93, 1.36,1.07).

Min 4 x 30mins Reiki over 4 weeks may reduce clinical levels of anxiety. Unstudied LT effects.

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Clinically Relevant Stress
GRADE: HIGH

Study	Results Between groups P Value and Effect Size d = 0.2 (Small) 0.5 (Medium) 0.8 (Large).	ROB 2
Bowden et al. (2011) Mood and wellbeing in High vs Low Anxiety and Depression.	**Sig** **High Stress Reiki> placebo (p=0.008). d=0.87 d=0.90 at f.up. Not sig in low mood (p<0.05).**	Some Concerns
Vasudev & Shastri (2016) Self-perceived work-related stress software professionals.	**Hands on Reiki and DR Placebo p=0.028 d= 0.63** No diff bet hands on Reiki and DR p=0.878 suggests benefits from hands on R not due to touch or other placebo effects.	Some concerns
Yuce and Tasci (2021) Stressed Caregivers of cancer patients.	**CSI p<0.001 at post-treatment 6 weeks. d=2.3**	Some Concerns

3/3 studies significant outcomes

For 3 studies effect sizes could be calculated, 2 were large to very large and one was moderate.
6 x 30-45min sessions Reiki over 6 weeks may reduce clinically levels of stress with potential long-term effects.

Normal Stress
GRADE: LOW to MODERATE

Study	Results Between groups P Value and Effect Size d = 0.2 (Small) 0.5 (Medium) 0.8 (Large).	ROB 2
Bowden, Goddard and Gruzelier (2010) Well-being & salivary cortisol in healthy psych undergraduates.	NS (p=0.054) stress subscale over placebo on DASS.	Some Concerns
Shore (2004) Depression and Self Perceived Stress. Software Prof.	**Perceived Stress Scale (PSS) post-test p=0.029 d=0.88** **1 year follow up p=0.001 d=2.02**	Some concerns

One study significant outcomes, one study insignificant outcomes.
Effects could be calculated for the significant study and were large.
1-1.5hrs Reiki /week for 6 weeks may assist over placebo for normal levels of stress. (Shore, 2004).

Clinically Relevant Depression
GRADE: HIGH

Study	Results Between groups P Value and Effect Size d = 0.2 (Small) 0.5 (Medium) 0.8 (Large).	ROB 2
Dressen & Singg (1998) Chronically ill and in pain. Pain >1yr.	Reiki sig>placebo (no p value) P=0.0001 pre-post. d=1.4 self-esteem (d= -0.30), **locus of control (d=0.54).**	Some Concerns
Erdogan & Cinar (2016) Depression in the Elderly. Nursing home.	**Reiki sig > placebo at all 4 time measurements.** **1st p=0.001 4th p=0.000** **8th p=0.000, 12th p=0.000 (1 mth f.up). Inadequate data to calculate d.**	Some concerns
Shore (2004) Depression and Self Perceived Stress.	**Reiki >placebo Reiki p=0.042 d=0.74** **1 yr follow up p= 0.001 d=1.43**	Some Concerns

3/3 studies significant outcomes.

Shifflet et al. (2002) excluded due to high ROB.

For 2 studies effects could be calculated and were large.

6-10 sessions of 45 mins Reiki over 6-10 weeks may assist clinical depression. Potential LT effects.

Burnout
GRADE: LOW to MODERATE

Study	Results **Between groups P Value and Effect Size d = 0.2 (Small) 0.5 (Medium) 0.8 (Large).**	ROB 2
Díaz-Rodríguez et al., (2011) Nurses with Burnout.	Reiki reduced diastolic BP > placebo p=0.04 d= 0.59 and increased SIgA over placebo p= 0.04 d= -0.75 Systolic BP p=0.24 a-amylase activity p=0.71	Some concerns
Díaz-Rodríguez et al., (2011) Health Care Proff with Burnout.	**ECG recordings for SDNN Reiki>placebo (p<0.04), d= 0.71** **Body temp Reiki > Placebo (p=0.02), d=0.85** **Salivary Cortisol p=0.08, ECG RMSSD p=0.06 HRV non sig.**	Some Concerns
Rosada et.al. (2015) Burnout Health care professional.	**Reiki >placebo Overall for burnout p=0.011.** **Reiki also reduced emotional exhaustion, depersonalization, increased pers accomplishment (p<0.05 no values given).** **Inadequate data to calculate d.**	Some Concerns

3/3 studies had significant outcomes (2 very good methodology), but Diaz studies used biomarkers to measure burnout and some disagree with this so GRADE lowered.

Effects could be calculated for 2 studies and were mostly moderate, one large.

One x 30min session Reiki may reduce biomarkers related to burnout. 6x30mins may reduce psychological symptoms of burnout (emotional exhaustion, depersonalisation etc).

Unstudied LT effects.

Pain

Chronic Pain

GRADE: LOW to Moderate

Study	Results **Between groups P Value and Effect Size d = 0.2 (Small) 0.5 (Medium) 0.8 (Large).**	ROB 2
Dressen & Singg (1998) Chronically ill and in pain.	**Sensory pain p=0.03 d=0.53** **Evaluative pain R>P p= 0.001 (pre-post) R>P d=1.17.** **Present Pain intensity R>P p=0.0001 pre/post. R>P d=1.06** Affective pain p=0.91 Total pain p=0.09	Some Concerns
Gillespie et al. (2007) Diabetic Neuropathy	Reiki Not significantly > placebo for pain (no p values given for any and all sig improved but not >placebo).	Some Concerns
Cinar et al. (2022) Fibromyalgia	**Pain** **VAS Reiki > Placebo only *before* 4th session (p=0.02)** **McGill Pain** **1st wk p=0.01, wk 2 p=0.002,** 3rd p=0.25, 4th **p=0.02.** **QofLife SF36 pain dimen p=0.03 (Reiki>placebo bet session1 & 4 pre- application).** Insuff data for effects.	Some concerns
Assefi et. al. (2008) Fibromyalgia	**Reiki > placebo in reducing pain meds (p=0.03)** Reiki not sig > placebo on VAS for pain (p=0.52).	LOW

¾ studies significant. The one insignificant study did have low baseline pain scores but studies not grouped as 1 measure had no cut off scores.

Only one study could calculate effects and they were mostly large.

Fibromyalgia: 1 sig study (30mins/wk x 4), 1 study with twice as much Reiki reduce pain meds but not pain scores (2x30mins/wk x 8).

Did not decrease pain for diabetic neuropathy (but low baseline pain scores).

Overall varied outcomes depending on condition more targeted research needed.

45mins/wk x 10 weeks may assist with moderate chronic pain for some conditions.

Moderate Acute Pain

GRADE: Moderate to High

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Study	Results **Between groups P Value and Effect Size d = 0.2 (Small) 0.5 (Medium) 0.8 (Large).**	ROB 2
Midilli (2014) Post Caesarean Section	Pain VAS **Reiki >Placebo (p<0.05)**. **Time to use analgesic (p=0.001) Reiki>placebo** No. analgesics used Day 1 not sig (p=0.58) **Reiki > Placebo Day 2 (p=0.005), Day 3 (p=0.001).** Insufficient data to calculate effect sizes.	Some concerns (Pain)
Baldwin, et al. (2017) Knee Replacement Surgery	No sig comparisons made BETWEEN Reiki and Placebo due to small sample size of control. **Pain** **Within grp Reiki (p=0.003) and PR (p>0.05) d= 4.6 V Large for Reiki over placebo.**	Some Concerns

2/2 studies significant outcomes.

Effects could be calculated for 1 study and were very large.

30mins/day over 4 days post-surgery may reduce acute pain.

Chronic Conditions

Chronic Conditions Physical Wellbeing and Comfort

GRADE: LOW to moderate

Study	Results **Between groups P Value and Effect Size d = 0.2 (Small) 0.5 (Medium) 0.8 (Large).**	ROB 2
Gillespie et al. (2007) Diabetic Neuropathy	Reiki Not significantly > placebo for wellbeing, walking distance or Diabetes (no p values given for any and all sig improved but not >placebo). Reiki >placebo for diabetes with borderline sig p=0.05.	Some Concerns
Fortes Salles et al. (2014) Hypertension	**Reiki>Placebo for SBP (p=0.004, d=0.6) and DBP (p= 0.006, d=0.8).**	Some Concerns
Baldwin et al. (2013) Limited ROM for min 1 year.	**Reiki > Placebo (p=0.003) for increasing ROM (20 degree increase for Reiki vs 0.6 degree increase placebo R).** **Insufficient data to calculate effects.** Reiki not sig > placebo for HR or HRV.	LOW
Cinar et al. (2022) Fibromyalgia	**Short-Form QofL Reiki > Placebo** **Physical function p=0.000 Energy p=0.009** Physical role p=0.651 Social p=0.064General health p=0.138 Insuff data for effects.	Some concerns
Alarcao & Fonesca (2015) Blood Cancer	**Reiki sig > placebo** **QoL: General p=0.035 Physical p=0.015 Environment p=0.008** **Social RShips p=0.0005** Psychol p=0.19 **Inadequate data to calculate d.**	Some concerns
Assefi et. al. (2008) Fibromyalgia	Reiki not sig > placebo on VAS for sleep (p=0.78), fatigue (p=0.45), overall wellbeing (p=0.51). Physical Funct (p=0.26), Mental funct (p=0.72).	LOW
Caitlin and Taylor Ford (2011) Wellbeing during chemotherapy.	Reiki Not > Placebo for comfort (p=0.84) or wellbeing (p=0.74)	Some Concerns

Outcomes varied, populations too different and require more targeted research.
Green=Significant

Hypertension: 1 x 20mins

Limited ROM (1year): 1 x 10 mins (inc 20 degrees).

Fibromyalgia: 30mins/wk x 4 weeks.(inc 2/5 Qof L dimensions physical funct and energy). Another study 2x30mins/wk x 8wks no sig outcomes on any Q of L dimension (and LOW ROB Assefi et al. 2008).

Blood Cancer: 2 x 1hr/wk x 4 wks. Incr QofL all general, physical, environ, social. Psychol didn't reach sig.

Wellbeing during Chemotherapy: 1x20 min session no sig outcomes wellbeing or comfort.

Biomarkers

Elevated to High Blood Pressure

GRADE: HIGH

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Study	Results Between groups P Value and Effect Size d = 0.2 (Small) 0.5 (Medium) 0.8 (Large).	ROB 2
Yuce and Tasci (2021) Stressed Caregivers of cancer patients.	**SBP (**Wk 1 p=0.30**, Wks 2-6 p=0.008 to <0.001 every week)** **Pre Trt 1-6th d= 1.27 Post 1-6th d=1.77** **DBP (**Wk 1 p=0.17**, Wks 2-6 p= or <0.001 every Wk except Wk 3 p=0.045).** **Pre 1-6th d=1.82** **Post 1-6th d=2.14**	Some Concerns
Fortes Salles et al. (2014) Hypertension	**Reiki>Placebo for SBP (p=0.004, d=0.6)** **DBP (p= 0.006, d=0.8).**	Some Concerns
Baldwin, et al. (2017) Knee Replacement Surgery	**No Between Grp comparisons due to attrition.** **SBP** **Within R p<0.001 PR p=0.01 No bet p given** **Reiki > PR for d= 2.2** **DBP** **Within R p< 0.001 PR (P>0.05) No bet p given** **Reiki >PR for d = 2.17**	Some Concerns.

3/3 studies significant outcomes. Effects could be calculated for all and all 3/3 had large effects.

1 Significant study removed due to High ROB for BP (Midilli, 2014).

Long-term follow-up effects not examined.

30-45mins Reiki should reduce elevated/high BP. Ongoing weekly applications may further reduce BP over time.

Normal Blood Pressure
GRADE: Moderate for DBP, Low for SBP

Díaz-Rodríguez et al., (2011) Nurses with Burnout.	**Reiki reduced diastolic BP > placebo p=0.04, d= 0.59.** Systolic BP p=0.24 NS	Some concerns
Mackay (2004)	**Reiki sig reduced DBP over placebo (p<0.04)** Systolic BP (NS no p value given) Insufficient data to calculate effects.	Some concerns

2/2 significant, effects could be calculated in 1 study and were moderate.

2 studies removed due to high ROB (Bat, 2021; Witte and Dundes, 1998).

LT effects not examined.

1 x 30 min session may reduce normal DBP. May have more pronounced effects with a higher dose.

Heart Rate / HRV
GRADE: Moderate for Min 30 minutes

Study	Results Between groups P Value and Effect Size d = 0.2 (Small) 0.5 (Medium) 0.8 (Large).	ROB 2
Yuce and Tasci (2021) Stressed Caregivers of cancer patients.	**HR** **Wk 1 p=0.56** **Wk 2 p=0.007** **Wks 3, 4, 5, 6 all p<0.001** **Pre 1-6th d=1.37 Post 1-6th d=1.91**	Some Concerns
Mackay (2004)	**R sig reduced HR (p=0.005)** Insufficient data to calculate effects.	Some concerns
Díaz-Rodríguez et al., (2011)	**Increased HRV : SDNN Reiki>placebo (p<0.04),** **d= 0.71 LF (p<0.05).**	Some Concerns

¾ studies significant but Baldwin et al (2013) insignificant study only used 10 mins Reiki, the others 30-45minutes.

3 studies excluded due to High ROB (Midilli, 2014; Bat, 2021; Witte and Dundes, 1998).

Effects could be calculated for 2 studies and were mod for one and large for the other.

30-45mins/wk x 2 weeks may reduce HR and increase HRV.

Health Care Proff with Burnout.		
Baldwin et al. (2013) Limited ROM for min 1 year.	Reiki not sig > placebo for HR (no p value) or HRV (p=0.13).	LOW

Conclusions

Overall there were a very small number of studies in most areas so the findings are not conclusive.

Studies should use clinically relevant baseline scores or incorporate normal verses clinical baselines as a variable.

When conducting research experienced Level 2 and level 3 master practitioners should be used preferably trained in the Usui method with face-to-face attunements.