Bijlage 4 Evidence tabellen

UITGANGSVRAAG 3.4: Wat is het effect van interventies, gericht op zingeving/spiritualiteit, op de kwaliteit van leven van patiënten in de palliatieve fase?

Systematic reviews

Study ID	Method	Patient characteristics	Intervention(s)	Results	Critical appraisal of review quality
Candy B 2012	• SR • Funding/CoI: Marie Curie Palliative Care Research Unit, London, UK; Royal Free and University College Medical School, London, UK; no CoI • Search date: Nov 2011 • Databases: CENTRAL, Medline, PsycInfo, Embase, AMED, Cinahl, NHS research register, ATLA Religion database, ASSIA, Anthropology Plus, Social Services Abstracts, Sociological Abstracts • Study designs: RCTs, quasi-RCTs, controlled before and after studies and interrupted time series studies • N included studies: 5 RCTs	• Eligibility criteria: Participants were aged 16 and over, of either sex and: 1. were in the terminal phase of a chronic and progressive life-threatening disease including but not limited to cancers (terminal defined as an estimated life expectancy of less than a year); or 2. had a life-threatening disease with poor prognosis, such as advanced heart failure or dementia, and were receiving palliative care. Participants may or may not have held, or practised, any type of religious or spiritual belief • Patient characteristics: o Mean age: 42-74y	Spiritual interventions: - Meditation: Downey 2009, Williams 2005 - Multidisciplinary palliative care team interventions: Brumley 2007, Gade 2008, Rabow 2004	See below for individual studies, no meta-analysis performed	• High-quality review • Included RCTs: Downey 2009, Williams 2005, Brumley 2007, Gade 2008, Rabow 2004

Study ID	Method	Patient characteristics	Intervention(s)	Results	Critical appraisal of review quality
Martinez M 2016	• SR • Funding/CoI: no financial support, no CoI • Search date: Jan 2002 – Jan 2016 • Databases: PubMed, Cinahl, Cochrane Library, PsycInfo; experts; references • Study designs: all • N included studies: 28, of which 5 RCTs	• Eligibility criteria: patients with advanced life-threatening diseases	Dignity therapy	See below for individual studies, no meta-analysis performed	• Review of low quality: broad search, but search strategy unclear, unclear methods for quality appraisal, quality of evidence not taken into account in conclusions • Included RCTs: Chochinov 2011, Hall 2011, Hall 2012, Juliao 2013 & 2014 & 2015, Rudilla 2016
Piderman KM 2015	• SR • Funding/CoI: one author received a grant through the Mayo Clinic Cancer Center • Search date: Jan 2013 – Jun 2014 • Databases: Medline, CDSR, Cinahl • Study designs: all • N included studies: 22, of which 3 RCTs	• Eligibility criteria: patients with metastatic cancer	Interventions to improve spiritual well-being	See below for individual studies, no meta-analysis performed	• Review of low quality: broad enough search, but simple search strategy, no clear methods for quality appraisal, quality of evidence not taken into account in conclusions • Included RCTs: Zimmerman 2014, Piderman 2014, Lloyd-Williams 2013

Primaire studies

Study ID	Method	Patient characteristics	Interventions	Results	Critical appraisal of study quality
Chochinov HM 2011	• Design: RCT • Funding/CoI: funded by the National Cancer Institute, National Institutes of Health (grant number R01CA102201); the first author is a Canada	• Eligibility criteria: patients with terminal prognosis with a life expectancy of 6 months or less, according to their treating physician; receiving palliative care in a hospital or community setting (hospice or home) through an affiliated	Dignity therapy (N=165 randomized, N=108 analyzed): individualised, short-term psychotherapy provided by a psychologist, psychiatrist, or experienced palliative-care nurse	Quality of life: CRITICAL OUTCOME Two-item Quality of Life Scale (score 1-10): • Rating: baseline 6.48 vs. 6.27 vs. 6.29, at study completion 6.39 vs. 6.34 vs. 6.64; NS • Satisfaction: 6.34 vs. 6.10 vs. 5.83, at study completion 6.04 vs. 6.05 vs. 6.05; NS Other outcomes:	Level of evidence: high risk of bias (subjective outcomes) • No blinding • Incomplete outcome data (no ITT analysis)

Study ID	Method	Patient characteristics	Interventions	Results	Critical appraisal of study quality
	Research Chair in Palliative Care, funded by the Canadian Institutes for Health Research; no CoI • Setting: multicentre trial • Sample size: N=441 (randomized) • Duration: recruitment Apr 2005 – Oct 2008; duration of intervention unclear	recruitment site in Canada, USA, and Australia; aged 18 years or older; willing to commit to three or four contacts over about 7–10 days; able and willing to provide written informed consent. Patients were excluded if they were delirious or otherwise cognitively impaired (based on clinical consensus and post-randomisation Blessed Orientation Memory Concentration test),8 too ill to complete the requirements of the protocol, or unable to speak and read English • *A priori* patient characteristics: intervention vs. control o Mean age: 64.2 vs. 66.7 vs. 64.3y o Male : 52% vs. 45% vs. 51% o Catholic: 29% vs. 23% vs. 27%	<u>Standard palliative care</u> (N=140 randomized, N=111 analyzed): palliative-care-support services that were available to all study patients, including specialist palliative-care physicians and nurses (ie, experts in the management of pain and symptoms), social workers, chaplains, and psychologists or psychiatrists <u>Client-centered care</u> (N=136 randomized, N=107 analyzed): supportive psychotherapeutic approach, in which the research nurse therapist guides the patient through discussions that focus on here-and-now issues	**Distress** (Patient Dignity Inventory, 25 items, score 1-5): no significant differences **Structured Interview for Symptoms and Concerns** (7 items, score 0-6): no significant differences **Edmonton Symptom Assessment Scale** (8 items, score 1-10): no significant differences **Functional Assessment of Chronic Illness Therapy** (FACIT): no significant differences **Hospital Anxiety and Depression Scale** (HADS): no significant differences	
Downey L 2009	• Design: RCT • Funding/CoI: Financial support from the National Institutes of Health/National Cancer Institute (grant #5R01-CA106204) and the Lotte & John Hecht Memorial Foundation; CoI not reported • Setting: Seattle-area hospice organizations, cancer and AIDS clinics,	• Eligibility criteria: hospice or palliative care patients living in the Seattle, Washington, metropolitan area, who spoke English, were at least 18 years old, were mentally capable of providing reliable responses during a 60-90 minute baseline interview were expected to survive for at least 3 weeks after enrollment, and agreed to accept assignment to any of the three treatment conditions	In all three study arms treatment would last for 35 minutes, but the visit could include up to 10 additional minutes for introductions, information exchange, and paperwork <u>Meditation</u> (N=56): Washington-State-licensed naturopathic physicians; meditation	<u>Quality of life</u>: CRITICAL OUTCOME Single item (score 0-10), measured at 10w • Each of the treatment groups, considered individually, experienced overall decline in the proportion with good-quality life • Linear regression models with adjustment for covariates showed no significant effects of either massage or meditation, when compared with friendly visits • Patient's mean actual QOL rating: adjusted differences from friendly visit -0.269 and -0.146	Level of evidence: high risk of bias • Unclear randomization process and allocation concealment • No blinding • Unclear ITT analysis

Study ID	Method	Patient characteristics	Interventions	Results	Critical appraisal of study quality
	physicians' offices, and cancer support groups • Sample size: N=167 (randomized) • Duration: unclear; follow-up of 9 weeks	• *A priori* patient characteristics: intervention vs. control o Mean age: 72 vs. 68 vs. 69y o Male: 36% vs. 30% vs. 44%	providers were to lead the patient in progressive muscle relaxation, mindfulness-based meditation, and guided imagery/visualization Massage (N=56): Washington-state-licensed massage therapists; light back-and-neck massage in a position of the patient's choosing, followed by effleurage and goodbye holding. Depending on need, they could spend some time focusing on areas of particular tension or stress Friendly visit (N=55): Friendly visitors could spend the allotted time with the patient (e.g., reading to them, engaging in conversation, writing letters, doing light chores, running errands, or just spending time with them); alternatively, they could provide respite or other assistance to caregivers without directly interacting with the patient	• Patient's expected weeks of good QOL: adjusted differences from friendly visit -0.135 and +0.120 • Quality of last 7 days of life: adjusted differences from friendly visit +0.515 and +0.546 Other outcomes: **Pain distress** (score 0-5) • Each of the treatment groups, considered individually, experienced overall decline in the proportion with low pain distress • Linear regression models with adjustment for covariates showed no significant effects of either massage or meditation, when compared with friendly visits • Patient's expected weeks with low pain distress: adjusted differences from friendly visit -0.036 and +0.179	
Hall S 2011	• Design: RCT • Funding/CoI: supported by a grant from Dimbleby Cancer Care; no other CoI	• Eligibility criteria: patients with advanced cancer aged 18 years or more; excluded: if the palliative care team felt they were unable to take part in a	Dignity therapy (N=22 randomized, N=12 analysed at 1w, 8 at 4w):	Quality of life: CRITICAL OUTCOME **EQ-5D** • 1w MD=0.10 (95%CI -0.30 to 0.09), effect size = 0.05; 4w MD=0.01 (95%CI -0.35 to 0.37), effect size = 0.00	Level of evidence: high risk of bias • Open-label

Study ID	Method	Patient characteristics	Interventions	Results	Critical appraisal of study quality
	• Setting: hospital-based palliative care teams, NHS, UK • Sample size: N=45 (randomized) • Duration: recruitment Apr 2009 – Jun 2010; 4w follow-up	protocol lasting 2 weeks, they were unable to provide informed consent (due to cognitive problems or the severity of their illness) or they were unable to understand English, patients with moderate or severe cognitive impairment • *A priori* patient characteristics: intervention vs. control o Mean age: 64.9 vs. 65.3y o Male: 41% vs. 57%	psychotherapeutic protocol proposed by Chochinov et al. Control group (N=23 randomized, N=15 analysed at 1w, 10 at 4w): standard palliative care	**Two 10-point Likert scales assessing current quality of life and satisfaction with quality of life** • 1w MD=1.56 (95%CI -4.47 to 1.35), effect size = 0.05; 4w MD=0.83 (95%CI -2.96 to 4.61), effect size = 0.01 Other outcomes: **Dignity-related stress** (Patient Dignity Inventory): • 1w MD=1.21 (95%CI -8.22 to 5.79), effect size = 0.01; 4w MD=2.29 (95%CI -10.11 to 14.68), effect size = 0.01 **Hope** (Herth Hope Index): • 1w MD=2.55 (95%CI -4.73 to -0.36), effect size = 0.20; 4w MD=2.50 (95%CI -5.78 to 0.78), effect size = 0.15 **Psychological stress** (HADS): • Anxiety: 1w MD=0.39 (95%CI -3.22 to 2.45), effect size = 0.00; 4w MD=0.08 (95%CI -5.21 to 5.04), effect size = 0.00 • Depression: 1w MD=0.48 (95%CI -2.55 to 1.59), effect size = 0.01; 4w MD=0.59 (95%CI -3.97 to 5.15), effect size = 0.01	• Incomplete outcome data (no ITT analysis, many lost-to-follow-up)
Rudilla D 2016	• Design: quasi-RCT • Funding/CoI: not reported • Setting: home care unit, university centre, Spain • Sample size: N=75 (randomized) • Duration: 3 months	• Eligibility criteria: adult patients with advanced/terminal illness receiving palliative treatment, with knowledge of their diagnosis and prognosis and patients with an interest in dignity. The exclusion criteria were: (1) less than two weeks of predicted survival; (2) evidence of a conspiracy of silence; and (3) cognitive impairment (comprehension/ expression problems)	Dignity therapy (N=37 randomized, N=35 analysed): psychotherapeutic protocol proposed by Chochinov et al. Counselling therapy (N=38 randomized, N=35 analysed): based on the guidelines for counseling proposed by Arranz et al.	Quality of life: CRITICAL OUTCOME Two items of the EORTC-QLQ-C30 Effect size = 0.02, p=0.919 (MD = -0.03) Other outcomes: **Patients' sense of dignity** (Patient Dignity Inventory): - Symptom distress: effect size = 0.37, p=0.13 - Existential distress: effect size = 0.34, p=0.16 - Dependency: effect size = 0.05, p=0.81 - Peace of mind: effect size = 0.40, p=0.10 - Social support: effect size = 0.03, p=0.88	Level of evidence: high risk of bias • Pseudorandomisation, no allocation concealment • No blinding • Incomplete outcome data (no ITT analysis)

Study ID	Method	Patient characteristics	Interventions	Results	Critical appraisal of study quality
		• *A priori* patient characteristics: intervention vs. control o Male: 57% vs. 63%		**Hospital Anxiety and Depression Scale** (HADS): - Anxiety: effect size = 0.56, p=0.02 - Depression: effect size = 0.14, p=0.54 **Resilience** (Brief Resilient Coping Scale): Effect size = 0.17, p=0.48 **Spirituality** (GES questionnaire): - Intrapersonal spirituality: effect size = 0.32, p=0.19 - Interpersonal spirituality: effect size = 0.20, p=0.40 - Transpersonal spirituality: effect size = 0.35, p=0.15 **Social support** (Duke–UNC-11 Functional Social Support Questionnaire): - Confidential support: effect size = 0.14, p=0.56 - Affective support: effect size = 0.32, p=0.18	
Vermandere 2016	• Design: cluster RCT • Funding/CoI: supported by the Vlaamse Liga tegen Kanker and the Constant Van de Wiel Fund for General Practice (KU Leuven); no other CoI • Setting: 18 regional nursing offices, Belgium • Sample size: N=49 patient-provider dyads that completed the study • Duration: inclusion Apr 2013 – Oct 2013	• Eligibility criteria: Dutch-speaking patients suffering from a progressive, life-threatening disease, at least 18y old, aware of the palliative diagnosis; patients whose prognosis was estimated (by their treating physician) to be less than 2 months were excluded • *A priori* patient characteristics: intervention vs. control o Mean age: 71.9 vs. 72.0y o Male: 54% vs. 37%	Spiritual history taking (N=25): spiritual history taking on the basis of the ars moriendi model Usual care (N=24) at least one routine home visit between pre- and post-measurements	Quality of life: CRITICAL OUTCOME **EORTC QLQ-C15-PAL** No significant difference: Total score: evolution difference mean 1.07 (95%CI -1.77 to 3.91; p=0.45) Global score: evolution difference mean 0.32 (95%CI -0.57 to 1.21; p=0.47) Other outcomes: **Spiritual well-being** (FACIT-Sp-12): No significant difference: Evolution difference mean -0.21 (95%CI -3.18 to 2.76; p=0.89) **Pain** (4-point verbal rating scale): No significant difference: Evolution difference mean 0.14 (95%CI -0.33 to 0.61; p=0.55) **Patient-provider trust** (HCRTS):	Level of evidence: high risk of bias • Unclear allocation concealment • No blinding • 3 exclusions in each group, no ITT analysis

Study ID	Method	Patient characteristics	Interventions	Results	Critical appraisal of study quality
				No significant difference: Evolution difference mean -0.37 (95%CI -3.45 to 2.70; p=0.81)	
Williams 2005	• Design: RCT • Funding/CoI: The National Institute for Nursing Research, National Institute of Health provided funding for this study through grant NR08093-02. This project is affiliated with the Yale Center for Interdisciplinary Research on AIDS, which is supported by a grant from the National Institute of Mental Health (P30 MH62294); other CoI not reported • Setting: 40-bed nonprofit, skilled nursing facility dedicated to HIV/AIDS care, US • Sample size: N=58 • Duration: Nov 2001 – Sep 2003	• Eligibility criteria: patients with age 18 years or older, a diagnosis of AIDS as defined by the CDC HIV Classification System, in residence at Leeway for a minimum of 1 month (to allow for stabilization of medications and equilibration to the environment), and a life expectancy of at least 2 months; at least one of the following: (1) CD4 T-cell count less than 200 cells/mm3; (2) viral load greater than 100,000 copies per milliliter; (3) comorbid diagnosis of cancer, cirrhosis/liver failure, severe congestive heart failure, severe chronic obstructive pulmonary disease, end-stage renal failure; exclusion if cognitive impairment or decompensated mental illness • *A priori* patient characteristics: intervention vs. control o Mean age: 45 vs. 43 vs. 47 vs. 46y o Male: 54% vs. 50% vs. 69% vs. 63%	<u>Meditation</u> (N=13): 90-minute introductory group class on the basic principles of Metta meditation conducted by a meditation teacher; meditation exercise at least once daily for 4 weeks <u>Massage</u> (N=16): 30-minute massage, 5 days out of each week throughout the 4-week intervention period <u>Meditation + massage</u> (N=13) <u>Standard care</u> (N=16): comprehensive assessments by a multidisciplinary health care team consisting of representatives from medicine, nursing, social services, dietary, and recreation departments	<u>Quality of life</u>: CRITICAL OUTCOME **15-item Missoula-VITAS Quality of Life Index (MVQOLI)** Total score at 8w, change from baseline: Meditation -0.18, massage +0.33, combination +3.75, standard care -0.56; significant difference between combination group and the 3 other groups No significant (p>0.05) change in scores from baseline was seen in any of the five dimensions or the total score at 8 and 68 weeks for the meditation only, massage only, and control groups Significant improvements from baseline were seen in transcendent (+5.92) and function (+19.08) at 8 weeks for the combined meditation and massage group. The combined group improvements were significantly different from the decline in scores seen in standard care (transcendent: -4.13, function: -5.00), massage only (transcendent: -3.69, function: +1.44), as well as the meditation only group for the transcendent score (-3.62)	Level of evidence: high risk of bias • No blinding of participants • Otherwise good study
Xiao 2013	• Design: RCT • Funding/CoI: none to declare • Setting: home-based hospice, China • Sample size: N=80 • Duration: unclear	• Eligibility criteria: patients (1) being newly admitted to the study hospice; (2) being diagnosed with advanced cancer by a physician; (3) awareness of their diagnosis, prognosis, and therapy; (4) being an adult (at least 18	<u>Life review program</u> (N=40): Same as routine care, + life review program: reviewing a life (3 sessions) and formulating a life review booklet; individually conducted,	<u>Quality of life</u>: CRITICAL OUTCOME **Overall QOL (single-item scale 0-10)** Significant differences in within-group (F = 32.881, p=0.000), between-group (F = 52.615, p=0.000), and interaction effects (F = 40.555, p=0.000) <u>Other outcomes</u>:	Level of evidence: high risk of bias • Unclear if adequate randomization process and allocation concealment • No blinding

Study ID	Method	Patient characteristics	Interventions	Results	Critical appraisal of study quality
		years old); and (5) having no cognitive or verbal communication impairments. The exclusion criteria were being severely disabled and having a disease that was expected to progress rapidly (Karnofsky Performance Status <40%) • *A priori* patient characteristics: intervention vs. control o Mean age: 59.8 vs. 58.5y o Male: 55% vs. 50% o Religion: 70% vs. 75%	registered nurse as facilitator <u>Routine care</u> (N=40): home visits and weekly telephone follow-up, focusing on physical symptom management, medical consultations, and health education, whereas psychospiritual support was spontaneous	**QOL concerns (adopted Quality-of-Life Concerns in the End-of-Life Questionnaire, 28 items)** Physical discomfort: Within-group effect was significant (F = 35.185, p=0.000), but between-group (F = 2.254, p=0.137) and interaction effects (F = 0.518, p=0.596) were not Food-related concerns: Significant difference in within-group effect (F = 22.650, p=0.000), but none in between-group (F = 3.936, p=0.051) and interaction effects (F = 0.236, p=0.790) Healthcare concerns: Significant differences in within-group (F = 5.561, p=0.005) and between-group effects (F = 4.766, p=0.032), but not in interaction effect (F = 1.305, p=0.274) Support: Significant differences in interaction effect (F = 6.330, p=0.003), but not in within-group (F = 2.850, p=0.067) and between-group effects (F = 2.707, p=0.104) Negative emotions: Significant differences in within-group (F = 9.987, p=0.000), between-group (F = 8.683, p=0.004), and interaction effects (F = 20.033, p=0.000) Sense of alienation: Significant differences in between-group (F = 9.191, p=0.003) and interaction effects (F = 9.118, p=0.000), but none in within-group effect (F = 0.704, p=0.484) Existential distress:	

Study ID	Method	Patient characteristics	Interventions	Results	Critical appraisal of study quality
				Significant differences in within-group (F = 21.243, p=0.000), between-group (F = 14.301, p=0.000), and interaction effects (F = 17.447, p=0.000) Value of life: Significant differences in within-group (F = 9.344, p=0.000), between-group (F = 68.218, p=0.000), and interaction effects (F = 117.227, p=0.000)	

Abbreviations: 95%CI: 95% confidence interval; CoI: conflicts of interest; MA: meta-analysis; MD: mean difference; NS: not significant; QOL: quality of life; RCT: randomized controlled trial; SR: systematic review.

References

Candy B, Jones L, Varagunam M, Speck P, Tookman A, King M. Spiritual and religious interventions for well-being of adults in the terminal phase of disease. Cochrane Database of Systematic Reviews. 2012(5)

Chochinov HM, Kristjanson LJ, Breitbart W, McClement S, Hack TF, Hassard T, et al. Effect of dignity therapy on distress and end-of-life experience in terminally ill patients: a randomised controlled trial. Lancet Oncology. 2011;12(8):753-62.

Downey L, Diehr P, Standish LJ, Patrick DL, Kozak L, Fisher D, et al. Might massage or guided meditation provide "means to a better end"? Primary outcomes from an efficacy trial with patients at the end of life. Journal of Palliative Care. 2009;25(2):100-8.

Hall S, Goddard C, Opio D, et al. A novel approach to enhancing hope in patients with advanced cancer: a randomised phase II trial of dignity therapy. BMJ Support Palliat Care 2011; 1: 315–321.

Martinez M, Arantzamendi M, Belar A, Carrasco JM, Carvajal A, Rullan M, et al. 'Dignity therapy', a promising intervention in palliative care: A comprehensive systematic literature review. LID - 0269216316665562 pii. Palliat Med. 2016.

Piderman KM, Kung S, Jenkins SM, Euerle TT, Yoder TJ, Kwete GM, et al. Respecting the spiritual side of advanced cancer care: a systematic review. Curr Oncol Rep. 2015;17(2):6.

Rudilla D, Galiana L, Oliver A, Barreto P. Comparing counseling and dignity therapies in home care patients: A pilot study. Palliat Support Care. 2016;14(4):321-9.

Vermandere M, Warmenhoven F, Van Severen E, De Lepeleire J, Aertgeerts B. Spiritual history taking in palliative home care: A cluster randomized controlled trial. Palliative Medicine. 2016;30(4):338-50.

Williams A-L, Selwyn PA, Liberti L, Molde S, Njike VY, McCorkle R, et al. A randomized controlled trial of meditation and massage effects on quality of life in people with late-stage disease: a pilot study. J Palliat Med. 2005;8(5):939-52.

Xiao H, Kwong E, Pang S, Mok E. Effect of a life review program for Chinese patients with advanced cancer: a randomized controlled trial. Cancer Nurs. 2013;36(4):274-83.