NKR 53 DEMENS og adfærdsforstyrrelser PICO 2_personcentreret tilgang vs. kontrol

Review information

Authors

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Citation example: S. NKR 53 DEMENS og adfærdsforstyrrelser PICO 2_personcentreret tilgang vs. kontrol. Cochrane Database of Systematic Reviews [Year], Issue [Issue].

Characteristics of studies

Characteristics of included studies

Amjad 2018

Methods	**Study design:** Randomized controlled trial **Study grouping:** Parallel group
Participants	**Baseline Characteristics** Intervention ● *Age mean (SD)*: 84.0 (5.8) ● *Male %*: 37.8 Control ● *Age mean (SD)*: 83.9 (5.9) ● *Male %*: 33.6 **Included criteria:** Community-dwelling adultswere recruited from July 2008 to May 2010 in Baltimore, Maryland. Eligibleparticipants were age≥ 70, English-speaking, community-residing in north-west Baltimore (28 postal codes), had a reliable study partner, met Diagnosticand Statistical Manual, Fourth Edition, Text Revision criteria for dementia orCognitive Disorder Not Otherwise Specified (American Psychiatric Associa-tion 2000), and had one or more unmet care needs on the Johns HopkinsDementia Care Needs Assessment (JHDCNA; Black et al. 2008).

	Excluded criteria: Individualsin crisis, with signs of abuse, neglect, or danger to self or others, were excluded. **Pretreatment:** Higher number of routine medications in the intervention group
Interventions	**Intervention Characteristics** Intervention ● *Description*: The Johns HopkinsDementia Care Needs Assessment (JHDCNA) was administered to all partic-ipants and their caregivers, including control, during a home visit at baseline.Control participants, their study partners, and primary care physicians (PCP)received written results of the JHDCNA, including recommendations foreach unmet need and a brief resource guide. Intervention participants, studypartners, and PCPs received written JHDCNA results followed by up to18 months of care coordination for participants through an interdisciplinaryteam of nonclinical memory care coordinators linked to a registered nurseand a geriatric psychiatrist. The care coordination protocol included individu-alized care planning based on unmet needs and patient/family priorities,dementia education and skill-building, referrals and linkages to services, infor-mal counseling, and care monitoring. Table 1 displays the 19 domains of careneeds assessed in the 86-item JHDCNA and examples of care strategies rec-ommended to address unmet needs. After randomization, coordinators con-ducted an in-home visit with the participant and study partner to review andprioritize needs and develop a care plan. The plan was implemented by studypartners and/or participants with guidance from the coordinator. A menu ofcare strategies was available for each unmet need and consisted of linkage toresources/services, caregiver education and skill-building, and informal coun-seling and problem-solving. While intervention intensity and contact fre-quency varied by individual needs and circumstances, the protocolprespecified two in-home visits (at baseline and 18 months) and at least onemonthly contact (e.g., phone, in-person). Coordinators were available to fami-lies without time restrictions. On average, coordinators made two contacts permonth to participants/families (mean 1.8, standard deviation 24.1; Samuset al. 2014). In recognition of potentially changing needs and priorities, needswere re-evaluated over time and the care plan and strategies adjusted as appropriate. When indicated, coordinators took direct roles to ensure imple-mentation of recommended strategies (e.g., attending outpatient appoint-ments, assisting with program applications). The three coordinators,employees of two community-based social service agencies, did not have priorformal training in geriatric case management or dementia care. They weretrained in dementia care management over 4 weeks and met with the inter-vention team weekly for case discussion and continuous case-based training,clinical oversight, and protocol adherence. ● *Length of treatment*: 18 months ● *Length of follow-up after end of treatment*: None Control ● *Description*: Usual care

Outcomes	No outcomes of relevance were reported
Notes	

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	Judgement Comment: From Samus et al., 2014: Participants were randomized by the PI within 48 hours of the BL visit to intervention oraugmented usual care group (1:2 allocation), using a custom Excel program which generateda random number from a uniform distribution.
Allocation concealment (selection bias)	Unclear risk	Judgement Comment: Insufficient information on allocation concealment
Blinding of participants and personnel (performance bias)	Unclear risk	Quote: "Single-blind RCT evaluating" Judgement Comment: From samus et al. 2014: Due to project budget limitations, the 18-month unmet need data (JHDCNA)was collected by a non-blinded RN.
Blinding of outcome assessment (detection bias)	Unclear risk	Judgement Comment: Unclear who was blinded. From Samu: This was an 18-month prospective, single-blind, parallel group randomized pilot trial design comparing the MIND care coordination intervention to augmented usual care in a cohort of 303 elders age 70+ with cognitive disorders (265 with dementia, 38 with mild cognitive impairment) living at home in Baltimore, MD
Incomplete outcome data (attrition bias)	Low risk	Quote: "An intention-to-treat approach was used in analyses, with participants included as randomized." Judgement Comment: No apparent sources of bias
Selective reporting (reporting bias)	Low risk	Judgement Comment: From Samus et al. 2014: clinicaltrials.gov; NCT01283750 No apparent sources of bias
Other bias	Low risk	Judgement Comment: The study appears to be free of other sources of bias

Ballard 2018

Methods	**Study design:** Cluster randomized controlled trial **Study grouping:** Parallel group
Participants	**Baseline Characteristics** I**Included criteria:** Eligible nursing homes had at least 60% of residents with dementia **Excluded criteria:** Nursing homes were excluded if they were receiving special support from their local authority or if they failed to meet the 5 Care Quality Commission care home quality standards.
Interventions	**Intervention Characteristics** Intervention ● *Description*: WHELD ● *Length of treatment*: 4 months ● *Length of follow-up after end of treatment*: 9 months Control ● *Description*: Treatment as usual ● *Length of treatment*: 4 months ● *Length of follow-up after end of treatment*: 9 months
Outcomes	*BPSD (NPI), SD* ● **Outcome type**: ContinuousOutcome *Antipsychotic medication administration, %* ● **Outcome type**: DichotomousOutcome *Agitation (CMAI), SD* ● **Outcome type**: ContinuousOutcome *Depressive symptoms (Cornell), SEM (mean difference!)* ● **Outcome type**: ContinuousOutcome *Quality of life (DEM-QoL), CI* ● **Outcome type**: ContinuousOutcome
Notes	

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	Quote: "and preparation. Randomisation and blinding Nursing homes were allocated to receive either the WHELD intervention or TAU using secure web access to the remote randomisation centre at the North Wales Organisation for Rando- mised Trials in Health Clinical Trial Unit (NWORTH CTU) at Bangor University. Randomi- sation was performed by"
Allocation concealment (selection bias)	Low risk	Quote: "Randomi- sation was performed by dynamic allocation [38] to protect against subversion while ensuring that the trial maintained a good balance to the allocation ratio of 1:1 both within each stratifi- cation variable and across the trial. Nursing homes were stratified by region and size." Quote: "blind to treat- ment allocation. Every attempt was made to minimise accidental un-blinding by minimising contact between therapists and the researchers collecting outcome data and with clear instruc- tions to researchers and nursing home staff to not discuss treatment allocation. Sample size The target minimum"
Blinding of participants and personnel (performance bias)	Unclear risk	Judgement Comment: Insufficient information on blinding of participants and personnel
Blinding of outcome assessment (detection bias)	Low risk	Quote: "blind to treat- ment allocation. Every attempt was made to minimise accidental un-blinding by minimising contact between therapists and the researchers collecting outcome data and with clear instruc- tions to researchers and nursing home staff to not discuss treatment allocation. Sample size The target minimum" Quote: "Clinicians and research assistants completing follow-up assessments were blind to treat- ment allocation."
Incomplete outcome data (attrition bias)	Low risk	Quote: "plan for the current study. The imputation model was less predictive in validation analyses than it had been in the factorial study. The completer analysis was therefore used as the primary outcome in place of the imputation analysis. Therefore, the primary analysis included all participants with data available at the 9-month assessment point, and the imputation model was used as a sensitivity analysis. The analysis model was finalised prior to the locking of the study database for the current trial. The same approach was used" Judgement Comment: Dropouts are accounted for and equally distributed across groups

Selective reporting (reporting bias)	Low risk	Quote: "ISRCTN Registry ISRCTN62237498" Judgement Comment: The study appears to be free of selective outcome reporting bias
Other bias	Low risk	Judgement Comment: The study appears to be free of other sources of bias

Barbosa 2015

Methods	**Study design:** Randomized controlled trial **Study grouping:** Parallel group
Participants	**Baseline Characteristics** Intervention ● *Age mean (SD)*: 43.37 (10.00) Control ● *Age mean (SD)*: 45.90 (8.04) **Included criteria:** The service managers of each facility were asked to identify all DCWs that providedmorning personal care (i.e., period of time between 07am and 12am when DCWs areinvolved on activities related to bathing, grooming, dressing and toileting) to people withdementia in a regular basis; and were employed for at least 2 months **Excluded criteria:** Temporary DCWs and trainees were excluded as it was not possible to ensure their participation until the end of the study.
Interventions	**Intervention Characteristics** Intervention ● *Description*: Psycho-educational intervention ● *Length of treatment*: 8 weeks ● *Length of follow-up after end of treatment*: None Control ● *Description*: Education-only intervention ● *Length of treatment*: 8 weeks ● *Length of follow-up after end of treatment*: None
Outcomes	*Caregivers burden (PSS), SD* ● **Outcome type**: ContinuousOutcome

Notes	

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	Judgement Comment: Randomization was performed using a random number generator
Allocation concealment (selection bias)	Unclear risk	Judgement Comment: Randomizarion occured at facility level because of possible contamination. Unknown if there was sufficient concealment.
Blinding of participants and personnel (performance bias)	Unclear risk	Judgement Comment: Insufficient information on blinding of participants and personnel
Blinding of outcome assessment (detection bias)	Unclear risk	Judgement Comment: Insufficient information on blinding of outcome assessors
Incomplete outcome data (attrition bias)	Low risk	Judgement Comment: The study appears to have no incomplete outcome data
Selective reporting (reporting bias)	Low risk	Judgement Comment: There is no reference to study protocol, but the study appears to be free of selective outcome reporting
Other bias	Low risk	Judgement Comment: The study appears to be free of other sources of bias

Chenoweth 2009

Methods	
Participants	
Interventions	
Outcomes	
Notes	Data obtained from: Kim, Sun Kyung; Park, Myonghwa Effectiveness of person-centered care on people with dementia: a systematic review and meta-analysis. Clinical Interventions In Aging 2017;12(Journal Article):381-397

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	Refernce: Kim et al. 2017
Allocation concealment (selection bias)	Low risk	Refernce: Kim et al. 2017
Blinding of participants and personnel (performance bias)	High risk	Refernce: Kim et al. 2017
Blinding of outcome assessment (detection bias)	Low risk	Refernce: Kim et al. 2017
Incomplete outcome data (attrition bias)	Low risk	Refernce: Kim et al. 2017
Selective reporting (reporting bias)	Low risk	Refernce: Kim et al. 2017
Other bias	Low risk	Refernce: Kim et al. 2017

Chenoweth 2014

Methods	
Participants	
Interventions	
Outcomes	
Notes	Data obtained from: Kim, Sun Kyung; Park, Myonghwa Effectiveness of person-centered care on people with dementia: a systematic review and meta-analysis. Clinical Interventions In Aging 2017;12(Journal Article):381-397

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	Refernce: Kim et al. 2017
Allocation concealment (selection bias)	Low risk	Refernce: Kim et al. 2017
Blinding of participants and personnel (performance bias)	Unclear risk	Refernce: Kim et al. 2017
Blinding of outcome assessment (detection bias)	Low risk	Refernce: Kim et al. 2017
Incomplete outcome data (attrition bias)	High risk	Refernce: Kim et al. 2017
Selective reporting (reporting bias)	Low risk	Refernce: Kim et al. 2017
Other bias	Low risk	Refernce: Kim et al. 2017

Eritz 2016

Methods	**Study design:** Randomized controlled trial **Study grouping:** Parallel group
Participants	**Baseline Characteristics** Overall ● *Age mean (SD)*: 85.98 (7.49) ● *Male %*: 24.3 **Included criteria:** Staff members needed to have strong English to complete questionnaires
Interventions	**Intervention Characteristics** Intervention ● *Description*: Life history of the resident participants with whom they worked. Verbally and interactive format alowwing for questions and discussions. Also placed in the residents romms and on residents´charts. ● *Length of treatment*: 8 weeks ● *Length of follow-up after end of treatment*: None Control ● *Description*: Medical history.

Outcomes	*Antipsychotic medication administration, SD* ● **Outcome type**: ContinuousOutcome *Agitation (CMAI), SD* ● **Outcome type**: ContinuousOutcome *Quality of life (Qol-AD), SD* ● **Outcome type**: ContinuousOutcome
Notes	

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Judgement Comment: Mentioned as a randomised controlled trial. Nothing written on how it was done
Allocation concealment (selection bias)	Unclear risk	Judgement Comment: Insufficient information on allocation concealment
Blinding of participants and personnel (performance bias)	Unclear risk	Judgement Comment: Insufficient information on blinding of participants and personnel
Blinding of outcome assessment (detection bias)	Unclear risk	Judgement Comment: Insufficcient information on blinding of outcome assessors
Incomplete outcome data (attrition bias)	Low risk	Judgement Comment: No apparent sources of bias
Selective reporting (reporting bias)	Low risk	Judgement Comment: No apparent sources of bias
Other bias	Low risk	Judgement Comment: The study appears to be free of other sources of bias

Hilgeman 2014

Methods	
Participants	
Interventions	
Outcomes	
Notes	Data obtained from: Kim, Sun Kyung; Park, Myonghwa Effectiveness of person-centered care on people with dementia: a systematic review and meta-analysis. Clinical Interventions In Aging 2017;12(Journal Article):381-397

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Refernce: Kim et al. 2017
Allocation concealment (selection bias)	Unclear risk	Refernce: Kim et al. 2017
Blinding of participants and personnel (performance bias)	High risk	Refernce: Kim et al. 2017
Blinding of outcome assessment (detection bias)	High risk	Refernce: Kim et al. 2017
Incomplete outcome data (attrition bias)	Low risk	Refernce: Kim et al. 2017
Selective reporting (reporting bias)	Low risk	Refernce: Kim et al. 2017
Other bias	Low risk	Refernce: Kim et al. 2017

Rokstad 2013

Methods	
Participants	
Interventions	
Outcomes	

Notes	Data obtained from: Kim, Sun Kyung; Park, Myonghwa Effectiveness of person-centered care on people with dementia: a systematic review and meta-analysis. Clinical Interventions In Aging 2017;12(Journal Article):381-397

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	Refernce: Kim et al. 2017
Allocation concealment (selection bias)	Low risk	Refernce: Kim et al. 2017
Blinding of participants and personnel (performance bias)	High risk	Refernce: Kim et al. 2017
Blinding of outcome assessment (detection bias)	Low risk	Refernce: Kim et al. 2017
Incomplete outcome data (attrition bias)	Low risk	Refernce: Kim et al. 2017
Selective reporting (reporting bias)	Low risk	Refernce: Kim et al. 2017
Other bias	Low risk	Refernce: Kim et al. 2017

Thyrian 2017

Methods	**Study design:** Cluster randomized controlled trial **Study grouping:** Parallel group
Participants	**Baseline Characteristics** Intervention ● *Age mean (SD)*: 80.6 (5.7) ● *Male %*: 49.7 Control ● *Age mean (SD)*: 79.8 (5.0) ● *Male %*: 38.8 **Included criteria:** Eligible participants will be identified from among thepatients of the participating GP practices. The inclusioncriteria are that the person must be at least 70 years ofage, living at home, have screened positive for

	dementia(score 8 or lower) on the DemTect Scale [29,30](reference: Thyrian et al. 2012) **Excluded criteria:** The exclusion criteriaare insufficient German-language competence andother medical conditions that do not allow testing (forexample, hearing impairment, visual impairment).(reference: Thyrian et al. 2012)
Interventions	**Intervention Characteristics** Intervention ● *Description*: The intervention can be conceptualised as standing onthree pillars: (1) treatment and care management, (2)medication management and (3) caregiver support. Inimproving the person's situation, the DCM will systematicallyassess the resources and needs in eight actionfields: medical diagnostics and treatment, nursing careand treatment, nonmedical therapies, social inclusionand/or support, legal counselling, technical assistanceand telemedicine, pharmacological treatment and care,and caregiver support and education. The intervention will be delivered according to adetailed protocol. The DCM will meet the person withdementia and the person's caregiver for the baseline assessmentand upon the first interventional visit, usuallyat the participant's home. Further mandatory personalcontacts will then be scheduled monthly for the first6 months of the intervention and by telephone for thelast 6 months of the intervention period. In addition tothese mandatory contacts, optional contacts will be possiblеduring the first 6 months. Optional contacts can bemade in person or by telephone, depending on the person'sindividual needs and preferences.The personal resource and needs assessment will beanalysed by the DCM, and a summary will be forwarded to the person's GP. Treatment paths and specific actionswill be discussed and implemented in close cooperationwith the GP. (reference Thyrian et al. 2012) ● *Length of treatment*: 6 months ● *Length of follow-up after end of treatment*: 12 months Control ● *Description*: Participants cluster-randomised to the control group willreceive care as usual in a primary care setting. (reference Thyrian et al. 2012) ● *Length of treatment*: ● *Length of follow-up after end of treatment*:
Outcomes	*Caregivers burden (BIZA), SD* ● **Outcome type**: ContinuousOutcome *Quality of life, SD* ● **Outcome type**: ContinuousOutcome
Notes	

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	High risk	Judgement Comment: Patient allocated to study group by study center.
Allocation concealment (selection bias)	Unclear risk	Judgement Comment: Insufficient information on allocation concealment
Blinding of participants and personnel (performance bias)	High risk	Judgement Comment: Blinding was not possible
Blinding of outcome assessment (detection bias)	High risk	Judgement Comment: Blinding was not possible
Incomplete outcome data (attrition bias)	Low risk	Judgement Comment: Intention to treat analysis with multiple imputation replacing missing data
Selective reporting (reporting bias)	Low risk	Judgement Comment: trial protocol available clinicaltrials.gov identifier: NCT01401582.The study appears to be free of selective outcome reporting. Matches study protocol.
Other bias	Low risk	Judgement Comment: The study appears to be free of other sources of bias

vandeVen 2013

Methods	
Participants	
Interventions	
Outcomes	
Notes	Data obtained from: Kim, Sun Kyung; Park, Myonghwa Effectiveness of person-centered care on people with dementia: a systematic review and meta-analysis. Clinical Interventions In Aging 2017;12(Journal Article):381-397

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	Refernce: Kim et al. 2017
Allocation concealment (selection bias)	Unclear risk	Refernce: Kim et al. 2017
Blinding of participants and personnel (performance bias)	High risk	Refernce: Kim et al. 2017
Blinding of outcome assessment (detection bias)	Unclear risk	Refernce: Kim et al. 2017
Incomplete outcome data (attrition bias)	Low risk	Refernce: Kim et al. 2017
Selective reporting (reporting bias)	Low risk	Refernce: Kim et al. 2017
Other bias	Unclear risk	Refernce: Kim et al. 2017

Footnotes

Characteristics of excluded studies

Ballard 2016

Reason for exclusion	Wrong study design

Ballard 2016a

Reason for exclusion	Wrong intervention

Ballard 2017

Reason for exclusion	Wrong intervention

Barbosa 2016

Reason for exclusion	Wrong comparator

Barbosa 2016a

Reason for exclusion	Wrong intervention

Barbosa 2017

Reason for exclusion	Wrong comparator

Barbosa 2017a

Reason for exclusion	Wrong outcomes

Brooker 2011

Reason for exclusion	Wrong intervention

Brooker 2016

Reason for exclusion	Wrong study design

Buettner 1998

Reason for exclusion	Wrong intervention

Burgio 2002

Reason for exclusion	Wrong patient population

Clare 2017

Reason for exclusion	Wrong study design

Cohen Mansfield 2012

Reason for exclusion	Wrong intervention

Deudon 2009

Reason for exclusion	Wrong intervention

DiNapoli 2016

Reason for exclusion	Wrong patient population

DiNapoli 2016a

Reason for exclusion	Wrong intervention

Edvardsson 2014

Reason for exclusion	Wrong study design

Fitzsimmons 2002

Reason for exclusion	Wrong intervention

Fossey 2006

Reason for exclusion	Wrong patient population

Kovach 2006

Reason for exclusion	Wrong intervention

Kuhlmey 2010

Reason for exclusion	Not in English

Latham 2017

Reason for exclusion	Wrong study design

Li 2017

Reason for exclusion	Wrong outcomes

Lichtwarck 2018

Reason for exclusion	Wrong intervention

McCabe 2015

Reason for exclusion	Wrong intervention

McCallion 1999

Reason for exclusion	Wrong intervention

McCallion 1999a

Reason for exclusion	Wrong intervention

Muscio 2015

Reason for exclusion	abstract only

O'Connor 2017

Reason for exclusion	Wrong intervention

Pieper 2016

Reason for exclusion	Wrong intervention

Rajkumar 2016

Reason for exclusion	Wrong comparator

Reisberg 2015

Reason for exclusion	abstract only

Reisberg 2017

Reason for exclusion	Wrong intervention

Reisberg 2017a

Reason for exclusion	abstract only

Seitz 2015

Reason for exclusion	abstract only

Selbaek 2017

Reason for exclusion	abstract only

Sjogren 2013

Reason for exclusion	Wrong study design

Tanner 2015

Reason for exclusion	Wrong intervention

Thyrian 2017a

Reason for exclusion	abstract only

vanderPloeg 2013

Reason for exclusion	Wrong intervention

VanHaitsma 2015

Reason for exclusion	Wrong intervention

Zwijsen 2014

Reason for exclusion	Wrong intervention

Zwijsen 2014a

Reason for exclusion	Wrong intervention

Zwingmann 2017

Reason for exclusion	abstract only

Footnotes

Characteristics of studies awaiting classification

Footnotes

Characteristics of ongoing studies

Footnotes

References to studies

Included studies

Amjad 2018

Amjad, Halima; Wong, Stephanie K.; Roth, David L.; Huang, Jin; Willink, Amber; Black, Betty S.; Johnston, Deirdre; Rabins, Peter V.; Gitlin, Laura N.; Lyketsos, Constantine G.; Samus, Quincy M.. Health Services Utilization in Older Adults with Dementia Receiving Care Coordination: The MIND at Home Trial.. Health services research 2018;53(1):556-579. [DOI: https://dx.doi.org/10.1111/1475-6773.12647]

Ballard 2018

Ballard, Clive; Corbett, Anne; Orrell, Martin; Williams, Gareth; Moniz-Cook, Esme; Romeo, Renee; Woods, Bob; Garrod, Lucy; Testad, Ingelin; Woodward-Carlton, Barbara; Wenborn, Jennifer; Knapp, Martin; Fossey, Jane. Impact of person-centred care training and person-centred activities on quality of life, agitation, and antipsychotic use in people with dementia living in nursing homes: A cluster-randomised controlled trial.. PLoS Medicine / Public Library of Science 2018;15(2):e1002500. [DOI: https://dx.doi.org/10.1371/journal.pmed.1002500]

Barbosa 2015

Barbosa, Ana; Nolan, Mike; Sousa, Liliana; Figueiredo, Daniela. Supporting direct care workers in dementia care: effects of a psychoeducational intervention.. American Journal of Alzheimer's Disease & Other Dementias 2015;30(2):130-138. [DOI: https://dx.doi.org/10.1177/1533317514550331]

Chenoweth 2009

Chenoweth, L.; King, M. T.; Jeon, Y. H.; Brodaty, H.; Stein-Parbury, J.; Norman, R.; Haas, M.; Luscombe, G.. Caring for Aged Dementia Care Resident Study (CADRES) of person-centred care, dementia-care mapping, and usual care in dementia: a cluster-randomised trial. The Lancet.Neurology 2009;8(4):317-325. [DOI: 10.1016/S1474-4422(09)70045-6 [doi]]

Chenoweth 2014

Chenoweth, L.; Forbes, I.; Fleming, R.; King, M. T.; Stein-Parbury, J.; Luscombe, G.; Kenny, P.; Jeon, Y. H.; Haas, M.; Brodaty, H.. PerCEN: a cluster randomized controlled trial of person-centered residential care and environment for people with dementia. International psychogeriatrics 2014;26(7):1147-1160. [DOI: 10.1017/S1041610214000398 [doi]]

Eritz 2016

Eritz, Heather; Hadjistavropoulos, Thomas; Williams, Jaime; Kroeker, Kristine; Martin, Ronald R.; Lix, Lisa M.; Hunter, Paulette V.. A life history intervention for individuals with dementia: A randomised controlled trial examining nursing staff empathy, perceived patient personhood and aggressive behaviours.. Ageing & Society 2016;36(10):2061-2089. [DOI: http://dx.doi.org/10.1017/S0144686X15000902]

Hilgeman 2014

Hilgeman, M. M.; Allen, R. S.; Snow, A. L.; Durkin, D. W.; DeCoster, J.; Burgio, L. D.. Preserving Identity and Planning for Advance Care (PIPAC): preliminary outcomes from a patient-centered intervention for individuals with mild dementia. Aging & mental health 2014;18(4):411-424. [DOI: 10.1080/13607863.2013.868403 [doi]]

Rokstad 2013

Rokstad, A. M.; Rosvik, J.; Kirkevold, O.; Selbaek, G.; Saltyte Benth, J.; Engedal, K.. The effect of person-centred dementia care to prevent agitation and other neuropsychiatric symptoms and enhance quality of life in nursing home patients: a 10-month randomized controlled trial. Dementia and geriatric cognitive disorders 2013;36(5-6):340-353. [DOI: 10.1159/000354366 [doi]]

Thyrian 2017

Thyrian, Jochen Rene; Hertel, Johannes; Wucherer, Diana; Eichler, Tilly; Michalowsky, Bernhard; Dreier-Wolfgramm, Adina; Zwingmann, Ina; Kilimann, Ingo; Teipel, Stefan; Hoffmann, Wolfgang. Effectiveness and Safety of Dementia Care Management in Primary Care: A Randomized Clinical Trial.. JAMA Psychiatry

2017;74(10):996-1004. [DOI: https://dx.doi.org/10.1001/jamapsychiatry.2017.2124]

vandeVen 2013

van de Ven, G.; Draskovic, I.; Adang, E. M.; Donders, R.; Zuidema, S. U.; Koopmans, R. T.; Vernooij-Dassen, M. J.. Effects of dementia-care mapping on residents and staff of care homes: a pragmatic cluster-randomised controlled trial. PloS one 2013;8(7):e67325. [DOI: 10.1371/journal.pone.0067325 [doi]]

Excluded studies

Ballard 2016

Ballard C.; Fossey, J.. Wheld: An RCT of an optimized nonpharmacological intervention to improve agitation and quality of life in 1006 people with dementia living in nursing homes. 2016;(Conference Proceedings). [DOI:]

Ballard 2016a

Ballard C.; Orrell M.; Zhong S.Y.; MonizCook E.; Stafford J.; Whittaker R.; Woods B.; Corbett A.; Garrod L.; Khan Z.; WoodwardCarlton B.; Wenborn J.; Fossey, J.. Impact of antipsychotic review and nonpharmacological interventionon antipsychotic use, neuropsychiatric symptoms, and mortality in people with dementia living in nursing homes: A factorial cluster-randomized controlled trial by the well-being and health for people with dementia (WHELD) program.. American Journal of Psychiatry 2016;173(3):252-262. [DOI: http://dx.doi.org/10.1176/appi.ajp.2015.15010130]

Ballard 2017

Ballard, Clive; Orrell, Martin; Sun, Yongzhong; Moniz-Cook, Esme; Stafford, Jane; Whitaker, Rhiannon; Woods, Bob; Corbett, Anne; Banerjee, Sube; Testad, Ingelin; Garrod, Lucy; Khan, Zunera; Woodward-Carlton, Barbara; Wenborn, Jennifer; Fossey, Jane. Impact of antipsychotic review and non-pharmacological intervention on health-related quality of life in people with dementia living in care homes: WHELD-a factorial cluster randomised controlled trial.. International journal of geriatric psychiatry 2017;32(10):1094-1103. [DOI: https://dx.doi.org/10.1002/gps.4572]

Barbosa 2016

Barbosa, Ana; Nolan, Mike; Sousa, Liliana; Marques, Alda; Figueiredo, Daniela. Effects of a Psychoeducational Intervention for Direct Care Workers Caring for People With Dementia: Results From a 6-Month Follow-Up Study.. American Journal of Alzheimer's Disease & Other Dementias 2016;31(2):144-155. [DOI: https://dx.doi.org/10.1177/1533317515603500]

Barbosa 2016a

Barbosa, Ana; Marques, Alda; Sousa, Liliana; Nolan, Mike; Figueiredo, Daniela. Effects of a psycho-educational intervention on direct care workers' communicative behaviors with residents with dementia. Health communication 2016;31(4):453-459. [DOI: 10.1080/10410236.2014.965382]

Barbosa 2017

Barbosa, Ana; Nolan, Mike; Sousa, Liliana; Figueiredo, Daniela. Person-centredness in direct care workers caring for residents with dementia: Effects of a psycho-educational intervention.. Dementia 2017;16(2):192-203. [DOI: https://dx.doi.org/10.1177/1471301215585667]

Barbosa 2017a

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Other references

Additional references

Other published versions of this review

Classification pending references

Data and analyses

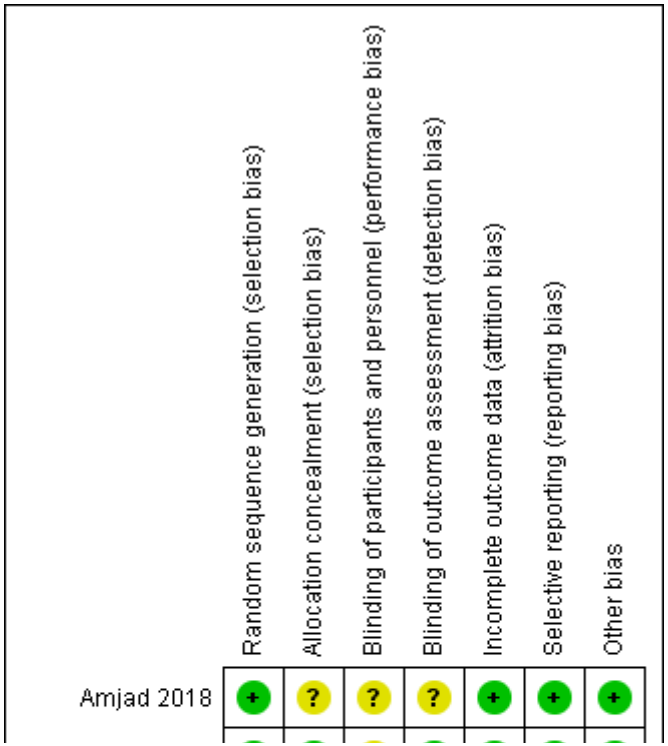
1 Person centeret care vs. control_Min 1 mo, longest possible FU after EoT, max 12 mo

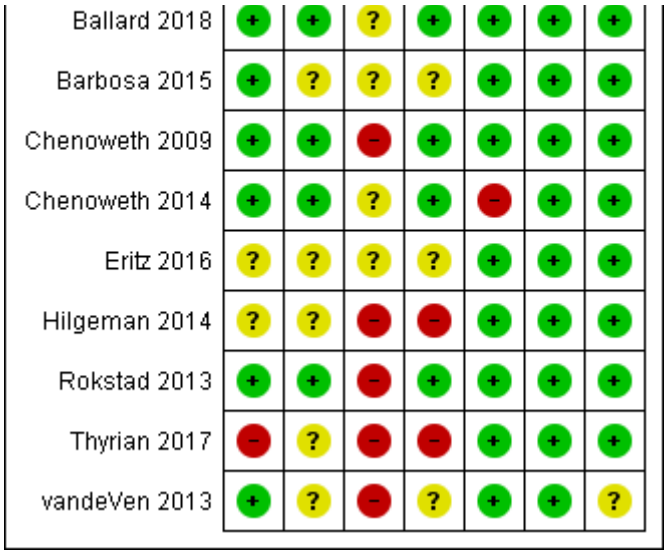
Outcome or Subgroup	Studies	Participants	Statistical Method	Effect Estimate
1.1 caregivers burden	3	745	Std. Mean Difference (IV, Random, 95% CI)	-0.10 [-0.27, 0.06]

1.2 Total agitation	6	1631	Std. Mean Difference (IV, Random, 95% CI)	-0.10 [-0.21, 0.00]
1.3 Total neuropsychiatric symptoms_NPI	5	1669	Std. Mean Difference (IV, Random, 95% CI)	-0.18 [-0.40, 0.03]
1.4 Total quality of life	8	2056	Std. Mean Difference (IV, Random, 95% CI)	-0.13 [-0.22, -0.04]
1.5 Total depression_CSDD	3	859	Std. Mean Difference (IV, Random, 95% CI)	-0.10 [-0.33, 0.12]
1.6 Antipsychotic medication administration	1	73	Mean Difference (IV, Fixed, 95% CI)	-0.19 [-0.66, 0.28]
1.14 Antipsychotic medication administration	1	553	Risk Ratio (IV, Fixed, 95% CI)	1.02 [0.61, 1.73]

Figures

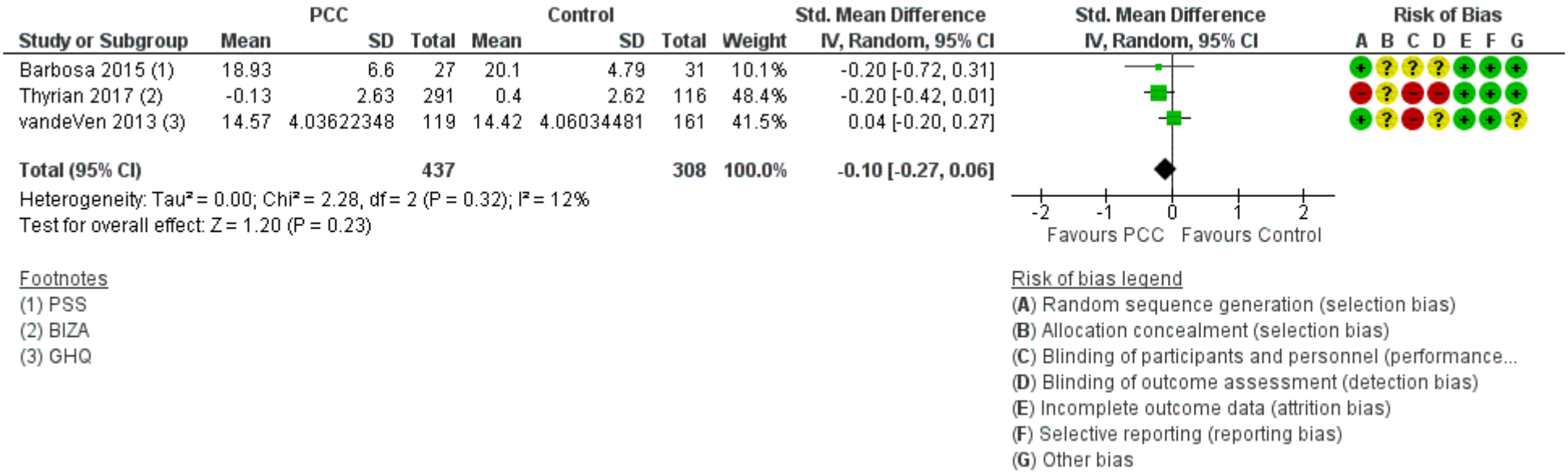
Figure 1





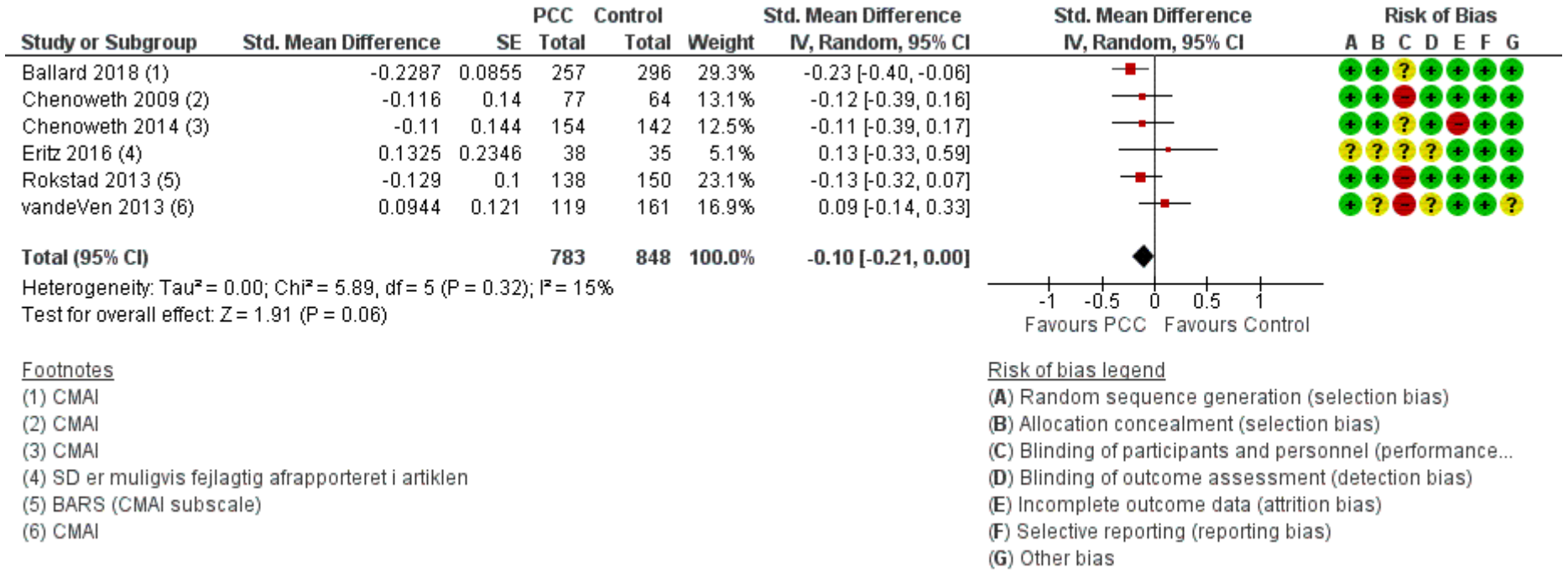
Risk of bias summary: review authors' judgements about each risk of bias item for each included study.

Figure 2 (Analysis 1.1)



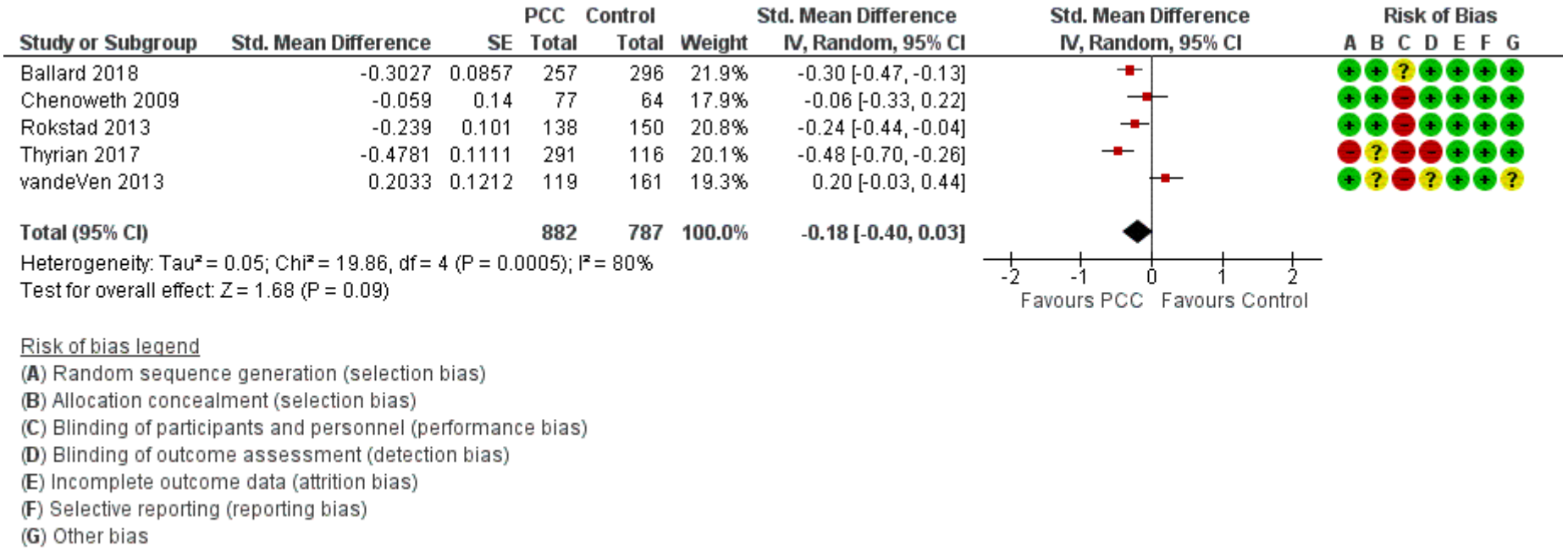
Forest plot of comparison: 1 Person centeret care vs. control_Min 1 mo, longest possible FU after EoT, max 12 mo, outcome: 1.1 caregivers burden.

Figure 3 (Analysis 1.2)



Forest plot of comparison: 1 Person centeret care vs. control_Min 1 mo, longest possible FU after EoT, max 12 mo, outcome: 1.2 Total agitation.

Figure 4 (Analysis 1.3)

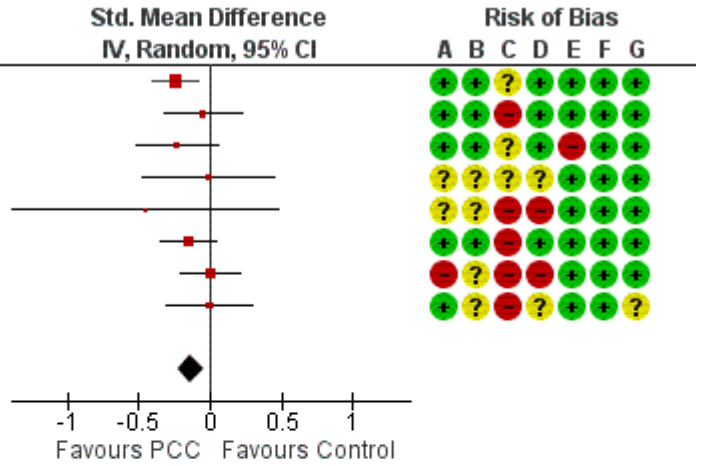


Forest plot of comparison: 1 Person centeret care vs. control_Min 1 mo, longest possible FU after EoT, max 12 mo, outcome: 1.3 Total neuropsychiatric symptoms_NPI.

Figure 5 (Analysis 1.4)

Study or Subgroup	Std. Mean Difference	SE	PCC Total	Control Total	Weight	Std. Mean Difference IV, Random, 95% CI
Ballard 2018 (1)	-0.2458	0.0856	257	296	28.4%	-0.25 [-0.41, -0.08]
Chenoweth 2009 (2)	-0.054	0.14	77	64	10.6%	-0.05 [-0.33, 0.22]
Chenoweth 2014 (3)	-0.233	0.149	154	142	9.4%	-0.23 [-0.53, 0.06]
Eritz 2016 (4)	-0.014	0.2343	38	35	3.8%	-0.01 [-0.47, 0.45]
Hilgeman 2014 (5)	-0.456	0.48	10	8	0.9%	-0.46 [-1.40, 0.48]
Rokstad 2013 (6)	-0.151	0.1	138	150	20.8%	-0.15 [-0.35, 0.04]
Thyrian 2017 (7)	0	0.1098	291	116	17.3%	0.00 [-0.22, 0.22]
vandeVen 2013 (8)	-0.005	0.153	119	161	8.9%	-0.01 [-0.30, 0.29]
Total (95% CI)			**1084**	**972**	**100.0%**	**-0.13 [-0.22, -0.04]**

Heterogeneity: Tau² = 0.00; Chi² = 5.42, df = 7 (P = 0.61); I² = 0%
Test for overall effect: Z = 2.93 (P = 0.003)

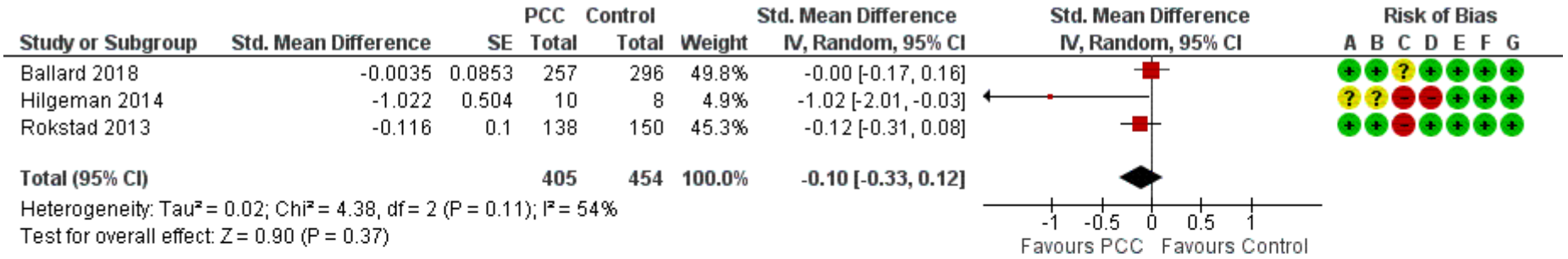


Footnotes
(1) DEM-QoL proxy
(2) QUALID
(3) DEM-QoL proxy
(4) ADRQL
(5) QoL-AD, self-reported
(6) QUALID
(7) QoL-AD, self-reported
(8) QualiDem

Risk of bias legend
(**A**) Random sequence generation (selection bias)
(**B**) Allocation concealment (selection bias)
(**C**) Blinding of participants and personnel (performance...
(**D**) Blinding of outcome assessment (detection bias)
(**E**) Incomplete outcome data (attrition bias)
(**F**) Selective reporting (reporting bias)
(**G**) Other bias

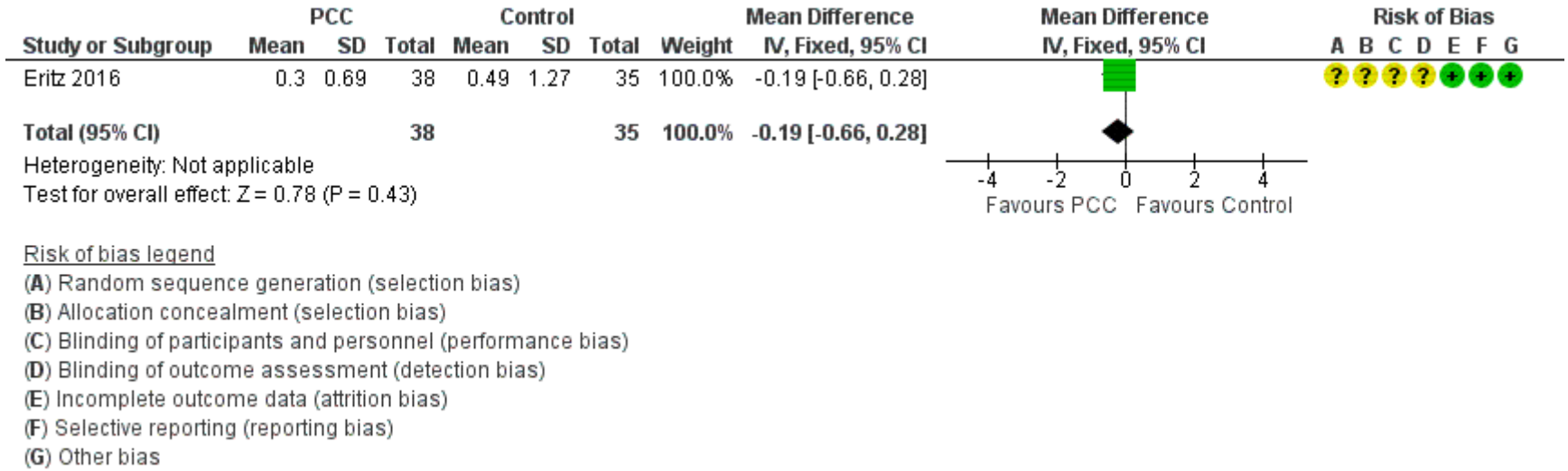
Forest plot of comparison: 1 Person centeret care vs. control_Min 1 mo, longest possible FU after EoT, max 12 mo, outcome: 1.4 Total quality of life.

Figure 6 (Analysis 1.5)



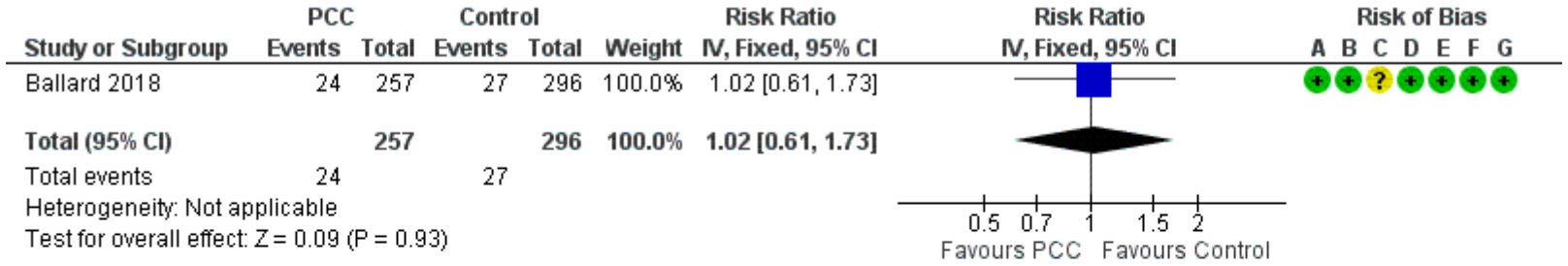
Forest plot of comparison: 1 Person centeret care vs. control_Min 1 mo, longest possible FU after EoT, max 12 mo, outcome: 1.5 Total depression_CSDD.

Figure 7 (Analysis 1.6)



Forest plot of comparison: 1 Person centeret care vs. control_Min 1 mo, longest possible FU after EoT, max 12 mo, outcome: 1.6 Antipsychotic medication administration.

Figure 8 (Analysis 1.14)



Risk of bias legend
(**A**) Random sequence generation (selection bias)
(**B**) Allocation concealment (selection bias)
(**C**) Blinding of participants and personnel (performance bias)
(**D**) Blinding of outcome assessment (detection bias)
(**E**) Incomplete outcome data (attrition bias)
(**F**) Selective reporting (reporting bias)
(**G**) Other bias

Forest plot of comparison: 1 Person centeret care vs. control_Min 1 mo, longest possible FU after EoT, max 12 mo, outcome: 1.14 Antipsychotic medication administration.