First author, year, country, reference	Study design, duration	Population	Core components	Control group	Outcome measures	Key findings
Bass, 1998, US [22]	RCT 12 months	Primary informal caregivers of community-dwelling older people with Alzheimer disease (N=102); mean age 60 years	1. Peer interaction via a bulletin board and private mail 2. Online question and answer with a nurse 3. Information on AD, treatment, and caring 4. Decision support tool	1 face-to-face information session on caregiving and Alzheimer disease	Physical strain; emotional strain; relationship strain; activity restriction; frequency and duration of use	Peer and nurse interaction sections more often used than solitary parts (average 11.28 and 0.97 times per month, respectively). Reduced relationship strain for spouses and emotional strain for those with more social support. Duration of use of the interaction functions associated with reduced strain in those with most initial strain and non–spouse caregivers.
Beauchamp, 2005, US [23]	RCT 30 days	Employed family caregivers with regular caring duties who reported experiencing stress as a result of caring (N=299); mean age 46.9 years	1. Individualized tailoring: questionnaire about the individual's situation used to recommend resources 2. 3 modules focusing on components of knowledge and cognitive and behavioral skills including coping with emotions and difficulties	Waiting list	Caregiver strain; positive caregiving (Positive Aspects of Caregiving); depression (CES-D[a]); anxiety (State-Trait Anxiety Inventory); satisfaction survey	Improved stress (*F*=15.19, *P*<.001), self-efficacy (*F*=5.87, *P*=.02), intention to get support (*F*=9.76, *P*=.002), strain (*F*=4.90, *P*=.03), caregiver gain (*F*=5.35, *P*=.02), depression (*F*=6.83, *P*=.009), and anxiety (*F*=4.78, *P*=.03). No change in employing coping strategies. Positive correlation between time spent viewing the program and outcome (*r*=.30, *P*=.001).
Blom, 2015, Netherlands [24]	RCT 6 months	Family caregivers of PWD[b] with score >4 on CES-D or a	1. Multimedia lessons on problem solving, relaxation, cognitive restricting, and assertiveness; guided by a psychologist	Email newsletters with practical information about caring	Depression (CES-D); anxiety (HADS-A); pressure (Self-Perceived Pressure for Informal Care Scale); problems	Significant reduction in symptoms of depression and anxiety in intervention group, with differences in effect size 0.29 and 0.34, respectively,

		score >3 on HADS-A[c] or a minimum of 6 on a 1-item burden scale (N=251); mean age 61.2 years	2. Homework	and dementia	from dementia symptoms (RMBPC[d]); competence (SSCQ[e]); mastery (Pearlin Mastery Scale)	compared with comparison group.
Fowler, 2016, US [25]	RCT 4 months	Primary informal caregivers of homebound PWD (N=28); mean age 60 years	1. Peer interaction 2. Interaction with a multiprofessional health care team via a question-and-answer forum 3. Educational modules on providing care, self-care, and dementia 4. Links to community resources 5. Online sleep hygiene program 6. Blog where caregivers can upload pictures and share personal information	Usual care	General self-efficacy scale; insomnia severity index; sleep actigraphy band data	No significant difference in insomnia severity scores, sleep quality (underpowered to detect this), or self-efficacy as a result of the intervention.
Hattink, 2015, Netherlands, UK [26]	RCT 2-4 months	Informal caregivers, volunteers, and formal caregivers of PWD dwelling in the community (N=142); mean age 52 years	1. Modules covering information about dementia, practical advice on caring, and looking after the caregiver 2. Interaction with a learning advisor who tailored the program for the caregiver 3. Links to other resources including a Facebook forum	Waiting list group with no intervention for 4 months	Knowledge (Alzheimer's Disease Knowledge Scale); Alzheimer disease survey; approach (Approaches to Dementia Questionnaire); interpersonal reactivity (Interpersonal Reactivity Index); quality of life; burden; competence (SSCQ); evaluation of user experience of the	Rated positively by users for usefulness and user friendliness; statistically significant effects for informal caregivers on attitudes toward dementia (η^2=.19), distress (η^2=.15), empathic concern (η^2=.46), and taking the perspective of the PWD (η^2=.32). No significant impact on knowledge, quality of life or burden. Significant reduction in self-

					intervention	reported sense of competence (η^2=.11); 59/142 dropped out, mostly for unknown reasons.
Hicken, 2016, US [27]	RCT 4-6 months	Caregivers of veterans with dementia (N=231); mean age 70.2 years	1. Video vignettes about dementia 2. Video vignettes and written information about caregiving 3. Assessments of caregiver well-being with proactive contact from a social worker or individualized tailoring if particular area of need 4. Self-guided cognitive behavioral therapy-based techniques for mood management 5. Links to local services	Telephone support, written information, and a digital video disc of the content	Burden (ZBI[f]); grief (Marwit-Meuser Caregiver Grief Inventory); mood (9-item Patient Health Questionnaire); family conflict and hardship; desire to institutionalize	Significant improvement in hardship (β=–.253, t_{104}=–2.66, *P*=.009) and grief (β=–.324, t_{48}=–2.46, *P*=.02) for the internet group compared with controls. All other outcome measures had no significant difference in change scores between cohorts.
Kajiyama, 2013, US [28]	RCT 3 months	Informal caregivers of PWD aged ≥21 years, caring for at least 8 hours per week (N=150); mean age 56 years	1. Education on dementia and planning for the future 2. Self-care advice including stress management techniques, relaxation, and healthy habits 3. Advice on communication skills and managing difficult behaviors	Website and written documents containing information on dementia only	Stress (a); problems with dementia symptoms (RMBPC); depression (CES-D); quality of life	31% dropped out. Caregivers in the intervention group experienced significantly greater improvement in perceived stress (t_{45}=3.18, *P*=.003). No significant change in any other outcome measures.
Nuñez-Naveira, 2016, Spain, Poland, Denmark [29]	RCT 3 months	Primary informal caregivers of PWD with a burden due to their caring	1. Chats and forums for peer discussion 2. Video, audio, and written content on instructions for caring tasks and information about dementia	Usual care	Depression (CES-D); burden (ZBI); usability questionnaires; competence (Caregiver Competence Scale); satisfaction (Revised	21% of caregivers dropped out. Statistically significant decrease in depressive symptomatology in the experimental group. No significant change in other

		(N=77)	3. Medication reminders 4. Calendar for caregivers to schedule events 5. Facility to record instructional videos for the care receiver 6. Questionnaire for individual customization 7. Signposting to other websites and resources		Caregiving Satisfaction Scale)	outcomes.
Van Mierlo, 2015, Netherlands [30]	RCT 12 months	Informal caregivers of PWD living at home (N=73); mean age 63.0 years	1. Tool to individually tailor information given on the basis of needs 2. Information about local and national care and support services	No access to the tool (DEM-DISC)	Needs (Camberwell Assessment of Needs for the Elderly); quality of life (Quality of life in Alzheimer’s Disease and EuroQuol EQ5D+c); neuropsychiatric symptoms (Neuropsychiatric Inventory Questionnaire); competence (SSCQ); ease of use (Usefulness, Satisfaction and Ease of Use Questionnaire)	At 12 months: significantly more total care needs (*P*=.004) and total unmet needs (*P*=.02) in the experimental group compared with the control group; significantly higher sense of competence in the experimental group compared with control. No other significant differences.

Table 1. Characteristics, components, outcomes, and key findings of randomized controlled trials (RCTs).

[a] CES-D: Center for Epidemiologic Studies Depression Scale.

[b] PWD: person with dementia.

[c] HADS-A: Hospital Anxiety and Depression Scale.

[d] RMBPC: Revised Memory and Behavior Problems Checklist.

[e] SSCQ: Short Sense of Competence Questionnaire.

[f] ZBI: Zarit Burden Interview.