

Multimedia appendix 2 Synthesis of components, behaviour change techniques and outcomes for each category of Internet-based interventions

Author	Categories of components ^a				Behaviour change techniques ^c	Caregiver outcomes (ES) ^d
	Multi-media	IOA ^b	Guidance and supportive feedback ^b	Other ^b		
Web-based education interventions						
Eames et al [32]	Text	NR	NR	NR	NR	NSSD in caregiver strain
Pierce et al [36]	Text	NR	<i>Professional support:</i> nurse specialist and rehabilitation team respond to questions with a private asynchronous module (email forum) <i>Peer support:</i> asynchronous discussions facilitated by a nurse (email)	List of relevant web links	NR	NSSD in depression symptoms and satisfaction with life
Torkamani et al [38]	Text	Online questionnaires on CR and CG health status	<i>Professional support:</i> clinicians receive answers from IOA, facilitating the speedy delivery of appropriate interventions. Clinicians are also reachable with a “contact us” button. <i>Peer support:</i> asynchronous discussion sessions (forum)	Musical entertainment Relaxation and exercise techniques	Social support Stress management	NSSD in caregiver burden, occurrence of psychiatric and/or behavioral problems, depressive symptoms and quality of life

Self-help web-based therapeutic interventions						
Beauchamp et al [27]	Text Videos	Online questionnaires on CG personal situation Changing role button to select the relationship with CR	NR	IOA used to tailor content Testimonials	Barrier identification Instructions Modelling Social support	↓ stress (0.5) ↑ intention to get support (0.3) ↓ caregiver strain (0.2) ↑ caregiver gain (0.2) ↓ depressive symptoms (0.2) ↓ state anxiety (0.2) ↑ self-efficacy (0.2) NSSD in the use of specific stress-reduction strategies
McLaughlin et al [34]	Text Videos	Video-based skills exercises	NR	List of relevant web links and articles	Barrier identification Instructions Modelling Prompt practice Stress management	↑ skill application (1.01) ↑ intention to use (0.7) ↑ knowledge (0.67) NSSD in satisfaction with life
Human-supported web-based therapeutic interventions						
Bloom et al [28]	Text Videos	Homework and exercises online Evaluation at the start and end of each lesson	<i>Professional support:</i> psychologist provides asynchronous feedback on IOA (electronic secured application) <i>Automatic reminders</i> to send homework or attend lessons	Consultation of feedback is mandatory to have access to the next lesson	Barrier identification Instructions Modelling Feedback on performance Stress management Time management	↓ symptoms of anxiety (0.48) ↓ depressive symptoms (0.26)

Cristancho-Lacroix et al [30]	Text Videos lectures	NR	<i>Peer support:</i> asynchronous discussion sessions moderated by a psychologist (forum)	Relaxation training Testimonials Glossary Bank of activities to stimulate CR	Information on behaviour-health link and on consequences Barrier identification Instructions Prompt practice Social comparison Social support Stress management	↑ knowledge (0.79) NSSD in perceived stress
Chih et al [29]; DuBenske, et al [31]; Namkoong et al [35]	Text Graphic	Online questionnaires on CR and CG health status Coaching service that automatically generates graphics of health status, offer decision aids and structures an action plan	<i>Professional support:</i> cancer information specialist available via an “ask and expert” button. <i>Clinician report:</i> summaries of users’ health available to the clinical team on demand, from a threshold alert or two days before a clinic visit. <i>Peer support:</i> asynchronous discussion sessions moderated by a professional facilitator (bulletin board)	IOA and interactions through supportive feedback component used to tailor content FAQs List of relevant web links, articles and community services Cancer news Testimonials Personal webpage	Information on behaviour-health link and on consequences Barrier identification Instructions Goal setting Social support Stress management Time management	↓ negative mood at 6 and 12 months ↓ caregiver burden, at 6 months ↑ bonding = ↑ active coping NSSD for preparedness, physical burden and in levels of disruptiveness
Kim et al [33]	Video lectures Power points	Online quizzes following the viewing of video lectures	<i>Professional support:</i> asynchronous service to network with health professionals (email)	List of relevant web links	Information on behaviour-health link and on consequences Instructions Feedback on performance	↑ caregiver mastery

Smith et al [37]	Text Video of enacted support group	At-home applications given by a nurse	<i>Professional support:</i> two times per week, a synchronous chat session directed by a nurse for the viewing and commenting of the weekly video (Adobe connect). The nurse is also available by asynchronous communication (email). <i>Peer support:</i> asynchronous discussion sessions (email and message board)	List of relevant web links, instructional videos and pdf files. Online library of educational information Search engine	Information on behaviour-health link and on consequences Intention formation Instructions Self-monitoring of behaviour Feedback on performance Prompt practice Social comparison Social support Identification to role models Stress management	↓ depression, at 11 weeks and one month follow-up NSSD in sense of mastery, self-esteem and social support.
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^a As categorized by Barack and Klein [19].

^b CG: caregiver; CR: care recipient; FAQ: frequently asked question; IOA: interactive online activities; NR: none reported.

^c As categorized by Abraham and Michie [22].

^d Arrows show the direction of statistically significant differences in intervention group compared to control for outcomes measured ($P < .05$). ES: value of effect sizes as originally reported by the authors; NSSD: non statistically significant difference.