

Physician and a Consultant Paramedic. Participants from across Yorkshire 'dialled in' remotely, individually or in groups. Each session comprised an expert didactic and two anonymised case presentations from participants, which formed the basis of facilitated discussions. Session resources were emailed. Electronic surveys based on existing research were completed by participants: a knowledge questionnaire on recruitment; self-completed surveys of knowledge and self-efficacy at the start and after 3 sessions, and individual session evaluations.

Results Of the 30 applicants, 27, 23 and 28 attended each of the first 3 sessions. Of these, 18 completed the initial survey and 16 the second. The proportion of participants self-reporting as 'competent' or 'very competent' increased in 4 out of 5 domains related to EOLC. The proportion reporting 'agree' or 'strongly agree' with questions related to competence in EOLC increased in 12 out of 16 domains.

Conclusions Attendance and recruitment rates indicate that ECHO is an accessible model of education delivery. The survey findings support the successful application of this model to paramedics delivering EOLC, resulting in improved self-reported knowledge and confidence.

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10 THE EFFECTS OF OPIOIDS ON COGNITION IN OLDER ADULTS WITH CANCER AND CHRONIC NON-CANCER PAIN: A SYSTEMATIC REVIEW

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10.1136/bmjspcare-2019-ASP.9

Background Pain is poorly managed in older adults and opioids can be used to manage moderate-severe pain. Little data exists about adverse effects of opioids in this population, especially on cognition.

Aim To identify, appraise and synthesise evidence on the impact of opioids on cognition in older adults with cancer/chronic non-cancer pain.

Methods Protocol followed the Preferred Reporting Items for Systematic Review and Meta-Analysis Protocols (PRISMA-P). Searches of MEDLINE, EMBASE, PsycINFO, CINAHL, Cochrane Library and Web of Science, from inception to April 2018. Randomised controlled trials, quasi-experimental studies and observational studies of adults aged ≥ 65 with cancer/chronic non-cancer pain taking opioids were included. Measure(s) of cognition was the primary outcome. Study eligibility for inclusion, data extraction and quality appraisal (using QualSyst) were independently performed in duplicate. A narrative synthesis was conducted.

Results From 3370 unique articles screened, 12 met inclusion criteria. Studies explored cognition in 1134 participants with cancer and 959 with chronic non-cancer pain. Five studies reported no significant effect of opioids on cognition, two reported an improvement to cognition, three showed worsened cognition and two studies reported mixed effects. Studies showing improved cognitive function administered opioids over a short-term period, whilst those demonstrating decreased function administered opioids long-term. Higher opioid doses over long time periods led to decreased cognitive function.

However, methods of cognitive assessment varied across studies (i.e. number of cognitive assessments used, cognitive domains assessed and timing). Six studies adopted single screening tools, which are not sensitive to detect subtle cognitive changes.

Conclusion To determine cognitive effects of opioids in this population, it is essential to report length of opioid use/dose, and the timing/sensitivity of screening tools and neuropsychological assessments. Without this evidence, we know little about how and whether adverse effects of opioids impact on pain management among older adults.

11 FATIGUE INTERVENTION CO-DESIGN STUDY: UNIQUE NEEDS OF TEENAGERS AND YOUNG ADULTS WITH CANCER-RELATED FATIGUE

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10.1136/bmjspcare-2019-ASP.10

Background Fatigue is the most prevalent and distressing symptom experienced by teenage and young adult (TYA) cancer patients. It has a particularly negative impact at this young age, hindering key developmental needs such as independence. Despite this, there have been no interventional studies focused on its management in TYAs. Exercise, psychological techniques and energy conservation are the most effective approaches in older adults. TYAs, however, report finding current fatigue management strategies unhelpful. We therefore conducted a study, working with TYA patients and their parents, to co-design a fatigue intervention that better meets their needs.

Methods Thirteen patients aged 16–27 and within a year after the end of cancer treatment, and ten parents were recruited. In a three-phase iterative study design, participants took part in semi-structured interviews and focus groups. They then received the co-designed prototype intervention, before a final phase of feedback and amendment.

Results Participants described multiple age-related needs. Cognitive fatigue was more problematic than physical fatigue, and participants valued support explaining this to staff at education or work. Advice to exercise was most helpful when it included an individualised, structured plan, given the physical reserve of youth and fear that activity may worsen fatigue. The distress of fatigue was compounded by multi-level misunderstandings, particularly with parents, supporting parent inclusion in the intervention. Energy conservation and pacing were seen as irrelevant at this age, with a preference for App-based mindfulness techniques. Information was most acceptable in short video, rather than written, format.

Conclusion TYA cancer patients demonstrated unique needs from a fatigue intervention. Symptom control research findings involving older adults cannot necessarily be extrapolated to younger patients. The novel intervention co-design process was highly feasible and led to mutual benefit for participants and researchers. The effectiveness of the co-designed intervention now needs to be tested in a controlled trial.