

Effectiveness and cost-effectiveness of cancer specialist cancer nurse-led interventions: An umbrella review of systematic reviews

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BACKGROUND

- Nurses are well-placed to deliver innovative cancer care through coordinated holistic, patient-centred models, across settings and illness trajectories.
- Literature suggests benefits of specialist cancer nurse-led interventions however, it is unclear if, where and how they are effective and cost-effective.

AIM

To understand the effectiveness and cost-effectiveness of specialist cancer nurse-led interventions and models of care.

METHODS

Review Style: Umbrella review of systematic reviews

Data Sources: CINAHL, Cochrane DSR, Medline, PsycINFO and Google Scholar

Eligibility: Reviews conducted in a systematic way reporting on comparator studies

Process: Reviews screened, assessed and extracted by two independent reviewers

Appraisal: JBI Critical Appraisal Checklist for Systematic Reviews and Research Synthesis

Analysis: Narrative synthesis. Interventions categorized using the Omaha taxonomy

RESULTS

- Search**
 - Of 1,192 sources screened, 30 reviews eligible and included.
- Reviews**
 - Systematic reviews without meta-analysis n=19 (64%), with meta-analysis n=10 (33%), Scoping review n=1 (3%).
- Primary studies**
 - 285 primary studies including 190 000 participants, 28 countries represented, most studies from the USA n=99 (35%).
- Cancer types in reviews**
 - Mixed n=20 (67%), breast n=4 (13%), prostate n=2 (7%), liver, gynaecological, head and neck and advanced cancer n=1 (3%) each.
- Quality**
 - n=13 (43%) met >75% of criteria, n=13 (43%) met 50-75% of criteria, and n=4 (14%) met <50% of criteria.

- Interventions were delivered across the cancer trajectory, face-to-face, via telephone or internet and individually or in group settings.
- No full economic evaluations / cost-effectiveness studies were included.
- In primary studies most nurse-led interventions n=244 (86%) were in addition to usual care rather than alternative to other health care professional interventions.

Figure 1. Summary of core nursing interventions categorised against the Omaha System Intervention Scheme



When counting specific outcomes measures specialist cancer nurse-led interventions were ...

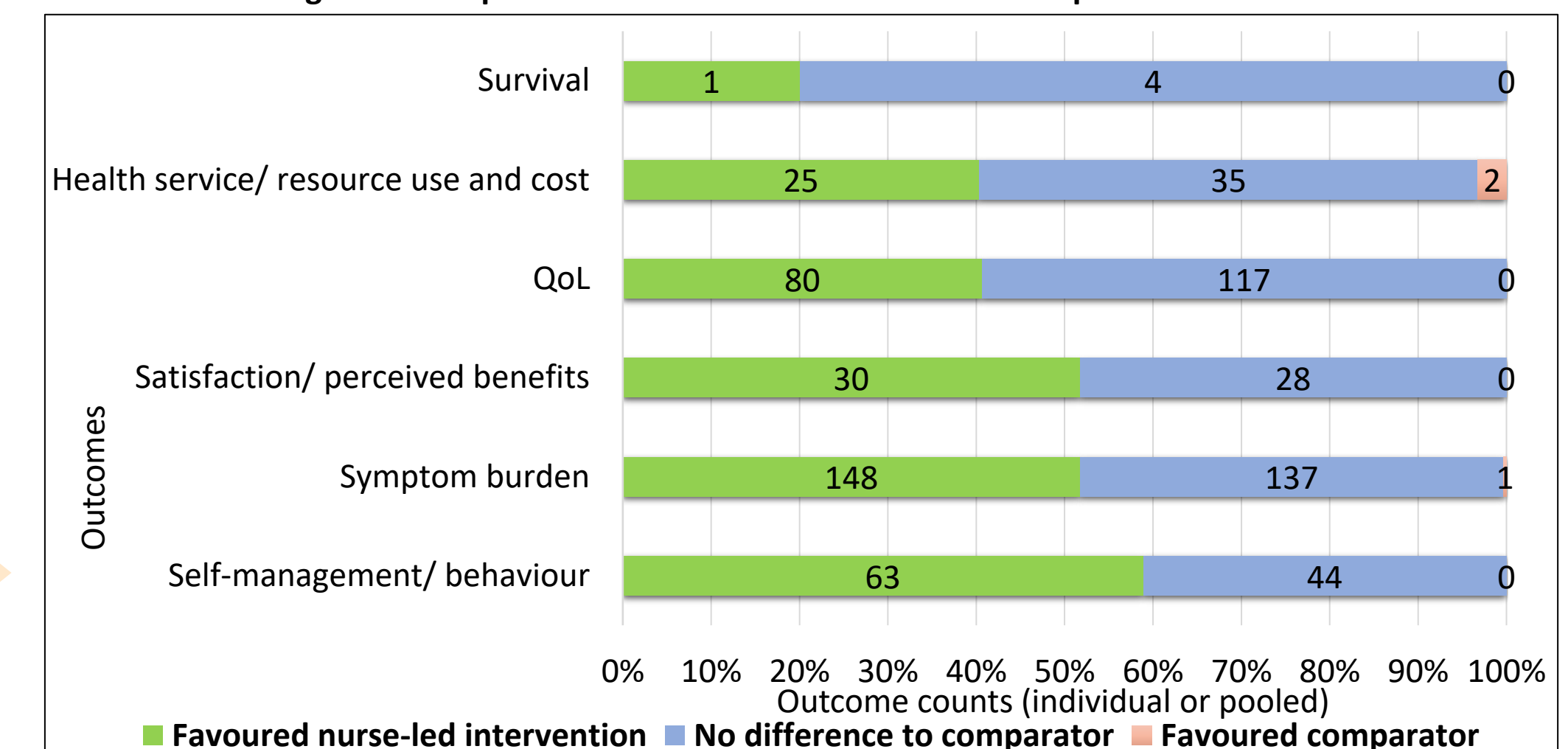
More effective than comparator groups at improving:

- self-management and behavior outcomes (n=63/107, 59%),
- symptom burden (n=148/286, 52%) and,
- satisfaction (n=30/58, 52%) (Figure 2).

No different than comparator groups for:

- quality of life (n= 80/197, 40%),
- healthcare utilization and cost (n=25/62, 40%) and,
- survival (N=1/5, 20%) (Figure 2).

Figure 2. Comparison of nurse-led intervention vs comparator outcomes



TAKE HOME MESSAGES

- Cancer nurses provide valuable care through the provision of **additional nurse-led interventions** to support unmet needs of patients and health services **across the cancer trajectory**.
- Economic evaluations and other studies** are needed to understand the value of nurse-led care.
- Findings can inform **refinement and continued development** of specialist cancer nursing roles and models of care.