

Understanding how two cancer rehabilitation services work for people in South Wales, UK: findings from a mixed-methods study

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Background

Cancer rehabilitation (CR) which can consist of physical exercise, psychological support and health education depending on people's needs, has a positive impact on quality of life internationally (Hunter et al. 2017). However, 41.3% of Welsh Cancer Patient Experience Survey respondents reported receiving limited or no practical advice or support for their cancer related health issues (Welsh Government, 2017). Reasons for this lack of support are unclear. Thus, the aim of this study was to investigate how two CR services work in South Wales, UK, for whom, and in what circumstances.

Methodology

- Realist informed mixed-methods study
- Findings can be explained as Context-Mechanism-Outcome configurations
- Ethical approval by London South – East Research Ethics Committee (17/LO/2123)
- Quantitative, secondary analysis of a database (n=1645 records over four years), with pre and post rehabilitation outcome measure data (e.g.: FACIT-F, etc.) compared using paired t-test or Wilcoxon signed rank test
- Qualitative semi-structured, one-on-one, audio recorded interviews with healthcare professionals (n=20) and people with cancer (n=15 including three dyadic interviews) recruited purposively from two sites
- Transcribed data were analysed using Braun and Clark's (2006) thematic approach

Findings - Outcomes

Statistical analysis of the database showed significant **positive change in people's fatigue** (t(4.069, p=0.000, r=0.484), **functional mobility** (T=665.500, p=0.000, r=0.493), **quality of life** (T=2560.500, p=0.000, r=0.550), and **pain** (T=30.000, p=0.000, r=0.676) following a 12-week exercise class. However, some participants

attended the 12-week exercise class several times, indicating long-term health issues, insufficient self-management, and dependency on services. Missing data patterns implied some participants disengaged. Reasons for this were unclear. Some interviews highlighted people's unmet support needs at both services, suggesting that CR does not always work as intended.

exercise classes encouraged people to start doing physical activities alone by reducing their fears regarding exercising with a cancer diagnosis and increasing their confidence. Tailored exercise classes also improved people's mental health by providing purpose and a sense of normality, and teaching skills that could enable people to self-manage stress. Educational interventions helped to enhance physical and psychological health by

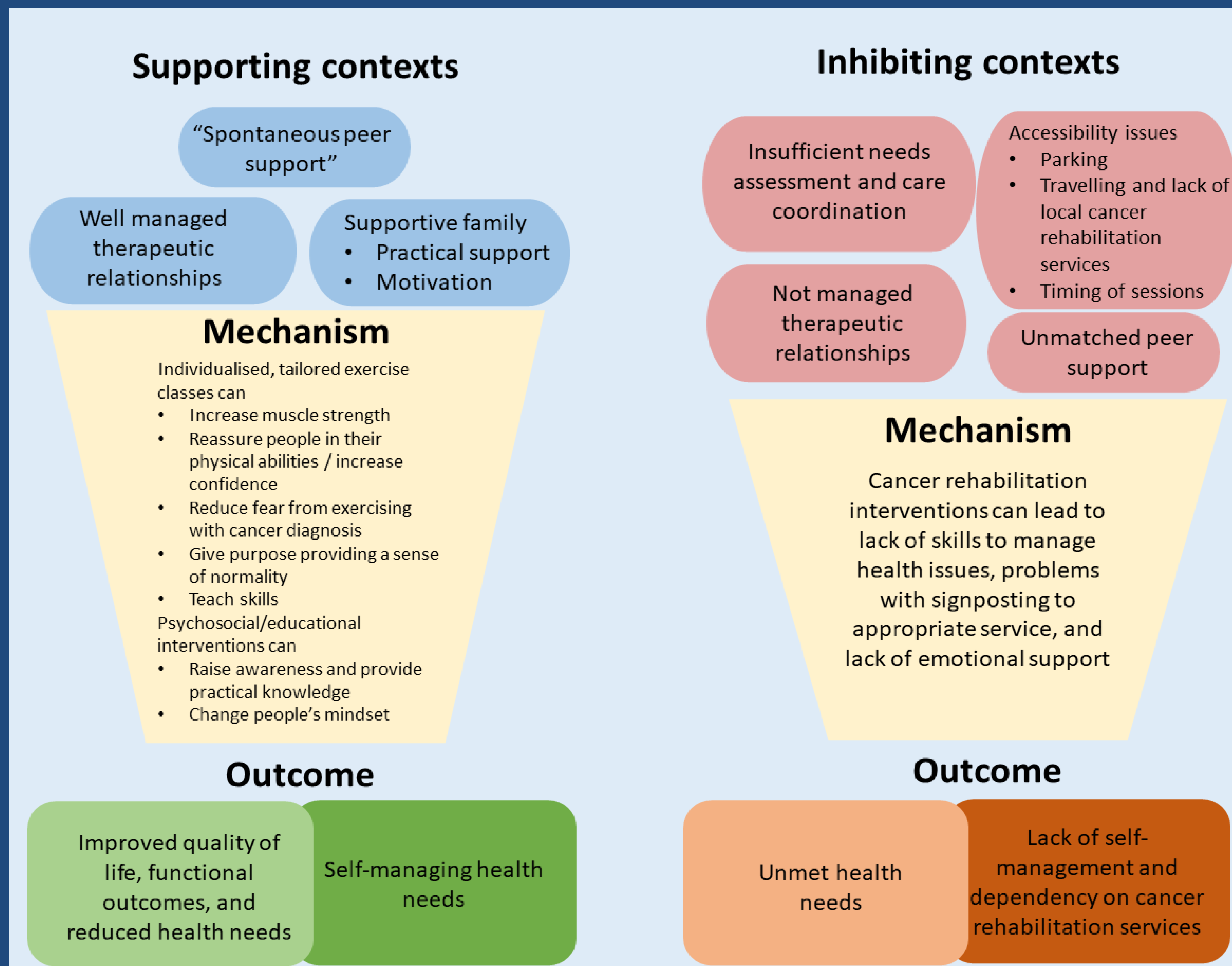
Findings - Contexts

Contexts and their relationships to mechanisms and outcomes can be seen in the Figure. In detail, well managed therapeutic relationships helped tailoring CR, as people openly discussed issues with healthcare professionals they trusted. Supportive family was helpful in two ways: providing practical support, such as driving, and motivation to become physically active. "Spontaneous peer support" was also an important context as it provided a relaxed informal support for people with cancer, and through the social interactions helped to restore a sense of normality.

However, inhibiting contexts resulted in insufficient tailoring of CR and unmet needs. There was not a gold-standard way to assess CR needs, which led to unidentified health issues. Coordination issues were also found, as healthcare professionals argued that keyworkers should be conducting needs assessment, although people with cancer experienced problems with keyworker allocation. Therapeutic relationships can be inhibiting contexts if not managed, leading to people depending on the services instead of self-managing. Unmatched peer support occurs when people in a group cannot help each other emotionally due to their different needs and circumstances. Other inhibiting contexts included accessibility issues.

Conclusion

Improved coordination of patient support and boundary setting for CR services is needed. However, some of these issues cannot be resolved until CR is fully embedded in the cancer pathway.



Findings - Mechanism

The mechanism of individualised, tailored exercise classes helped people improve muscle strength leading to increased mobility and reduced physical health needs. Individualised

raising people's bodily awareness and changing individuals' mindsets regarding their changed capacity. However, inhibiting contexts often led to CR not being tailored to individual needs.