The impact of cancer on employment and income: Do coastal inequalities exist?

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Poor health and socioeconomic outcomes are seen in UK coastal communities[1].

The impact of geography (coastal and rural living) on cancer survivorship outcomes are under-researched[1].

Employment is key to post-treatment reintegration (European Code of Cancer Practice).

Cancer survivors are 1.4 times more likely to be unemployed than those without cancer[2].

This study investigates the relationship between employment, financial hardship and geography among cancer survivors, to inform more equitable service delivery.

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Methods:

Data were drawn from the HORIZONS study[3], a UK multi-centre prospective cohort following individuals diagnosed with non-Hodgkin lymphoma, gynaecological cancers, or breast cancer (in females under 50), treated with curative intent. Participants completed surveys at 3, 12, 24 and 36 months post-diagnosis. Responses to relevant items from the Work and Social Adjustment Scale (WSAS) and the Quality of Life in Adult Cancer Survivors (QLACS) questionnaire at each time point were analysed. Outcomes were stratified by coastal status (within 10km of the coastline), rurality, age, deprivation, and cancer type. Bonferroni-corrected chi-squared tests were used to assess statistical significance.

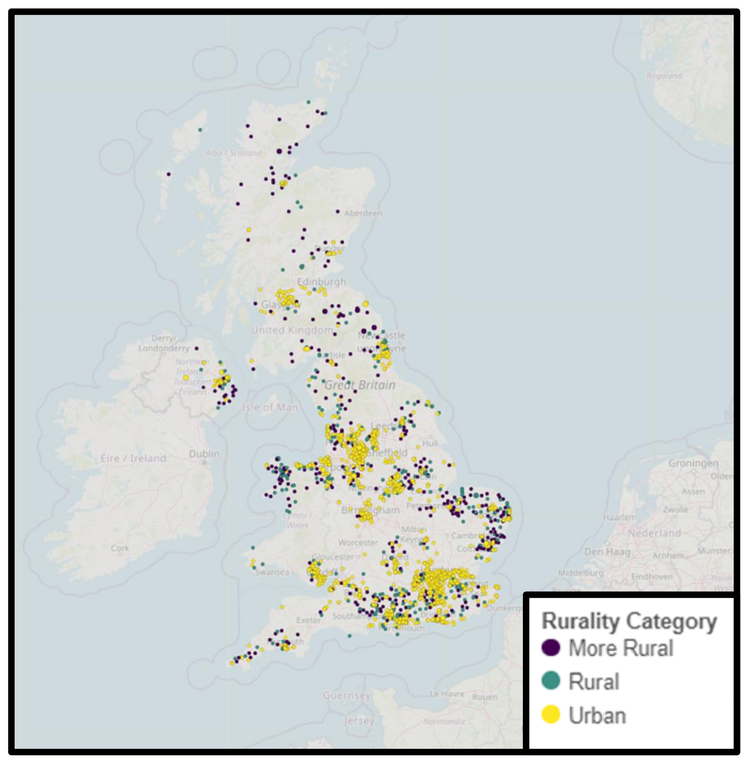

Figure 1. Map of participant locations

Results

- Of 1,680 participants (median age 46.5 years; 88% female; 62% with breast cancer), 27% resided in coastal and 28% in rural areas (*Figure 1*).
- At 3 months, 25% (n=318) reported 'very severe' work impairment due to cancer, this improved over time, but 'definite' impacts persisted in 26% (n=266) and 16% (n=105) at 12 and 36 months, respectively.
- Coastal status and rurality were not associated with significant differences in work ability or financial burden (*Figure 2a & 2b*).
- Deprivation significantly influenced financial difficulty: participants from the most deprived areas reported more income-related problems at 12 (p=0.002) and 24 months (p=0.008) (*Figure 2c*).
- Significant differences (p<0.001) in work ability were seen between different cancer types and ages, younger participants (≤50 years) and those with breast cancer reported greater impacts, by 36 months, 33% (n=63) of participants over 50 had left the workforce. Younger participants seemed to experience greater financial impacts, but differences did not reach statistical significance (*Figure 2d*).
- Item non-response was ≤5% across variables.

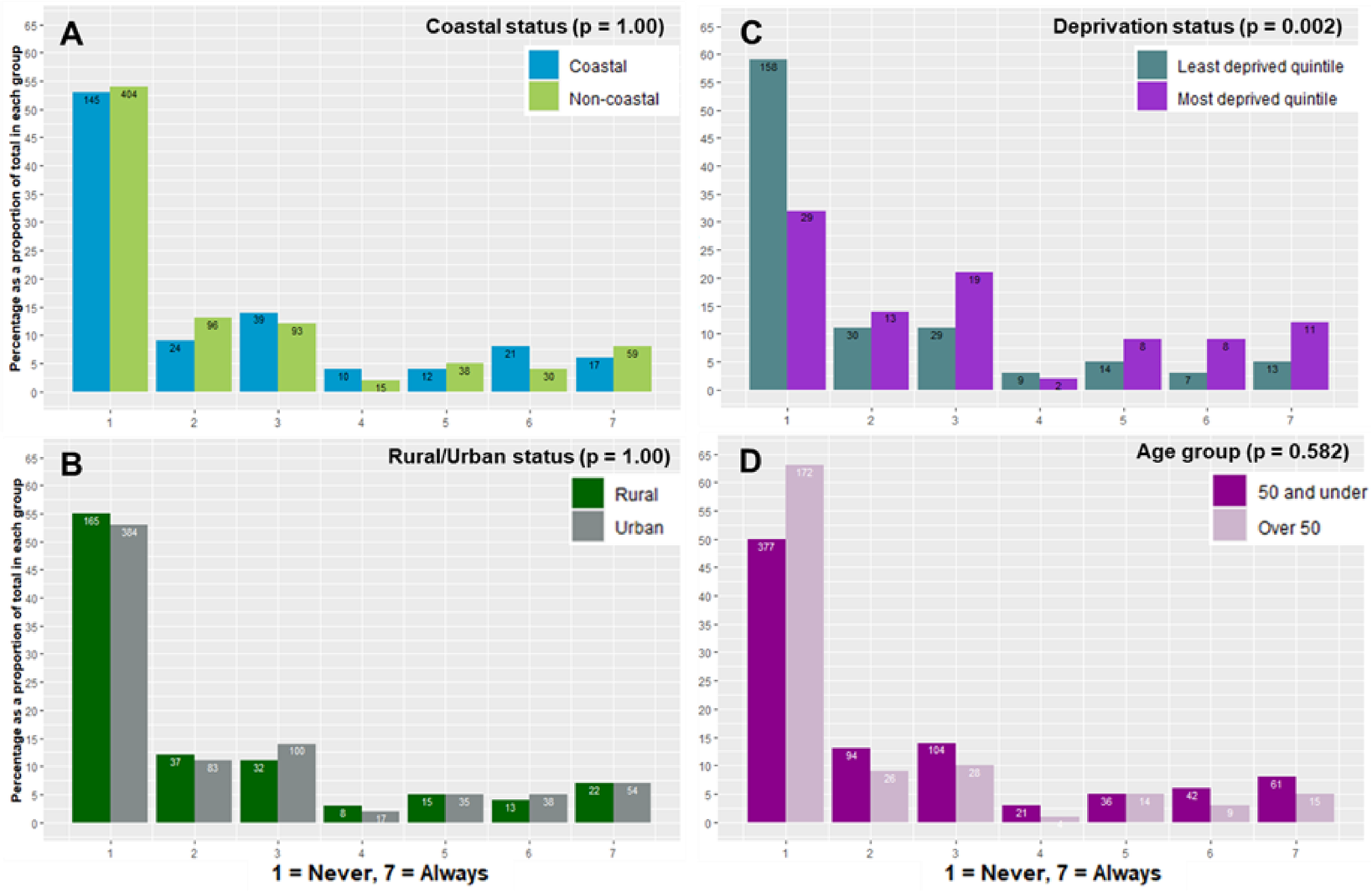

Figure 2. Employed participant responses to primary outcome question at 12 months post enrolment
Bonferroni-corrected chi-squared tests were used to assess statistical significance

Conclusions

Coastal residence and rurality do not appear to exacerbate work or financial challenges following cancer.

Substantial long-term impacts on employment persist across groups.

Younger individuals and those from deprived areas reported greater financial hardship, and differences in impact on work ability are seen between different cancer types.

Findings highlight the need for nuanced, equity-focused survivorship support that goes beyond binary employment outcomes and addresses persistent disparities related to deprivation, age, and cancer type.

References:

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