Exercise for cancer patients receiving immune checkpoint inhibitors: healthcare professional views and practices

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BACKGROUND

- Exercise has been proven safe and beneficial for people with cancer[1], however evidence in people receiving immune checkpoint inhibitor (ICI) immunotherapy is lacking.
- People receiving ICIs are engaging in exercise, while also reporting challenges with exercise participation[2].
- As people with cancer prefer receiving information about exercise from their treating clinician[3], it is important to understand healthcare professionals (HCPs) views and practices regarding exercise promotion.

METHODS

An anonymous, cross-sectional, 25-28 item survey for HCPs involved in treating or caring for people receiving ICIs for cancer, was distributed internationally through professional networks and associations.

The survey included questions regarding safety and efficacy of exercise during ICI treatment (using agree/disagree scale questions), as well as practices, confidence, and barriers with regard to providing exercise recommendations and referrals.

Main objective: To investigate the **perceptions of exercise** and the **exercise promotion practices** of HCPs, specifically for people receiving ICIs for cancer.

RESULTS

110 HCPs completed the survey (Fig. 1). Non-exercise HCPs (NEHCPs) included predominantly medical oncologists (n=40) and nurses (n=19). Participants were from 24 different countries and were primarily female (66%), worked in metropolitan regions (88%), and within public hospitals (76%).

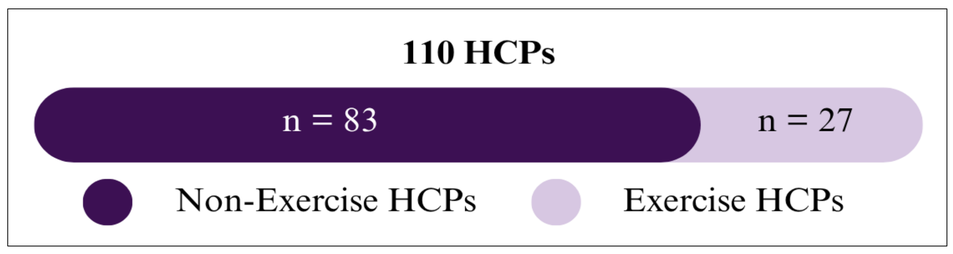

Figure 1. Proportion of exercise and non-exercise HCPs

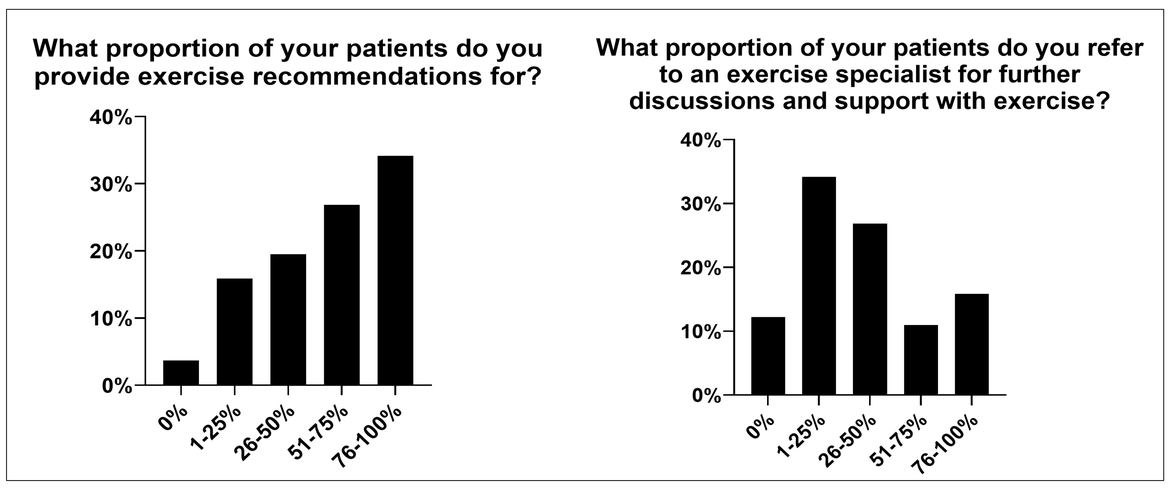

Figure 2. Non-exercise HCPs exercise promotion practices

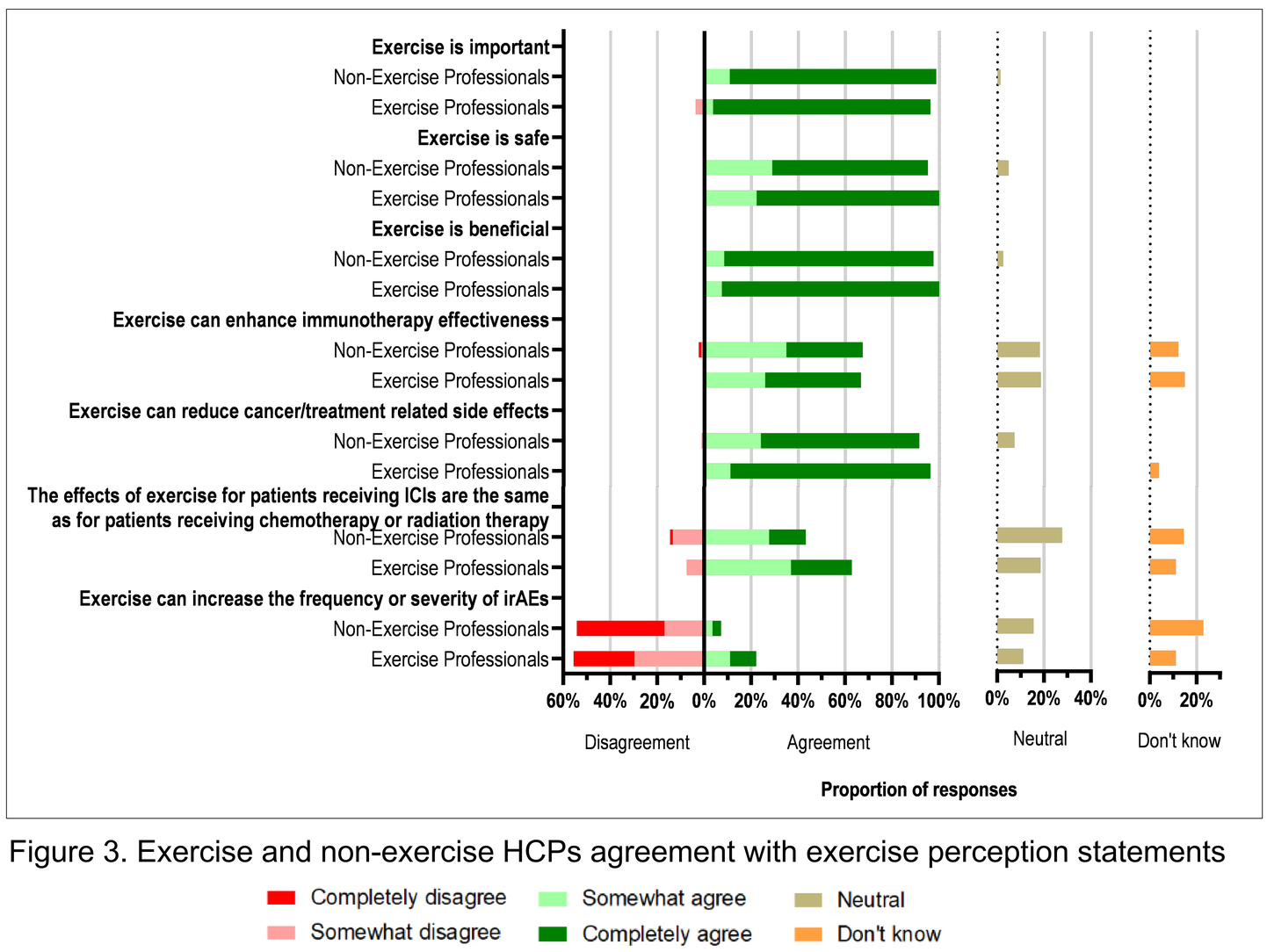

Figure 3. Exercise and non-exercise HCPs agreement with exercise perception statements

- On average, NEHCPs reported **recommending exercise to 64%** of patients and **referring 41%** of patients to an exercise specialist (Fig. 2).
- Over **95%** of HCPs perceived **exercise as important, safe, and beneficial** (Fig. 3).
- Approximately **a third** of HCPs were undecided or did not know whether exercise enhances **ICI effectiveness** and whether exercise increased **immune-related adverse event** (irAE) frequency or severity.
- Almost **70%** of HCPs reported feeling confident or very **confident in providing exercise advice**, with **84**% of HCPs able to correctly identify the **exercise guidelines** for people with cancer.
- The **main barriers to providing exercise recommendations f**or NEHCPs, included concerns about overwhelming patients, limited consultation time and uncertainty regarding appropriate recommendations, and for exercise HCPs it was patients being advised to rest.

CONCLUSION

Despite limited evidence in the ICI setting, HCPs perceived exercise as **safe, beneficial, and important** for people receiving ICIs, although some **uncertainties** regarding the **ICI-specific effects** of exercise remain**.**

ACKNOWLEDGEMENTS

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References: 1. Campbell, K., et al. *Med Sci Sports Exerc. (*2019)., **2.** Hyatt, A., et al. *Integr Cancer Ther.* (2019)., **3.** Cormie, P., et al. *J Cancer Surviv* (2025).

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