

Physical activity and the newly diagnosed lung cancer survivor: Beliefs and preferences prior to chemotherapy

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BACKGROUND

- ❖ Lung cancer is associated with a heavy disease burden and poor prognosis.
- ❖ Participation in regular physical activity has been found to have a number of quality of life and health benefits for lung cancer survivors (Jones, 2011).
- ❖ Pre-chemotherapy may be a time when lung cancer survivors make decisions and plans about lifestyle choices that will best support them through their chemotherapy, yet no known previous studies have focused on physical activity programming and counseling preferences and beliefs during this time.

PURPOSE

- ❖ The primary purpose of this study was to explore physical activity programming and counseling preferences of newly diagnosed lung cancer survivors scheduled to receive chemotherapy.
- ❖ The secondary purpose was to explore beliefs about physical activity during chemotherapy.

METHODS

Participants & Procedure

- ❖ Participants (N=43) were recruited from an ambulatory cancer center. The response rate was 81.1% (43/53)
- ❖ Once written and informed consent was received, participants were researcher-administered the questionnaire in a private evaluation room within the cancer center.

METHODS

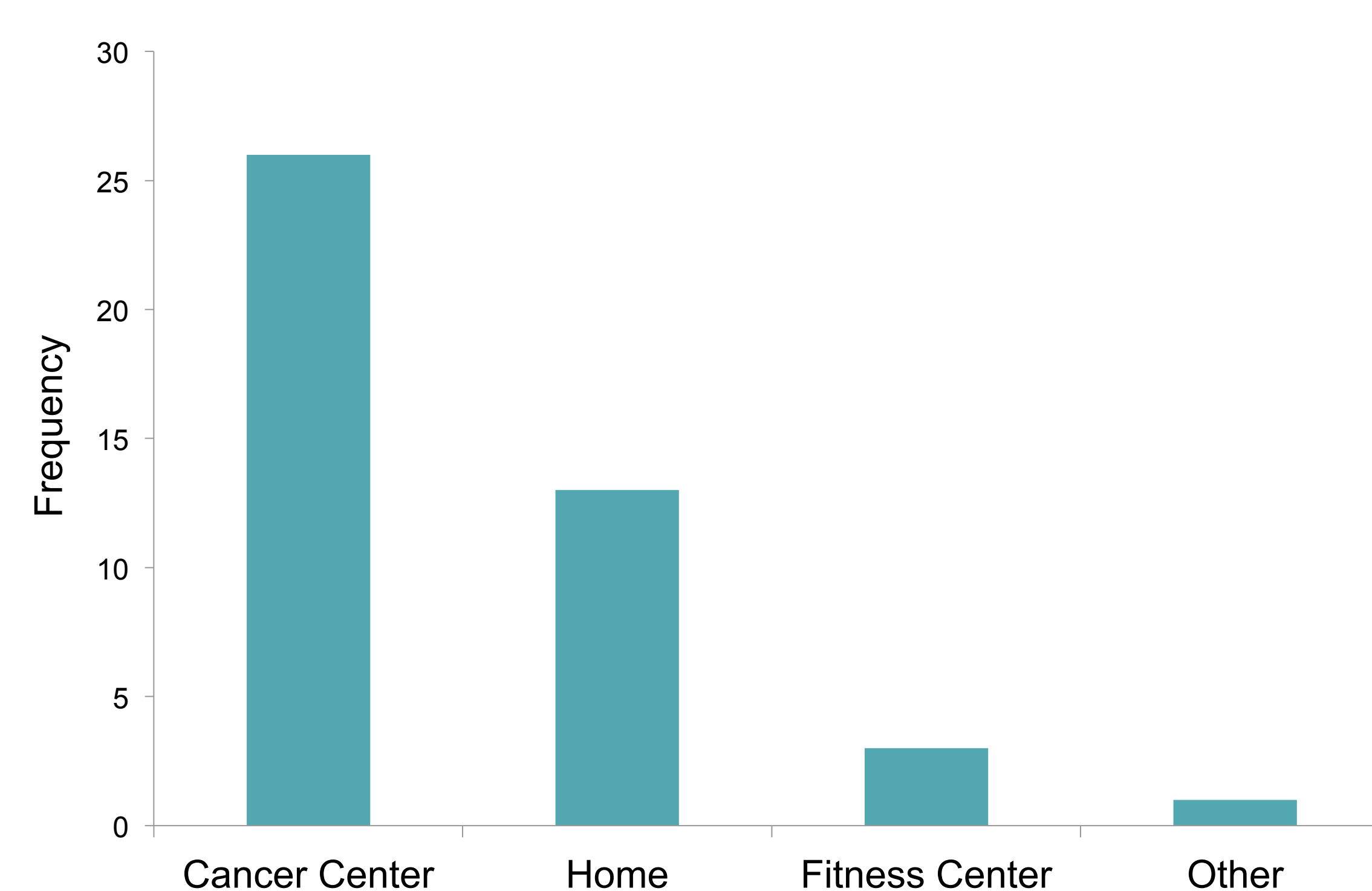
Measures

- ❖ *Physical Activity* was assessed by a modified version of the Godin Leisure Time Exercise Questionnaire (Godin & Shephard, 1985). Average moderate-to-vigorous minutes per week of activity was used as the measure of physical activity.
- ❖ *Physical Activity Programming and Counseling Preferences* were determined by 11 closed-ended items and one open-ended item derived from previous surveys of physical activity programming and counseling preferences (e.g., Jones & Courneya, 2002).
- ❖ *Physical Activity Beliefs during Chemotherapy* were assessed through open-ended questions based on behavioral and control beliefs from the Theory of Planned Behavior (Ajzen, 1991).

RESULTS

- ❖ *Demographic and Medical Variables.* Descriptive statistics indicated that the mean age was 63 (SD=10.7) years, 74% were male, 71% were Caucasian, and 30% were regular or occasional smokers. Approximately 41% had been diagnosed with small cell lung carcinoma and 79% were scheduled to concurrently receive radiation therapy.

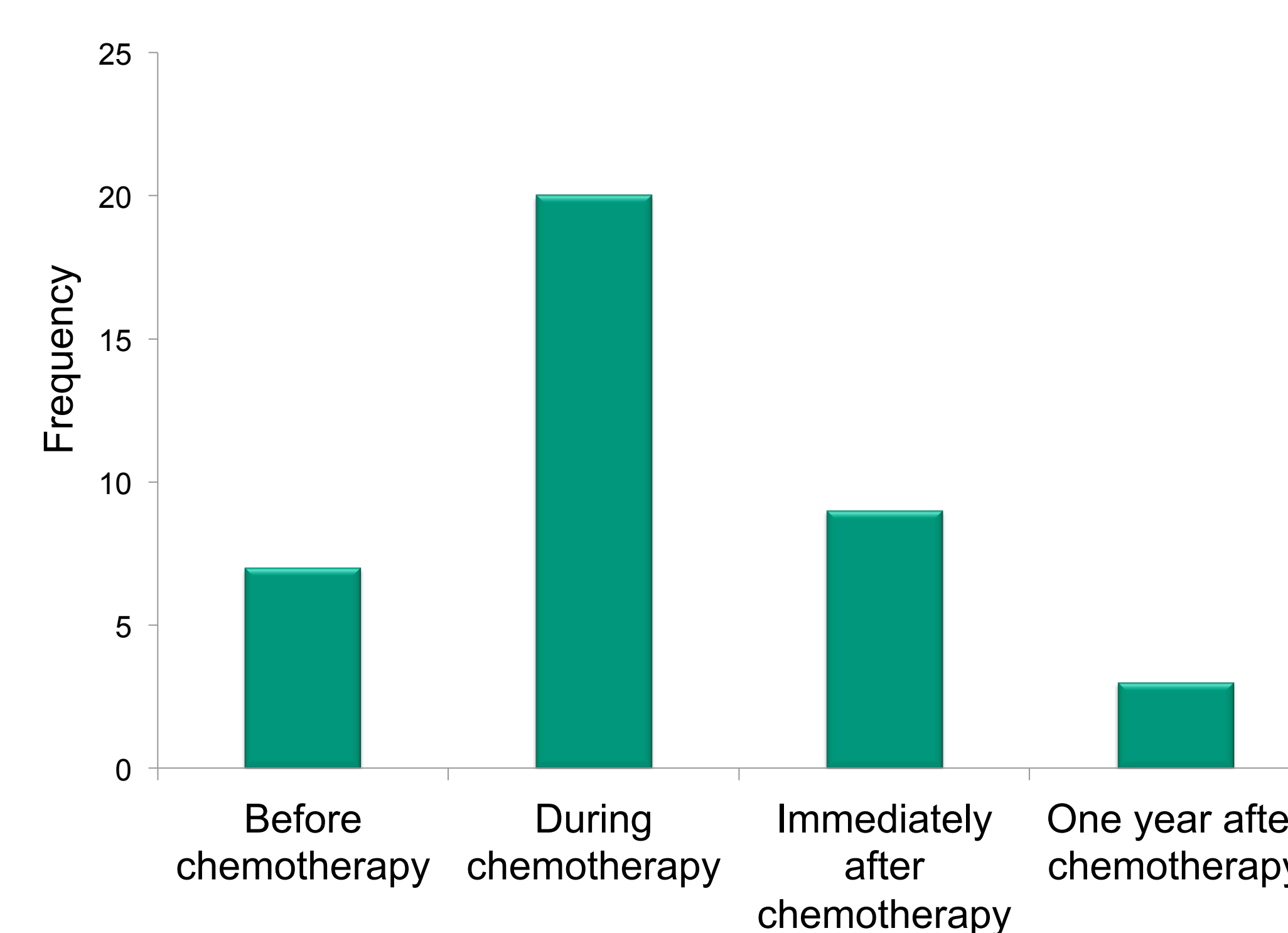
Figure 1. Preference of location for receiving physical activity counseling.



RESULTS

- ❖ *Physical Activity Levels.* Participants reported accumulating, in the past month, an average of 180 (SD=71.8) minutes of moderate-to-vigorous intensity physical activity. Approximately 17% reported sufficient physical activity to be considered meeting ACSM guidelines for physical activity.
- ❖ *Physical Activity Counseling Preferences.* Most participants indicated an interest in receiving physical activity counseling (78%), with preference for receiving counseling from an oncologist (27%) at the cancer center (61%; Figure 1) and in a face-to-face format (91%).
- ❖ *Physical Activity Programming Preferences.* The majority of participants expressed interest in a physical activity program (91%) and felt that they would be able to participate during chemotherapy (98%). Most participants indicated preference for participating in physical activity during chemotherapy (51%; Figure 2), with family and friends (43%), in their own home (57%) and at a moderate intensity (55%).

Figure 2. Preferences for timing for starting a physical activity program.



- ❖ *Physical Activity Beliefs.* The most commonly cited perceived benefits of physical activity were to build/maintain strength (n=26), feel better (n=7), have more energy (n=5), strengthen lungs/breathing (n=5) and improve health (n=4). The most frequently reported control beliefs were fatigue (n=11), no strength (n=8), pain (n=8), poor health/feeling sick (n=8) and lack of facilities (n=5).

DISCUSSION

- ❖ Participants indicated the same level of interest in physical activity counseling and programming as other types of cancer survivors (e.g., Jones & Courneya, 2002).
- ❖ Participants reported a greater preference for receiving physical activity counseling that was connected to the cancer center compared to in previous surveys of cancer survivors (e.g., McGowan et al., 2013).
- ❖ Further, participants indicated a preference for starting a physical activity program during chemotherapy compared to post treatment, which has commonly been found in past surveys of cancer survivors (e.g., Trihn et al., 2012).
- ❖ Physical activity beliefs were mainly related to strength, fatigue and health compared to weight-related issues and lack of time that has been found in previous surveys of post-treatment cancer survivors (Trihn et al., 2012).

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