What are the barriers to implementation of the physical activity guidelines in lung cancer? A qualitative study involving expert clinicians

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Background (lung cancer)

- Symptom include dyspnoea, fatigue, cough & pain
- Avoidance of symptom triggers promotes a vicious cycle of inactivity and functional decline (Granger et al *Lung Cancer* 2014)
- Engaging in sufficient levels of physical activity (PA) is important, yet despite the PA guidelines and supportive evidence, our current models of care are not sufficient (Cavalheri et al *Int Med J* 2013)

Aims

- To identify the barriers and enablers to implementation of the PA guidelines in lung cancer from the perspective of treating clinicians

Methods

- **Design:** Qualitative study with focus groups and semi-structured interviews
- **Participants:** 17 clinicians from five Victorian hospitals. Recruited from advertisement via statewide clinical networks.
- **Procedure:** Focus groups and interviews conducted by independent moderators. Semi-structured questions used to explore attitudes, beliefs and experiences. Transcribed and cross-checked.
- **Analysis:** Thematic analysis. Results reported with COM-B behaviour framework (Michie *Implement Sci* 2011):

Capability | **Opportunity** | **Motivation**

Results

Demographics (n=17)	Median [IQR]
Age, years	34 [28 – 48]
Gender, female n (%)	11 (65%)
Profession, n (%)	
Physiotherapist	8 (47%)
Respiratory physician	3 (18%)
Thoracic surgeon	2 (12%)
Oncologist	2 (12%)
Cancer nurse	2 (12%)
Years working in profession	16 [5 – 20]

BARRIERS

Capability (at patient level)

- Multi-morbidity and level of premorbid function
- Symptoms (pain, dyspnoea, fatigue, depression)
- Lack of knowledge regarding benefits of PA
- Lack of skills of how to modulate or ↑ PA
- Competing priorities – lack of time

Capability (at clinician level):

- Lack of skills and knowledge of how to modulate or ↑ PA; and how to individualize care regarding PA

Opportunity (physical):

- Fragmented care across the cancer continuum
- Limited access to physiotherapy
- Accessibility – services, equipment & financial costs

Opportunity (social):

- Illness stigma → rest; prognosis and illness

Motivation:

- Mood and low self esteem
- Lifelong bad habits (sedentary behaviour)
- Response to critical incident of diagnosis
- Scared of PA, and lack of knowledge of benefits

ENABLERS

- **Patient level factors:** Education of the potential benefits; External motivation (Fitbits and social support); Behaviour change methodology; Use of patient stories and support groups.
- **Institutional level factors:** Nurse coordinator to be main point of contact and refer onto physiotherapist for specialized consultation; Standardised outcome measure for medical team to identify patients with low PA; Standard pathways of care; Use of community and family.

Conclusions

- Key barriers to implementation of the physical activity guidelines in lung cancer exist in terms of capability, opportunity and motivation
- These barriers should be used to inform new models of care and interventions in lung cancer

Dr Granger is supported in part by a NHMRC Translating Research Into Practice Fellowship *catherine.granger@unimelb.edu.au*