



## Background

- Cancer-related fatigue (CRF) is the subjective sense of tiredness related to cancer and/or to cancer treatments, that has proven to be disturbing the patient's daily functioning (Hofman, Ryan, Figueroa-Moseley, Jean-Pierre, & Morrow, 2007).
- Depression and fatigue often co-occur in cancer patients.
- According to literature, fatigue shares 31% of its variance with depression (Brown & Kroenke, 2009).
- This cooccurrence results in confusions on how to assess, treat, and distinguish these two constructs.

## Objective

- This project seeks to explore the differences and similarities in the definition, measurement and treatment of both depression and CRF to improve and help develop future services.

## Methods

### Literature review

- Literature was reviewed to have a better understanding of similarities and differences among these two constructs.

### Focus groups

- Focus groups with health professionals, community partners and cancer patients were conducted at the Montfort Hospital.
- Focus group concentrated on CRF, the treatments provided for CRF and the impact CRF had on patient's well-being.

- Health professionals (n=6)
- Cancer patients (n=12)
- Community partners (n=15)

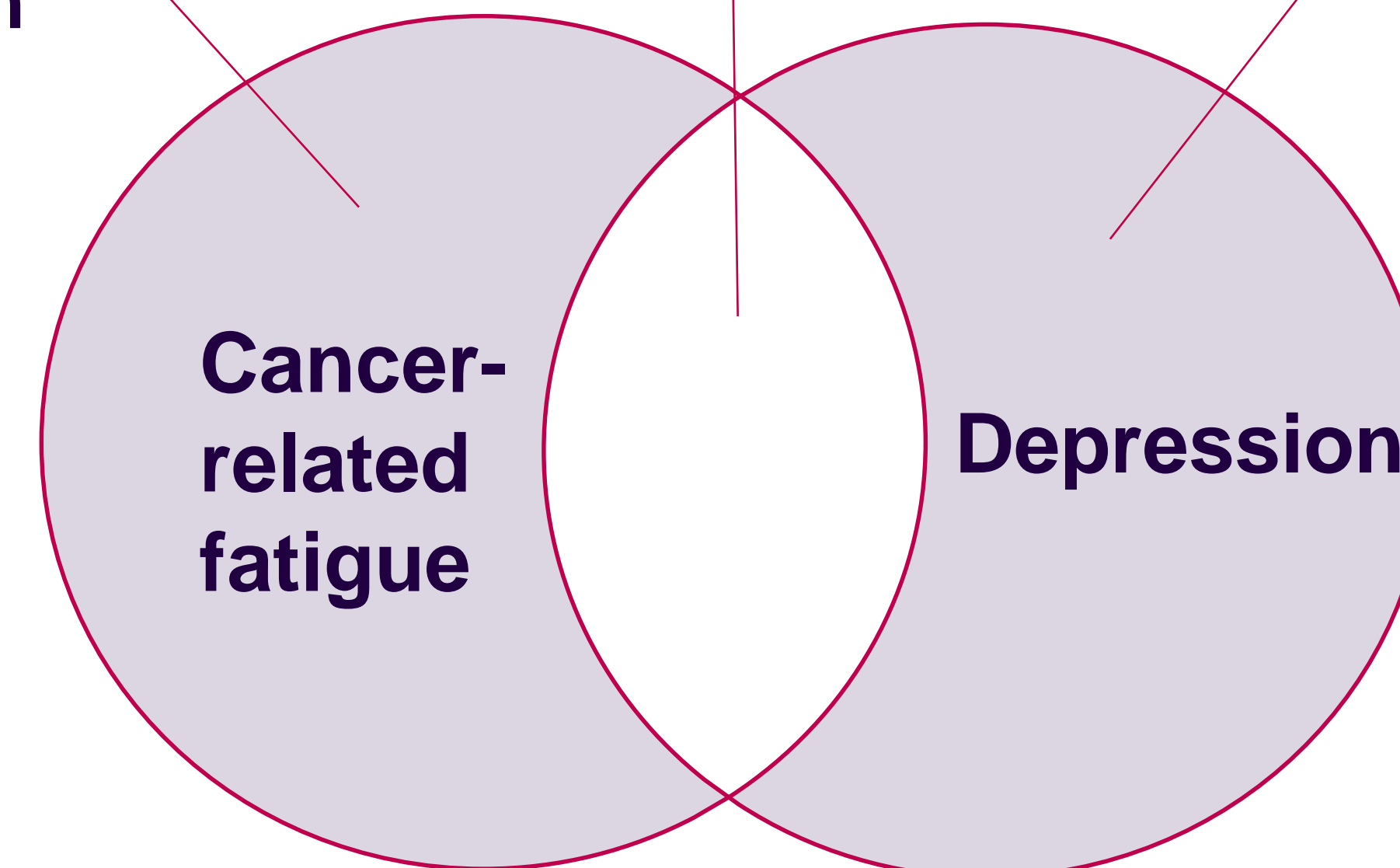
Participants

## Results

### Literature review

#### Symptoms

- Tiredness, weakness, fatigue, lack of energy,
- Feeling sad and/or irritable
- Difficulty concentrating
- Lack of motivation, insomnia/hypersomnia
- Change in appetite and/or weight
- Guilt
- Feelings of worthlessness
- Decrease in interests and pleasure
- Suicidality
- Feeling isolated
- Weakness or limb heaviness
- Problems in short term memory



#### Treatments

- No treatment explicitly addressed both CRF and depression together.
- Treatments for CRF included: bed rest, relaxation, change in diet, prescribed drugs and therapy (6 sessions recommended).
- Treatments for depression included: antidepressants and therapy (14 sessions recommended).

#### Focus groups

- Participants in the focus group had difficulty differentiating between CRF and depression.
- Health care professional had difficulty seeing CRF as a separate construct than depression.

Often, I consider fatigue to be a symptom of mental illness. That is to say, I will ask the level of fatigue but I will relate it to anxiety or depression  
- health care professional

Am I depressed?  
- patient recovering from cancer

Is cancer related fatigue due to treatment [...] or another disorder, such as, depression?  
- health care professional

## Discussion

### Literature review

- As demonstrated with the results, there is a clear overlap between the symptoms of depression and CRF.
- Regardless of variance shared by these two constructs, no intervention explicitly addressed both CRF and depression.

### Focus groups

- Individuals who participated in the focus groups expressed confusion as to whether symptoms were due to CRF or depression.

## Conclusion

- More research is needed to understand the relationship between depression and fatigue to help develop more suitable treatment for cancer patients suffering from both of these potentially debilitating conditions.

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## Reference

- Brown, L. F., & Kroenke, K. (2009). Cancer-Related Fatigue and Its Associations With Depression and Anxiety: A Systematic Review. *Psychosomatics*, 50(5), 440–447. [https://doi.org/10.1016/S0033-3182\(09\)70835-7](https://doi.org/10.1016/S0033-3182(09)70835-7)
- Cancer-Related Fatigue: Guidelines for Evaluation and Management. (n.d.). Retrieved March 6, 2018, from <http://theoncologist.alphamedpress.org/content/4/1/1.short>
- Curt, G. A., Breitbart, W., Cella, D., Groopman, J. E., Horning, S. J., Itri, L. M., ... Vogelzang, N. J. (2000). Impact of Cancer-Related Fatigue on the Lives of Patients: New Findings From the Fatigue Coalition. *The Oncologist*, 5(5), 353–360. <https://doi.org/10.1634/theoncologist.5-5-353>
- Goedendorp, M. M., Gielissen, M. F. M., Peters, M. E. W. J., Verhagen, C. A. H. H. V. M., & Bleijenberg, G. (2012). Moderators and long-term effectiveness of cognitive behaviour therapy for fatigue during cancer treatment. *Psycho-Oncology*, 21(8), 877–885. <https://doi.org/10.1002/pon.1981>
- Hofman, M., Ryan, J. L., Figueroa-Moseley, C. D., Jean-Pierre, P., & Morrow, G. R. (2007). Cancer-Related Fatigue: The Scale of the Problem. *The Oncologist*, 12(Supplement 1), 4–10. <https://doi.org/10.1634/theoncologist.12-S1-4>
- Li, M., Kennedy, E. B., Byrne, N., Gérin-Lajoie, C., Katz, M. R., Keshavarz, H., ... Green, E. (2017). Systematic review and meta-analysis of collaborative care interventions for depression in patients with cancer. *Psycho-Oncology*, 26(5), 573–587. <https://doi.org/10.1002/pon.4286>
- Linden, W., Vodermaier, A., Mackenzie, R., & Greig, D. (2012). Anxiety and depression after cancer diagnosis: prevalence rates by cancer type, gender, and age. *Journal of Affective Disorders*, 141(2–3), 343–351. <https://doi.org/10.1016/j.jad.2012.03.025>
- Predicting Who Benefits Most From Cognitive-Behavioral Therapy for Anxiety and Depression - Renaud - 2014 - Journal of Clinical Psychology - Wiley Online Library. (n.d.). Retrieved March 8, 2018, from <http://onlinelibrary.wiley.com/doi/10.1002/jclp.22099/full>
- Seyidova-Khoshknabi, D., Davis, M. P., & Walsh, D. (2011). Review Article: A Systematic Review of Cancer-Related Fatigue Measurement Questionnaires. *American Journal of Hospice and Palliative Medicine*, 28(2), 119–129. <https://doi.org/10.1177/1049909110381590>