CO2

DIFFERENTIAL EFFECT OF TRANSDIAGNOSTIC COGNITIVE-BEHAVIOUR THERAPY ON HEALTH-RELATED QUALITY OF LIFE ACCORDING TO THE NUMBER OF ANXIETY COMORBIDITIES

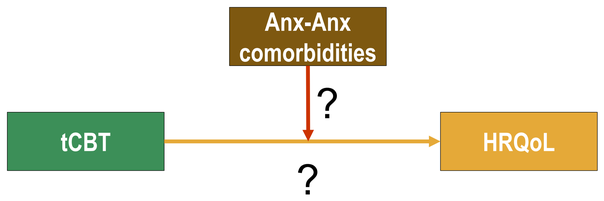
Alexandra Chapdelaine[1], Helen-Maria Vasiliadis[1], Martin D Provencher[2], Peter J Norton[3], Pasquale Roberge[1].

[1]Faculty of Medicine and Health Sciences, Université de Sherbrooke, Sherbrooke, Quebec, Canada. [2]School of Psychology, Université Laval, Quebec, Quebec, Canada. [3]Independent researcher.

INTRODUCTION

- Close to one in five individuals report a lifetime anxiety disorder[1]. **Anxiety-anxiety comorbidities are frequent** and associated with a **more severe clinical profile** and **lower quality of life**[2-3].
- **Cognitive behavioural therapy (CBT) is recommended** as a first-line psychological treatment for AD[4-5].
- The delivery of CBT (e.g. need for training, funding)[6] adds to several existing **barriers to accessing psychological treatment** (e.g., cost, local availability, time constraint)[7].
- **Transdiagnostic CBT** (tCBT) uses a **single protocol** which **facilitates treatment delivery** for individuals with comorbid anxiety disorders with a **mixed group format**[8].

OBJECTIVES



METHOD

*A **randomized controlled trial** (2016-2018, NCT02811458) evaluated the **effectiveness of tCBT** (plus treatment-as-usual [TAU]) for adults with **anxiety disorders** against TAU alone through a multicentric pragmatic trial in community-based settings in three urban regions of the province of Quebec, Canada*[9].

Intervention

- tCBT: psychoeducation, cognitive restructuring, gradual exposure, general cognitive restructuring;
- Format:12 weekly 2-hour sessions, 2 therapists, 8-10 participants.

Trial

- Recruitment: posters, social media, journal ads;
- Inclusion: 1) understanding, talking and writing French; 2)18 years of age or older and; 3) meeting DSM-5 criteria for **panic disorder, agoraphobia, social anxiety disorder or generalized anxiety disorder** according to the Anxiety and Related Disorders Interview Schedule for DSM-5;
- Exclusion: marked cognitive deficit; active suicidal intentions; psychosis; bipolarity disorder; substance abuse;
- Randomization: in block, on sites.

Secondary data analysis

- Baseline (T0), post-treatment (T1) and 4-month post-treatment (T2)
- EQ-5D-5L (index, visual analog scale, domains)

RESULTS

Participants' characteristics (n=231)

86% Female

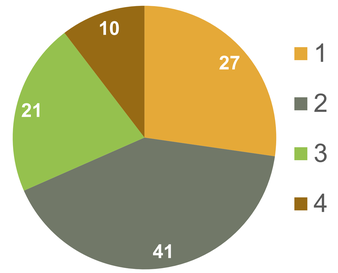
61% Working full-time

42% Went to university

54% Married/In a relationship

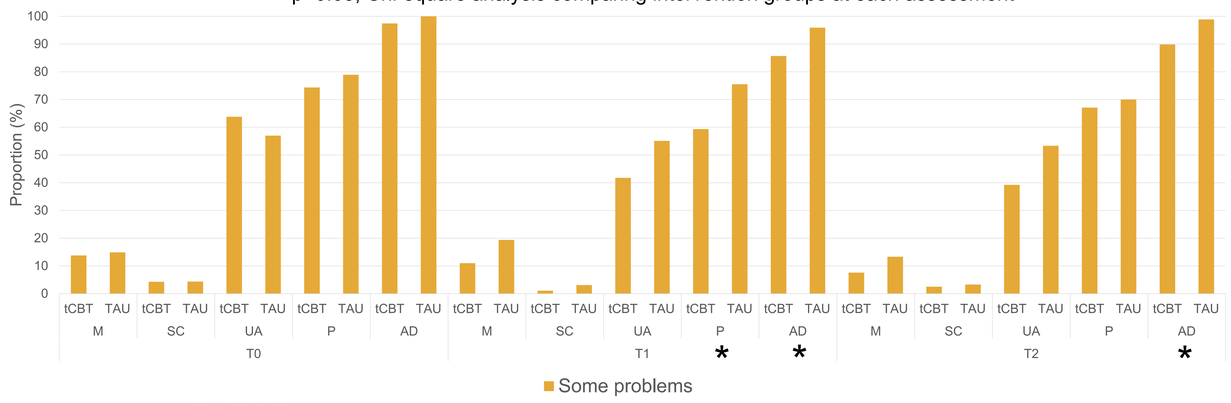
24 ±11 Beck Anxiety Inventory (x̄±SD)

Number of anxiety disorders among those considered (%)



REPORTING SOME LEVEL OF PROBLEMS ON THE EQ-5D-5L

*p<0.05, Chi-square analysis comparing intervention groups at each assessment



M = Mobility SC = Self-care UA = Usual activities P = Pain/discomfort AD = Anxiety/depression

IMPACT OF THE NUMBER OF ANXIETY DISORDERS ON EQ-5D-5L (GENERALIZED ESTIMATING EQUATIONS)

Coefficient (CI 95%) (adjusted for age, sex, taking psychotropic medication) (n=560)						
	Dependent variable – Visual analog scale	**Dependent variable – index** (inverse)	**Dependent variable – 5-level domains*** Reference category dependent variable: Level 1			
			Mobility	Usual activities	Pain/discomfort	Anx/dep
Time (ref = T0)						
Post-treatment (4 months)	**3.160 (0.854 – 5.466)**	**-0.287 (-0.392 – -0.181)**	-0.034 (-0.455 – 0.387)	**0.617 (0.304 – 0.930)**	**0.482 (0.169 – 0.694)**	**1.299 (0.957 – 1.642)**
4-month post-treatment (8 months)	**6.011 (3.706 – 8.317)**	**-0.408 (-0.519 – -0.298)**	0.349 (-0.138 – 0.837)	**0.713 (0.390 – 1.035)**	**0.520 (0.222 – 0.817)**	**1.463 (1.124 – 1.802)**
Group (ref = tCBT)						
TAU	-3.839 (-8.711 – 1.033)	**0.178 (0.010 – 0.346)**	0.060 (-1.293 – 1.413)	-0.521 (-1.391 – 0.349)	-0.318 (-1.074 – 0.438)	-0.514 (-1.160 – 0.133)
Number of anxiety disorders (ref = 1)						
2	-1.662 (-6.828 – 3.508)	0.098 (-0.060–0.255)	0.493 (-0.728 – 1.714)	-0.247 (-1.037 – 0.542)	-0.296 (-1.025 – 0.433)	-0.294 (-0.962 – 0.373)
3	-0.484 (-6.147 – 5.178)	0.027 (-0.161– 0.215)	0.547 (-1.372 – 2.466)	-0.444 (-1.297 – 0.408)	0.351 (-0.533 – 1.234)	-0.429 (-1.201 – 0.343)
4	**-11.063 (-18.254 – -3.871)**	**0.366 (0.139–0.593)**	-1.204 (-2.584 – 0.176)	**-1.396 (-2.269 – -0.524)**	-0.444 (-1.197 – 0.309)	**-1.376 (-2.349 – 0.403)**
Interaction						
*Group TAU * 2*	-1.001 (-8.316 – 6.314)	0.028 (-0.190 – 0.246)	-1.509 (-2.812 – 0.695)	-0.035 (-1.106 – 1.037)	0.126 (-0.907 – 1.158)	- 0.164 (-1.097 – 0.769)
*Group TAU * 3*	1.329 (-6.906 – 9.564)	-0.008 (-0.271 – 0.254)	-0.722 (-3.129 – 1.685)	0.664 (-0.515 – 1.844)	-0.598 (-1.793 – 0.598)	0.206 (-0.931 – 1.343)
*Group TAU * 4*	8.475 (-2.193 – 19.143)	-0.091 (-0.442 – 0.259)	-0.655 (-2.809 – 1.478)	0.941 (-0.600 – 2.482)	-0.355 (-1.907 – 1.198)	0.746 (-0.599 – 2.090)

* Not enough variation in data to create a model for the self-care domain

DISCUSSION

- The presence of all anxiety disorders considered was associated with a change in the EQ-5D-5L Usual activities and Anxiety/depression domains.
- **We did not find the presence of effect modification**, i.e. the association between tCBT and HRQoL did not differ according to the number of anxiety disorders.

LIMITATIONS

- There was a 20% loss to follow-up at T2. Losses to follow-up were more likely not reporting psychotropic medication use, having a higher BAI at baseline and being in the tCBT group. The findings may be subject to a selection bias.
- Future studies could also assess HRQoL with other instruments to replicate findings.
- Other aspects of quality of life should also be studied, such as positive self-image, hope, and feeling of being in control.

CONCLUSION

The prevalence of anxiety-anxiety comorbidity is common. tCBT can improve some domains of health-related quality of life, regardless of the number of comorbid anxiety disorders.

Main study results

Economic evaluation
Self-reported data

Economic evaluation
Medicoadministrative data

CIHR IRSC
Canadian Institutes of Health Research | Instituts de recherche en santé du Canada

REFERENCES

1. Remes O, Brayne C, van der Linde R, Lafortune L. A systematic review of reviews on the prevalence of anxiety disorders in adult populations. Brain Behav. 2016 Jun 5;6(7):e00497. doi: 10.1002/brb3.497.
2. Davies MR, Glen K, Mundy J, Ter Kuile AR, Adey BN, Armour C, Assary E, *et al*. Factors associated with anxiety disorder comorbidity. J Affect Disord. 2023 Feb 15;323:280-291. doi: 10.1016/j.jad.2022.11.051.
3. Wilmer MT, Anderson K, Reynolds M. Correlates of Quality of Life in Anxiety Disorders: Review of Recent Research. Curr Psychiatry Rep. 2021 Oct 6;23(11):77. doi: 10.1007/s11920-021-01290-4.
4. Generalised anxiety disorder and panic disorder in adults: management. London: National Institute for Health and Care Excellence (NICE); 2019 Jul. (NICE Clinical Guidelines, No. 113.) Available from: https://www.ncbi.nlm.nih.gov/books/NBK552847/
5. Social anxiety disorder: recognition, assessment and treatment: Clinical guideline. London: National Institute for Health and Care Excellence (NICE); 2013 May 22. (NICE Guideline, No. 159.) Available from: https://www.ncbi.nlm.nih.gov/books/NBK612073/
6. Wolitzky-Taylor K, Fenwick K, Lengnick-Hall R, Grossman J, Bearman SK, Arch J, Miranda J, Chung B. A Preliminary Exploration of the Barriers to Delivering (and Receiving) Exposure-Based Cognitive Behavioral Therapy for Anxiety Disorders in Adult Community Mental Health Settings. Community Ment Health J. 2018 Oct;54(7):899-911. doi: 10.1007/s10597-018-0252-x.
7. Moroz N, Moroz I, D'Angelo MS. Mental health services in Canada: Barriers and cost-effective solutions to increase access. Healthcare Management Forum. 2020;33(6):282-287. doi:10.1177/0840470420933911.
8. Peter J, Norton, Pasquale Roberge. Transdiagnostic Therapy. Psychiatric Clinics of North America. 2017; 40(7): 675-687. https://doi.org/10.1016/j.psc.2017.08.003.
9. Roberge P, Provencher MD, Gaboury I, Gosselin P, Vasiliadis HM, Benoît A, Carrier N, Antony MM, Chaillet N, Houle J, Hudon C, Norton PJ. Group transdiagnostic cognitive-behavior therapy for anxiety disorders: a pragmatic randomized clinical trial. Psychol Med. 2020 Dec 2;52(13):1-11. doi: 10.1017/S0033291720004316.