The THEMIS Statement: A Brazilian Multimodal Experience to the Promotion of Evidence-Based Practice in the Assessment of Anxiety Disorders

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It is of common knowledge among researchers in the field of assessment of anxiety disorders that given the characteristics of the high-prevalent mental disorders, valid and reliable instruments to their measurement are constantly needed. Recommendations of evidence-based practice in psychology also demand that clinical tasks such as the assessment of anxiety symptomatology are fulfilled with instruments integrating the best available research evidence. Evidence-based practice reflects in the promotion of effective mental health care and enhancement of public health with the use of empirically supported principles of psychological assessment and intervention [1]. Nonetheless, as multifaceted phenomena, anxiety disorders are assessed by various different approaches and instruments [2]. Therefore, promoting evidence-based practice in the assessment of anxiety disorders requires efforts from a multimodal perspective. Clinicians, researchers, and other practitioners must consider the scientific results about assessment instruments drawn from research in the laboratory and field settings relying on a variety of designs and methodologies [1]. They can then guarantee consistent and reliable data to professionals in the fields of anxiety research and treatment and, as the ultimate goal, benefits to the individuals that suffer from the consequences of anxiety disorders.

A set of six guidelines has been tested in recent research conducted in Brazil to stimulate and promote evidence-based practice in the assessment of anxiety disorders. First, the guidelines state the importance of reviewing evidence from scientific research from a dimensional perspective, accompanying theoretical updating and upgrading, which included the investigation in the Brazilian context of the psychometric properties of updated instruments such as the Dimensional Anxiety Scales [3] from DSM-5 [4]. Second, the guidelines illustrate a catalytic strategy of promotion of evidence-based practice: international collaboration. For instance, a Brazilian researcher member of the International Child and Adolescent Anxiety Assessment Expert Group (ICAAAEG) worked together in collaboration with fifty experts on childhood anxiety from all five continents, leaded by Peter Muris and his team from The Netherlands. The ICAAAEG developed the Youth Anxiety Measure for DSM-5, yet to be applied in all continents. Third, the guidelines highlight the importance of assessing beyond ratings of frequency and intensity of anxiety symptoms, and considering the presence of anxiety-related impairment and distress in the evidence-based practice. The Overall Anxiety Severity and Impairment Scale (OASIS [5]) have been therefore tested in Brazil as a tool to encompass harm assessment within the context of evidence-based measurement of anxiety disorders.

Fourth, the guidelines reinforce that, even though some types of psychometric properties are based on more theoretical assumptions (e.g. content validity); most of the psychometric studies examining the adequacy of measurement instruments rely heavily on mathematical and statistical tools for investigating the validity and reliability of the instruments. Therefore mathematical and statistical refinement is considered a guideline as important as theoretical updating and upgrading to promote evidence-based practice in the assessment of anxiety disorders. As an example of the possibilities of advances in scientific evidence that emerge from statistical refinement, recent studies conducted in Brazil investigate the adequacy of assessment instruments through means of both classical theory analyses and item-response theory analyses (suggesting, for instance, that many instruments largely applied in research and practicing field seem useful for characterizing dimensionality of symptoms in subclinical or clinical cases but lack information for characterizing little or mildly

anxious subjects), and include a variety of refinements such as the testing of bifactor models to widely recognized instruments that are considered to be multifactorial (e.g. the Screen for Child Anxiety Related Emotional Disorders; SCARED; [6, 7] but might not reliably offer subscale score estimates after accounting for a general anxiety score [8]. Fifth, the guidelines emphasize that one of the primary goals involved in the development and investigation of adequacy of anxiety assessment instruments is to provide tools to identify mentally-ill subjects or individuals at risk for developing mental disorders. Results of psychological and psychiatric assessments facilitated by these instruments underlie the referral of the subjects to a suitable treatment by clinicians and other practitioners. Anxiety assessment instruments are then used for another purpose: evaluating the effectiveness of the intervention and response to treatment in terms of improvements in mental health achieved during and after the intervention. Evidence-based practice in the assessment of anxiety disorders must, therefore, include instruments that present evidence from intervention, i.e., that have proven their utility in intervention and treatment studies. This guideline aided the investigation of the effectiveness of the Friends for Life program in Brazil as a manualized prevention protocol applied to children at risk for the development of internalizing disorders [9]. The effectiveness of the program was tested using two measures of childhood anxiety: the SCARED and the Spence Children's Anxiety Scale (SCAS; [10, 11]). Evidence form intervention implies that if both measures of anxiety indicate similar results of effectiveness and consistent moderators of response to treatment, there is evidence that these measures are suitable evidence-based practice in the assessment of anxiety disorders.

Sixth and finally, the guidelines reinforce that to achieve the ultimate goal of spreading benefits to the individuals that suffer from the consequences of anxiety disorders, efforts in this area need to go beyond the research and academic world, and be translated into everyday practice. In Brazil, spreading scientific knowledge through articles published in international journals, most of the times written in English, is unfeasible. Most private colleges and universities do not have free access to online scientific databases, and practitioners many times do not comprehend the English language. The spreading of science in these cases is largely operationalized by professors through classes and other speeches, in national and regional conferences and other scientific events, and through books, handbooks, and other manuals written in Brazilian-Portuguese as teaching material to be used in colleges and universities and by clinicians and practitioners on their daily routine. Therefore projects of dissemination of evidence-based research and findings in Brazil include producing books, book chapters and other manuals that can be spread to a broader community of Brazilian practitioners. For instance, a recently published comprehensive and didactic manual about assessment instruments in mental health includes a book chapter describing in didactic detail how to use three evidence-supported scales for assessing anxiety symptoms in childhood and adolescence. Scientific findings can then be more easily disseminated among students, clinicians and practitioners in the mental health field, expecting that this helps translating advances in scientific research into everyday practice.

In summary, evidence-based practice in the assessment of anxiety disorders can be drawn from scientific research that follows theoretical updates and upgrades, conducted by internationally joint efforts, including not only assessment of frequency and intensity of symptoms but also related impairment, tested by means of refined mathematical and statistical methods, applied in intervention programs, and spread through a variety of vehicles that can be more easily accessed by practitioners in their everyday routine. Considering the six aforementioned guideline strategies, Brazilian recent experiences present a multimodal approach to the promotion of evidence-based practice in the assessment of anxiety disorders referred to as the THEMIS statement, summarizing: Theoretical updating and upgrading; Harm assessment; Evidence from intervention; Mathematical and statistical refinement; International collaboration; and Spreading of science. Our results support the THEMIS statement as an effective plan of action to promote evidence-based practice in the assessment of anxiety disorders and also advance knowledge on the broader field of anxiety research. Future endeavors in the field of evidence-based practice in the assessment of anxiety disorders need to keep focusing on the integration of the best available research with clinical expertise considering the context of patient characteristics, culture, and preferences [1]. It also needs to integrate neuroscience findings and psychopathology assessment [12, 13] when fomenting theoretical update and upgrade, for instance recurring to findings from the Research Domain Criteria initiative [14]. Finally, it needs to endorse the role of patient values in treatment decision making, including "the role of ethnicity, race, culture, language, gender, sexual orientation, religion, age, and disability status, and the issue of treatment acceptability and consumer choice" [1]. Our team now focuses on applied research combining the THEMIS statement guidelines and patient-orientated practice to advance the field of evidence-based practice in the assessment of anxiety disorders and translate our work into benefits for the individuals in need of mental health care.

References

1 American Psychological Association (2005) Report of the 2005 presidential task force on evidence-based practice. Policy Statement on Evidence-Based Practice in Psychology.

2 Craske MG, Rauch SL, Ursano R, Prenoveau J, Pine DS, et al. (2009) What is an anxiety disorder? Depression and Anxiety 26: 1066-1085.

3 LeBeau RT, Glenn DE, Hanover LN, Beesdo-Baum K, Wittchen H, et al. (2012) A dimensional approach to measuring anxiety for DSM-5. International Journal of Methods in Psychiatric Research 21: 258-272.

4 American Psychiatric Association (2013) Diagnostic and statistical manual of mental disorders (5th ed.). Washington, DC: Author.

5 Norman SB, Cissell SH, Means-Christensen AJ, Stein MB (2006) Development and validation of an overall anxiety severity and impairment scale (OASIS). Depression and Anxiety 23: 245-249.

6 Birmaher B, Brent DA, Chiappetta L, Bridge J, Monga S, et al. (1999) Psychometric properties of the Screen for Child Anxiety Related Emotional Disorders (SCARED): a replication study. Journal of the American Academy of Child and Adolescent Psychiatry 38: 1230–1236.

7 Birmaher B, Khetarpal S, Brend D, Cully M, Balach L, et al. (1997) The Screen for Child Anxiety Related Emotional Disorders (SCARED): scale construction and psychometric characteristics. Journal of the American Academy of Child and Adolescent Psychiatry 36: 545–553.

8 DeSousa DA, Zibetti MR, Trentini CM, Koller SH, Manfro GG, et al. (2014) Screen for Child Anxiety Related Emotional Disorders: Are subscale scores reliable? A bifactor model analysis. Journal of Anxiety Disorders 28: 966-970.

9 Barrett PM, Farrell LJ, Ollendick TH, Dadds M (2006) Long-term outcomes of an australian universal prevention trial of anxiety and depression symptoms in children and youth: an evaluation of the Friends program. Journal of Clinical Child & Adolescent Psychology 35: 403-411.

10 Spence SH (1997) Structure of anxiety symptoms among children: a confirmatory factor-analytic study. Journal of Abnormal Psychology 106: 280-297.

11 Spence SH (1998) A measure of anxiety symptoms among children. Behaviour Research and Therapy 36: 545-566.

12 Casey BJ, Craddock N, Cuthbert BN, Hyman SE, Lee FS, et al. (2013) DSM-5 and RDoC: progress in psychiatry research? Nature Reviews Neuroscience 14: 810–814.

13 Cuthbert BN (2014) The RDoC framework: facilitating transition from ICD/DSM to dimensional approaches that integrate neuroscience and psychopathology. World Psychiatry 13: 28–35.

14 Insel T, Cuthbert B, Garvey M, Heinssen R, Pine DS, et al. (2010) Research Domain Criteria (RDoC): toward a new classification framework for research on mental disorders. The American Journal of Psychiatry 167: 748-751.