

## Rational-emotive behavioral intervention helped patients with cancer and their caregivers to manage psychological distress and anxiety symptoms

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### Abstract

There is a dearth of evidence-based data on how psychological distress and death anxiety symptoms experienced by cancer patients and caregivers are treated in developing regions. This article sheds light on the report of the findings from a 2016 study that revealed a rational-emotive behavioral intervention helped a select group of cancer patients and their family caregivers to manage problematic assumptions, psychological distress, and death anxiety symptoms in Nigeria. Based on my experience as a co-investigator and corresponding author of this previous study, I addressed the challenges of conducting such a study and the implications for future research in this article. This article encourages future researchers to replicate the study and endeavor to overcome the limitations of the previous study. Funders were also encouraged to ensure increased access to funds for conducting similar studies with cancer patients and their family caregivers in developing countries and other parts of the world.

**Key words:** Cancer patients; Caregivers; Death anxiety; Psychological distress; Psychological intervention; Rational-emotive behavioral intervention; Rational-emotive hospice care therapy

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**Core tip:** Emerging evidence seems to be boosting our understanding of how psychological interventions can be adapted to help improve the lives of cancer patients and their caregivers. This article reveals the importance of utilizing rational-emotive behavioral intervention to alleviate psychological distress and death anxiety symptoms experienced by cancer patients and their caregivers based on the outcomes from a 2016 study. The practical implications and future directions for clinicians who might want to use rational-emotive behavioral therapy intervention to improve the psychological health of cancer patients and caregivers were highlighted. Funders were also encouraged to

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ensure increased access to funds to enable researchers to conduct similar studies.

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## INTRODUCTION

Published research on how psychological distress and death anxiety symptoms experienced by cancer patients and caregivers are treated in developing regions is lacking. Available data indicate that deaths due to cancer in developing nations are expected to increase from 6.7 million in 2015 to 8.9 million in 2030<sup>[1]</sup>. On the other hand, cancer deaths in developed nations are expected to remain quite stable over the next 20 years<sup>[1]</sup>. About 70% of patients with cancer in developing nations are detected at a very late stage of the illness when treatment is ineffective<sup>[2]</sup>. In such situations, the only feasible intervention is palliative care. However, palliative care intervention often fails to reach more than five million terminally ill patients with cancer as well as their caregivers each year<sup>[3]</sup>.

Emerging evidence appears to boost our understanding of how psychological interventions can be adapted to palliative/hospice care settings to help improve the lives of patients with cancer as well as that of their caregivers in the developing regions. For instance, a new study on this subject by researchers at the University of Nigeria Nsukka found that rational-emotive behavioral therapy (REBT) adapted for use in a palliative/hospice care intervention was effective in helping to decrease the problematic assumptions, psychological distress, and death anxiety symptoms of patients with cancer and their caregivers<sup>[4]</sup>. The findings from the study suggest that this type of psychological intervention can be employed by clinicians in different regions to assist cancer patients and caregivers in managing cancer-related distress and death anxiety. It is important to note that the psychological treatment of patients with tumor using REBT cannot be overstated. A 2012 randomized controlled trial by Mahigir *et al*<sup>[5]</sup> found that REBT was effective in decreasing pain intensity scores of patients with cancer in two countries - India and Iran. It is against this backdrop that this article sheds light on the findings of the study by the researchers at University of Nigeria Nsukka.

## RATIONAL-EMOTIVE BEHAVIORAL INTERVENTION

In the Onyechi *et al*<sup>[4]</sup> study, the REBT model of psychotherapy developed by Dr Albert Ellis was adapted to help cancer patients and their caregivers in Nigerian outpatient settings. According to practitioners of the REBT theory, irrational beliefs such as awfulizing, catastrophizing, demandingness, low frustration tolerance, and self/others/life-downing beliefs are the root cause of emotional disturbance in healthy and sick people<sup>[6-8]</sup>. Thus, Onuigbo *et al*<sup>[8]</sup> observed that changing self-limiting beliefs, expectations, and attitudes are essential to a successful REBT intervention. Onyechi *et al*<sup>[4]</sup> innovatively adapted the REBT theory and called the intervention "rational-emotive hospice care therapy (REHCT)." As a randomized controlled trial, the study participants were assigned to one of two groups: intervention group (patients, *n* = 16; caregivers, *n* = 26) and usual care control groups (patients, *n* = 16; caregivers, *n* = 26). The intervention was manualized and delivered via group format. All participants were assessed for the presence of problematic assumptions, psychological distress, and death anxiety symptoms at pre-treatment, post-treatment, and follow-up periods using validated outcome measures. There was no report of adverse effects of the intervention. Also, completion rate of the intervention by the study participants was 100%. The study revealed that the beneficiaries of the REHCT showed significant improvements on problematic assumptions, psychological distress, and death anxiety symptoms reduction in contrast to participants in the usual care control group. It is worthy to note that the study by Onyechi *et al*<sup>[4]</sup> provided evidence-based preliminary data and treatment modality for use by clinicians and researchers who work with cancer patients at advanced stage of the

illness and their family caregivers and ushered in a novel direction in end-of-life care, cancer patient education, and oncology counseling practice in the Nigerian context.

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## IMPLICATIONS AND FUTURE DIRECTIONS

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The Onyechi *et al*<sup>[4]</sup> article has attracted a number of citations from peer reviewed journal articles focusing on the REBT theory<sup>[8,9]</sup> as well as those investigating death anxiety<sup>[10,11]</sup> and other mental health issues in cancer patients<sup>[12]</sup>. The implication of this article is that it encourages further studies on this research area and sheds light on the fact that the objective of end-of-life interventions for cancer patients that in part aims at alleviating psychological symptoms and promoting mental health of patients can be achieved through the use of psychological interventions such as the REHCT. Thus, further clinical trials are required to substantiate the efficacy of this psychological intervention by Onyechi *et al*<sup>[4]</sup> in various oncology counseling contexts and other countries. Psychological interventions whose objective is to improve and maintain mental health and psychological wellbeing of patients with advanced cancer at the end-of-life and their family caregivers might benefit from implementing the REHCT. Investigators who would like to anchor their interventions on the REBT framework should note that cognitive, emotive, and behavioral factors are key mechanisms of change in an REBT intervention<sup>[13]</sup>. In other words, an REBT intervention often focus on patients' thought processes, belief systems, feelings, and attitudes as the mechanisms of change in that they play vital roles in how REBT intervention demonstrates its clinical impacts<sup>[14]</sup>. Studies have shown that through a variety of techniques, REBT intervention can help individuals in group therapy to manage anxiety disorders and alter their illogical beliefs<sup>[15]</sup>.

As a co-investigator and corresponding author of the Onyechi *et al*<sup>[4]</sup> study, I was very pleased to receive this invitation from the *World Journal of Clinical Oncology* to contribute an article that falls under the scope of the journal. This invitation provided the opportunity for me to shed light on this research with cancer patients and their family caregivers in Nigeria. The study opened up new avenues for adaptation of psychological interventions for cancer patients and their family caregivers in this region. But the challenges of supporting and providing this intervention type to this category of patients and their family caregivers cannot be overemphasized. Funds were not secured from any organization or agency and as such all costs were undertaken by the investigators. I would like to use this opportunity to encourage funding organizations and agencies to expand access to their funds to cover this type of study targeting cancer patients and their family caregivers for researchers in developing regions such as Nigeria. This is important because it might help advance the course of action towards achieving the sustainable development goal number three of the United Nations which aims at ensuring good health and wellbeing for every individual at all ages<sup>[16]</sup>. As a sub-goal, the sustainable development goal number three aims at a one third reduction in premature death due to non-communicable diseases via prevention and treatment as well as promotion of mental health and well-being by the year 2030<sup>[16]</sup>. Strengthening researchers' access to funds for implementation of psychological interventions such as the REHCT might be one of the various ways to assist them in contributing to the attainment of this goal of sustainable development in developing countries.

In view of health economy, it is important to clarify the basis for allocating research funds to REBT more than other health programs related to this area. Gilbert *et al*<sup>[17]</sup> showed that an REBT program that integrated both individual and group therapy sessions with primary care and specialist mental health services provided an alternative to expensive in-patient admissions. The authors reported that the REBT program was cost-effective by minimizing the request for acute hospital beds, satisfactory to the patients, and yielded considerable improvements in patients' symptoms, subjective wellbeing, and functioning<sup>[17]</sup>. Also, in a randomized clinical trial of 170 Romanian patients that examined the cost-effectiveness of treatment interventions, which yielded significant positive changes in depression, depression-free days, and quality-adjusted life years scores of patients, the authors demonstrated that REBT intervention attracted lower cost compared to other health programs like pharmacotherapy with similar therapeutic effects<sup>[18]</sup>. Therefore, it might be reasonable to allocate more research funds to treatment interventions with similar clinical effects on patients' symptom management like other health programs but would require a lower cost to execute. These previous research reports suggest that, in view of health economy, an REBT program might require more support with research funding than other health programs related to this area because it appears to be less expensive and can have better cost-utility. The implication is that more patients can be treated

through an REBT program and funders would be able to disburse funds to more REBT researchers than they would to other researchers whose interventions might cost more to execute especially when a large number of patients are to be treated.

Despite the promising evidence of psychological interventions such as REBT, I would like to agree with Syrjala *et al*<sup>[19]</sup> that multidisciplinary teams are important in oncology settings for the integration of care and expertise in the delivery of psycho-behavioral treatments in standard care for cancer patients' symptom management. Because intense cancer pain is associated with increased levels of anxiety and depression<sup>[20]</sup> and increased levels of psychological distress and catastrophizing<sup>[21]</sup>, one important task that multidisciplinary teams have to carry out is to examine the efficacy of REBT in the reduction of cancer pain and related psychological concerns. Given that changes in pain-related psychological variables such as catastrophizing and other pain-related beliefs have also been found to be significantly linked to changes in pain intensity, pain interference, and psychological functioning<sup>[22]</sup>, the use of REBT to improve pain management in cancer patients is suggested for future researchers and healthcare teams who aim to reduce the perception of pain among such patients. In fact, studies are advancing support for further recognition of the relevance of psychological interventions in cancer pain management<sup>[23]</sup>. Future investigators focusing on this subject and would like to replicate the Onyechi *et al*<sup>[4]</sup> study should endeavor to use alternative research designs such as mixed methods design, employ robust statistical analysis tools, carryout a responder analysis, measure therapeutic adherence, and document the details of their intervention in clinical trial registries as this would help to further promote transparency in and public access to such a study.

## CONCLUSION

This article focused on the findings of a 2016 study in which the author was a co-investigator and corresponding author. The previous study demonstrated that a rational-emotive behavioral intervention helped a select group of cancer patients and their family caregivers to manage problematic assumptions, psychological distress, and death anxiety symptoms in Nigeria. Thus, this article encourages future researchers to replicate the study and endeavor to overcome the limitations of the previous study. Funders were also encouraged to ensure increased access to funds to enable researchers to conduct similar studies with cancer patients and their family caregivers in developing countries, and other parts of the world.

## REFERENCES

- 1 Boyle P, Levin B. *World cancer report 2008*. Lyon: IARC Press 2008;
- 2 World Health Organization. Cancer Key Statistics, 2018. Available from: <http://www.who.int/cancer/resources/keyfacts/en/>
- 3 Chan M. Cancer in developing countries: facing the challenge. Available from: [http://www.who.int/dg/speeches/2010/iaea\\_forum\\_20100921/en/](http://www.who.int/dg/speeches/2010/iaea_forum_20100921/en/)
- 4 Onyechi KC, Onuigbo LN, Eseadi C, Ikechukwu-Ilomuanya AB, Nwaubani OO, Umoke PC, Agu FU, Otu MS, Utoh-Ofong AN. Effects of Rational-Emotive Hospice Care Therapy on Problematic Assumptions, Death Anxiety, and Psychological Distress in a Sample of Cancer Patients and Their Family Caregivers in Nigeria. *Int J Environ Res Public Health* 2016; **13**: E929 [PMID: 27657099 DOI: 10.3390/ijerph13090929]
- 5 Mahigir F, Khanehkeshi A, Karimi A. Psychological treatment for pain among cancer patients by rational-emotive behavior therapy--efficacy in both India and Iran. *Asian Pac J Cancer Prev* 2012; **13**: 4561-4565 [PMID: 23167380 DOI: 10.7314/APJCP.2012.13.9.4561]
- 6 Centre for Rational-Emotive Behaviour Therapy at the University of Birmingham. What are irrational beliefs? 2018; Available from: <https://www.birmingham.ac.uk/schools/psychology/centres/rebt/about/beliefs.aspx>
- 7 Ellis A. Rational psychotherapy and individual psychology. *J Indiv Psychol* 1957; **13**: 38-44
- 8 Onuigbo LN, Eseadi C, Ebifa S, Ugwu UC, Onyishi CN, Oyeoku EK. Effect of rational emotive behavior therapy program on depressive symptoms among university students with blindness in Nigeria. *J Ration Emot Cogn Behav Ther* 2018 [DOI: 10.1007/s10942-018-0297-3]
- 9 Ugwoke SC, Eseadi C, Onuigbo LN, Aye EN, Akaneme IN, Oboegbulem AI, Ezenwaji IO, Nwobi AU, Nwaubani OO, Ezegbe BN, Ede MO, Orji CT, Onuoha JC, Onu EA, Okeke F, Agu P, Omeje JC, Omeke F, Ugwu R, Arumede F, Eneh A. A rational-emotive stress management intervention for reducing job burnout and dysfunctional distress among special education teachers: An effect study. *Medicine (Baltimore)* 2018; **97**: e0475 [PMID: 29703004 DOI: 10.1097/MD.00000000000010475]
- 10 Şahan E, Eroğlu MZ, Karataş MB, Mutluer B, Uğurpala C, Berkol TD. Death anxiety in patients with myocardial infarction or cancer. *Egypt Heart J* 2018; **70**: 143-147 [PMID: 30190638 DOI: 10.1016/j.ehj.2018.04.003]
- 11 Menzies RE, Zuccala M, Sharpe L, Dar-Nimrod I. The effects of psychosocial interventions on death anxiety: A meta-analysis and systematic review of randomised controlled trials. *J Anxiety Disord* 2018; **59**: 64-73 [DOI: 10.1016/j.janxdis.2018.09.004]

- 12 **Lehto RH**, Miller SE, Flanigan M, Wyatt G. Mental health in patients with advanced cancer at the end of life: evaluation of evidence and future directions. *Expert Rev Qual Life Cancer Care* 2018; **3**: 73-94 [DOI: [10.1080/23809000.2018.1483192](https://doi.org/10.1080/23809000.2018.1483192)]
- 13 **David D**, Cautin RL, Lilienfeld SO, eds. Rational emotive behavior therapy. Cautin RL, Lilienfeld SO, eds. *Encyclopedia of clinical psychology*. Hoboken: Wiley-Blackwell 2015; 1-8 [DOI: [10.1002/9781118625392.wbecp077](https://doi.org/10.1002/9781118625392.wbecp077)]
- 14 **American Addiction Centre**. What is rational emotive behavior therapy? Available from: <https://riveroakstreatment.com/therapies-rehab/rational-emotive-behavior-therapy/>
- 15 **Cowan D**, Brunero S. Group therapy for anxiety disorders using rational emotive behaviour therapy. *Aust N Z J Ment Health Nurs* 1997; **6**: 164-168 [PMID: [9479090](https://pubmed.ncbi.nlm.nih.gov/9479090/)]
- 16 **United Nations**. Sustainable Development Goals, 2015. Available from: <https://www.un.org/sustainable-development/health/>
- 17 **Gilbert M**, Cicolini T, Mander A. Cost-effective use of Rational Emotive Behavior Therapy in a public mental health service. *J Rat-Emo Cognitive-Behav Ther* 2005; **23**: 71-77 [DOI: [10.1007/s10942-005-0004-z](https://doi.org/10.1007/s10942-005-0004-z)]
- 18 **Sava FA**, Yates BT, Lupu V, Szentagotai A, David D. Cost-effectiveness and cost-utility of cognitive therapy, rational emotive behavioral therapy, and fluoxetine (Prozac) in treating depression: a randomized clinical trial. *J Clin Psychol* 2009; **65**: 36-52 [PMID: [19051275](https://pubmed.ncbi.nlm.nih.gov/19051275/) DOI: [10.1002/jclp.20550](https://doi.org/10.1002/jclp.20550)]
- 19 **Syrjala KL**, Jensen MP, Mendoza ME, Yi JC, Fisher HM, Keefe FJ. Psychological and behavioral approaches to cancer pain management. *J Clin Oncol* 2014; **32**: 1703-1711 [PMID: [24799497](https://pubmed.ncbi.nlm.nih.gov/24799497/) DOI: [10.1200/JCO.2013.54.4825](https://doi.org/10.1200/JCO.2013.54.4825)]
- 20 **Li XM**, Xiao WH, Yang P, Zhao HX. Psychological distress and cancer pain: Results from a controlled cross-sectional survey in China. *Sci Rep* 2017; **7**: 39397 [PMID: [28074915](https://pubmed.ncbi.nlm.nih.gov/28074915/) DOI: [10.1038/srep39397](https://doi.org/10.1038/srep39397)]
- 21 **Zaza C**, Baine N. Cancer pain and psychosocial factors: a critical review of the literature. *J Pain Symptom Manage* 2002; **24**: 526-542 [PMID: [12547052](https://pubmed.ncbi.nlm.nih.gov/12547052/) DOI: [10.1016/S0885-3924\(02\)00497-9](https://doi.org/10.1016/S0885-3924(02)00497-9)]
- 22 **Nieto R**, Raichle KA, Jensen MP, Miró J. Changes in pain-related beliefs, coping, and catastrophizing predict changes in pain intensity, pain interference, and psychological functioning in individuals with myotonic muscular dystrophy and facioscapulohumeral dystrophy. *Clin J Pain* 2012; **28**: 47-54 [PMID: [21642844](https://pubmed.ncbi.nlm.nih.gov/21642844/) DOI: [10.1097/AJP.0b013e31822019b1](https://doi.org/10.1097/AJP.0b013e31822019b1)]
- 23 **Lossignol DA**. Psychological interventions to reduce pain in patients with cancer. *Curr Opin Oncol* 2013; **25**: 368-372 [PMID: [23736877](https://pubmed.ncbi.nlm.nih.gov/23736877/) DOI: [10.1097/CCO.0b013e3283621090](https://doi.org/10.1097/CCO.0b013e3283621090)]

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