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Short communication

Status of cognitive behaviour therapy in India: Pitfalls, limitations and future directions—A systematic review and critical analysis

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ABSTRACT

Cognitive behavior therapy (CBT) an evidence-based psychotherapy is practiced across the globe with a common cognitive and behavioral fidelity. The focus of this review is about the status of CBT in India based on the analysis of published research on CBT from India. Publication of papers related to CBT in the Indian population is scarce. Among the published researches, the observed practice defects could compromise the overall response from the globally proven CBT interventions. Hence, quality control measures should be put into practice to regulate the application of CBT in India.

1. Background

Cognitive behaviour therapy (CBT) is an evidence based, empirical and structured psychotherapy directed towards modifying dysfunctional (inaccurate/unhelpful) thinking and behaviour that is inherent in specific psychiatric disorders. (Gloaguen et al., 1998; Butler et al., 2006; Hofmann and Smits, 2008) Even though the word Cognitive in CBT signals that treatment focuses a considerable degree on thought processes, the therapy is not limited to cognitive modification alone. Effective CBT has to deal with all aspects of an emotional disorder including intellectual aspect of cognitions, experiential aspect of emotions and maladaptive behaviours. CBT describes a family of interventions for depressive and anxiety disorders that shares the basic constituents of CBT model that focus on the significance of cognitive processes and behaviors for emotion regulation. (Beck et al., 1979; Hofmann and Reinecke, 2010). With depressive disorder as the prototype, the general therapeutic process of CBT is split up into different steps, with an insistence on distinct therapeutic mechanisms (viz. establishing a therapeutic relationship, practicing collaborative empiricism and managing the maladaptive cognitions and behaviors). Cognitive–behavioral therapy case formulation acts a back bone for each therapy session and provides a sense for the course of treatment. The goal of the initial sessions is to illustrate the close relationship between cognition and emotion. Each typical therapy session begins with establishment of an agenda (current problems) for that session, followed by cognitive restructuring of maladaptive cognitions (negative automatic thoughts, assumptions and schema). At the close of the session, a summary is elicited and a homework assignment is designed to help the patient in applying the specific skills and concepts learned from the session to his/her real-life problems. Every step in therapy is transparent and clearly reasoned. Over the course of therapy, the session contents progresses from superficial automatic thoughts to deeper beliefs and schemas. If the patient is suffering from considerable psychomotor retardation, behavioral activation strategies are implemented prior to cognitive interventions. Training in cognitive restructuring skills is offered through Didactic or Socratic means. In the didactic approach, the therapist explains the concept of cognitive distortion and discusses the types of distortions which is followed by application to real world examples. In the Socratic approach, the idea of guided discovery is emphasized through the usage of a series of questions to help the patients evaluate the validity and utility of their cognitions. (Beck et al., 1979; Hofmann and Reinecke, 2010; Tarrier, 2006) A similar flow of therapy session is practiced with various other anxiety disorders such as Panic disorder, Social anxiety disorder, Generalised Anxiety disorder, Obsessive compulsive disorder. (Barlow et al., 2000; Clark et al., 2006; Whittal et al., 2005). But the session content varies for each specific disorder based on the empirically proven cognitive and behavioural model of each individual disorder. For instance, Cognitive themes in different anxiety disorders include 1) concern about the consequences of a panic attack; misinterpretation of anxiety symptoms (Panic disorder), 2) concern about social embarrassment and negative evaluation (Social anxiety disorder), 3) concern about the uncontrollability and dangers of worrying (Generalised Anxiety disorder) and 4) concern about the consequences of intrusive thoughts and of not reducing distress by use of rituals (Obsessive compulsive disorder). The disorder specific cognitive distortions that are addressed in therapy sessions include 1) catastrophic misinterpretations (Panic disorder), 2) negative beliefs about self as a social object (Social anxiety disorder), 3)

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automatic intrusive thoughts of threat and uncertainty (Generalised Anxiety disorder), 4) inflated responsibility, thought action fusion, thought object fusion, overestimation of threat, need for control and need for certainty (Obsessive compulsive disorder). The behavioural counterpart of the anxious cognitive themes (safety behaviours and maladaptive repetitive behaviours) are managed through exposure-based strategies in a hierarchical fashion. (Clark, 1986; Clark and Beck, 2010; Rapee and Heimberg, 1997; Rachman, 1997). Additionally, CBT has been extensively tested for a wide range of other neurotic and stress related disorders (Viz. hypochondriasis, eating disorders, somatoform disorder, medical problems with psychological components, etc.). At this point, several outcome studies have demonstrated the efficacy of CBT for these neurotic disorders. (Butler et al., 2006; Chambless and Ollendick, 2001). The neurotic disorders discussed in this review including stuttering, dhat syndrome and psychosocial stress in vitiligo have a cognitive and behavioral pattern likened to social anxiety disorder, somatoform disorder and medical problems with psychological components respectively. (Menzies et al., 2008; Deb and Balhara, 2013) Apart from its well-established efficacy in neurotic spectrum disorders, CBT also has been proven to be effective in psychotic disorders like Schizophrenia. (Morrison et al., 2014, 2018) With this background information on global CBT practices, current review attempts to evaluate the extant literature of CBT among Indian populations.

2. Objective

The focus of this work is to appraise the status of cognitive behaviour therapy research in India and to investigate its compatibility with Western CBT paradigm.

3. Method

Electronic searches of databases such as PubMed, Psychinfo, Science direct, Scopus, EMBASE, EBSCO and Google Scholar was carried out to ascertain it. A list of articles was generated using search terms like cognitive behaviour therapy, cognitive therapy and mindfulness based cognitive therapy and the research done in India and the publications that focus on Indian population were identified and analysed.

4. Results

A comprehensive search of the electronic databases yielded 26 articles on CBT published from India. CBT treatment done on the Indian population was laid down as the major selection criterion for review. The identified papers were checked for quality. Initial quality assessment was done by using a self-prepared checklist for pubmed indexed journals. From the 26 retrieved papers, 15 articles were excluded. Among the 15 excluded papers, 4 were published in non-pubmed indexed journals, 2 were on mindfulness integrated CBT which is a variant of traditional CBT and 9 were review articles. (Fig. 1)

The 11 articles that met the selection criteria for the review were also screened for reporting on outcome data. Nine articles reported outcome data using pre- and post- intervention scores while two articles (Duggal et al., 2002; Priyamvada et.al., 2009) failed to report outcome data in a systematic fashion. The 11 papers included for final analysis were reviewed against the backdrop of the western CBT paradigm. A critical analysis was done with a major focus on the treatment section. The CBT treatment section was assessed using a self-prepared checklist for relevance (e.g., the exact nature of techniques used), clarity (e.g., content of the therapy session), appropriateness (e.g., description of the technique) and transparency (e.g., session allocation). The results revealed a variety of overt defects in Indian CBT works. Details of the studies included in the review and the major findings pertaining to the defects in the CBT program are depicted in Table 1. The major themes noted were the use of non-specific terminology with poor descriptions (54%) improper conceptualization and use of outdated techniques

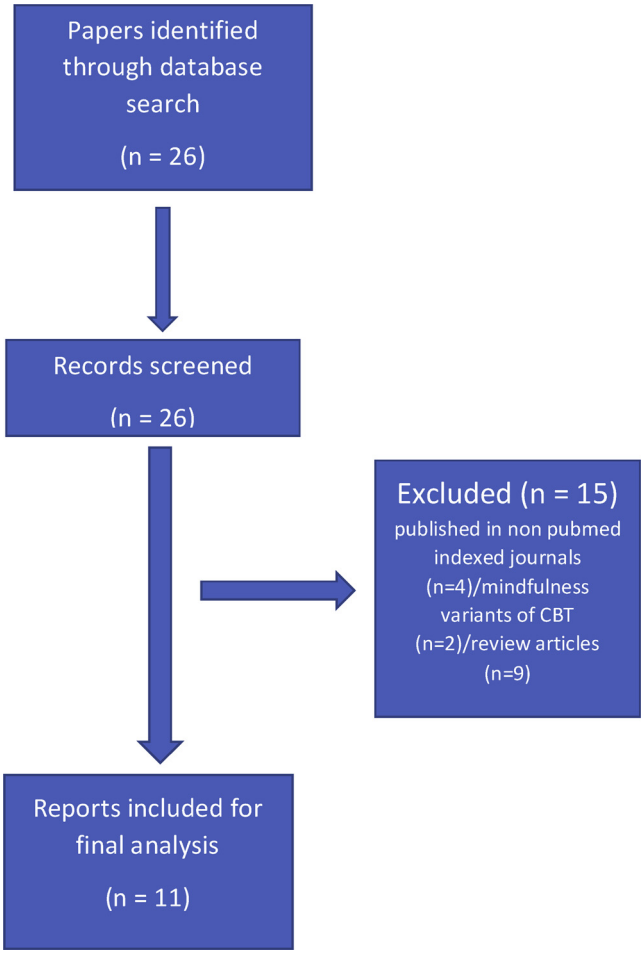

Fig. 1. Flow chart showing the process of article selection for review.

(45%), followed by over inclusiveness (36%) and unbalanced behavioural weightage (27%). (Table 2). Out of the 11 studies reviewed, the treatment procedures followed in 2 studies (except for minor discrepancies) were in compliance with the western CBT protocol. This could be highlighted as a good example of the use of CBT among the Indian population (Pinjarkar et al., 2015; Sondhi et al., 2013).

5. Discussion

5.1. Pitfalls

5.1.1. Over-inclusive

It was found that under the banner of CBT, several other techniques such as bibliotherapy, deep breathing, video feedback, coping skills training, stress management, social skills training, relaxation and imagery, self-statements training, assertiveness training, stress inoculation training, distraction techniques were described in these studies. (Shriharsh et al., 2003; Reddy et al., 2010; Gupta, 2016; Jha et al., 2016)

5.1.2. Use of outdated techniques

Jacobson's progressive muscle relaxation has been superseded by several standard relaxation techniques that have several advantages over the parent technique such as reduced time to achieve relaxation and applicability in any situation wherever the patient requires it. Many research papers still include Jacobson's progressive muscle relaxation as a prominent strategy. (Gupta, 2016; Priyamvada et al., 2009; Sondhi et al., 2013; Reddy et al., 2010; Abdul Salam et al., 2012)

Table 1
Details of the studies included in the review.

Sl. No.	Author and Year	Disorders treated	Study population	Major findings (pertaining to the defects in the CBT program)
1,	Manjula et al. (2009)	Panic disorder	30 patients	Use of non-specific terminology and poor descriptions, Unbalanced behavioral weightage
2,	Priyamvada et al. (2009)	Social anxiety disorder	1 patient	Unbalanced behavioral weightage, improper conceptualisation, use of outdated techniques,
3,	Reddy et al. (2010)	Stuttering	5 patients	Use of non-specific terminology and poor descriptions, use of outdated techniques, over inclusiveness
4,	Ananda et al. (2011)	Obsessive compulsive disorder	31 patients	Unbalanced behavioral weightage
5,	Abdul Salam et al. (2012)	Dhat syndrome	5 patients	Improper conceptualisation, use of non-specific terminology and poor descriptions, use of outdated techniques
6,	Sondhi et al. (2013)	Depression	1 patient	Improper conceptualisation (minor discrepancy), use of outdated techniques
7,	Pinjarkar et al. (2015)	Social anxiety disorder	7 patients	Nil
8,	Jha et al. (2016)	Psychosocial stress in Vitiligo	13 patients	Improper conceptualisation, use of non-specific terminology and poor descriptions, over inclusiveness
9,	Gupta (2016)	Stuttering	1 patient	Improper conceptualisation, use of outdated techniques, over inclusiveness
10,	Shriharsh et al. (2003)	Schizophrenia/ Schizoaffective disorder	51 patients	Use of non-specific terminology and poor descriptions, over inclusiveness
11,	Duggal et al. (2002)	Schizophrenia	1 patient	Use of non-specific terminology and poor descriptions

Table 2
Defects in the Indian CBT programs (articles n = 11).

Sr.no.	Observed defects	n (%)
1,	Use of non-specific terminology and poor descriptions	6 (54%)
2,	Improper conceptualisation	5 (45%)
3,	Use of outdated techniques	5 (45%)
4,	Over inclusiveness	4 (36%)
5,	Unbalanced behavioral weightage	3 (27%)

5.1.3. Use of non-specific terminology and poor descriptions

The term *cognitive restructuring* has been used loosely. For instance, a psychoeducational component of elaborating on safety behaviours was termed cognitive restructuring, (Manjula et al., 2009). Additionally, there are no elaborations about the specific techniques used in cognitive restructuring. (Manjula et al., 2009; Reddy et al., 2010; Gupta, 2016) A few research works did not follow the standard cognitive behavioural model. (Duggal et al., 2002; Shriharsh et al., 2003; Reddy et al., 2010; Jha et al., 2016; Gupta, 2016). Inappropriate descriptions of cognitive restructuring were also noted. (Shriharsh et al., 2003)

5.1.4. Improper conceptualisation

Cognitive formulation, which is considered as the heart of any CBT programme, should fuse the patient's clinical problems and the suggested cognitive model in an appropriate way. A few research works have mentioned patients' cognitive process in a wrong framework. For example, the expression "I cannot talk fluently with strangers, I cannot talk fluently during my seminar presentation" has been recorded under dysfunctional assumptions. In reality, such cognitive expressions are automatic thoughts. On the other hand, the cognitive phenomenon "I am inferior" is classified under automatic thought, which has to be described as a core belief, additionally, "I cannot talk fluently with strangers" a negative automatic thought is described as an assumption (Gupta, 2016). "If I am not sexually adequate then I am not a real man" is actually an assumption but is mentioned as a core belief (Abdul Salam et al., 2012).

Standard protocol follows a bottom up model and begins with automatic thoughts, eventually proceeding to modify the core beliefs. In certain other research papers, there was a reversal of formulations from what is recommended as a standard approach worldwide. Core beliefs were addressed first without working at the superficial level of cognitions, which backfire most of the times (Priyamvada et al., 2009).

Cognitive therapy is not about substituting positive thoughts for negative thoughts. Some research papers indicate usage of positive thoughts as a strategy in therapy process. Cognitive therapy has been portrayed as a procedure that replaces the negative feelings into positive, correct and appropriate feelings in the difficult situations but in reality it's about adaptive approaches in real life situations. (Jha et al., 2016)

Even though the formulation depicted in Sondhi et al. (2013) matches with the western CBT protocol, the focus of therapy was on non-critical peripheral assumptions such as "Even if I study, my mother will nag me", "Even if I study, I cannot do as well as my brother". This practice does not get along with the recommended cognitive strategies which specifically targets the conditional assumptions that are critical and central to the patient's cognitive taxonomy (Beck, 2011). Also within the therapy sessions, the practice of guided discovery was inappropriately applied and described (Sondhi et al., 2013).

5.2. Limitations

5.2.1. More focus on behaviourism

Behaviour therapies such as systematic desensitization, exposure and response prevention and specific relaxation techniques do have a role to play in the therapeutic work, but there should be an equal emphasis on cognitive interventions too. Some papers allocate more space to behavioural interventions, leaving little place for cognitive strategies. Under the garb of CBT, mostly behavioural interventions are offered and cognitive interventions are side-lined. This is obvious from the protocol description and session allocation, for instance, in Ananda et al. (2005), Priyamvada et al. (2009) and Manjula et al. (2009)

6. Aspects of cultural adaptation

There is a prevalent belief among the Indian psychotherapists that Western Origin Cognitive therapy does not suit Indian culture and frequently recommend a need for indigenous formulation. (Pichot et al., 1985; Neki, 1973; Reddy, 2012; Kumar and Gupta, 2012) Certainly, there is a worldwide endorsement that the CBT technique may require certain minor alterations based on cultural practices. This assertion is accompanied by a cautionary note that, such changes to the already proven original CBT model should not annihilate the parent architecture, which can lead to adverse responses. Guru-Chela paradigm (concerned with the formation of a therapeutic relationship in CBT) is the most discussed concept relating to the practice of culture-based CBT in India. (Neki, 1973; Kuruvilla, 2000; Manickam, 2010; Bhatia et al., 2013) The major defect in Indian CBT programs which were discussed in this review does not relate to any form of cross-cultural CBT adaptation. Clinicians can maintain fidelity while also tailoring the interventions to cultural group by adhering to the specific CBT protocol in a standardized format with certain minor alterations based on local cultural practices (though such changes should always be made in

complete awareness of what one is changing and why) (Masson, 1979). In addition, it should also be born in mind that supportive cultural adaptations should follow the main stream therapy and not as standalone interventions. In the wake of globalisation, as the Indian culture is slowly westernizing in several walks of life, the emphasis on the concept of cultural relativism in therapeutic approaches can be minimised.

7. Conclusion & future directions

This discussion throws a probing light on several shortcomings in Indian CBT research. An adaptation of a western model of therapy for Indian population should preserve the essence and core ideas of the parent concept in order to maintain the therapeutic efficacy of cognitive therapy. Since cognitive interventions are highly specialized form of treatment procedures, due attention needs to be focused on the exact techniques suggested. Loosely described approaches (under the banner of cognitive therapy) may amount to much inferior interventions that may ultimately tarnish the image of standard therapies. It's being a psychobiological intervention, a clinician who intends to use cognitive therapy procedures should have a clear understanding of the CBT therapeutic components. Programs training the practitioners in standard approaches is the need of the hour.

Conflict of interest

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