International Handbook of Occupational Therapy Interventions

Chapter 28 Intervention in Panic and Anxiety Disorders Through Lifestyle Modification

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A combination of habitual lifestyle behaviors such as diet, fluid intake, exercise, and habitual lifestyle drug use (such as caffeine, alcohol, and nicotine) may interact with altered sensitivity in body system function in some panic disorder clients. (Lambert et al., 2007)

Abstract Unhealthy habitual lifestyle behaviors add to the burden of local, national, and global health. When reviewing evidence of potential causes of panic disorder, at least six body systems are known to have altered sensitivity affected by habitual behaviors such as diet, fluid intake, exercise, and habitual lifestyle drug use (for example, caffeine, nicotine, and alcohol). This may also be true for other forms of anxiety disorder. Occupational therapists (OTs) work with everyday occupational behaviors that include habitual lifestyle factors. Negotiating a positive lifestyle change can affect anxiety symptoms through addressing systemic sensitivity. The occupational therapy lifestyle intervention discussed here centers on occupational form, performance, and synthesis related to habitual lifestyle behaviors that can therefore affect the development, experience, severity, and duration of anxiety symptoms. A recent random controlled study observed a significant short-term benefit (20 weeks). At long-term follow-up (10 months after entry into the trial), clinical results were equivalent to those achieved with full cognitive behavioral therapy (CBT). A model of the system within which the approach functions is presented.

Keywords Anxiety • Complexity science • Lifestyle • Occupation • Neuroses panic attacks • Randomized controlled trial • Therapy

Definition

Statements: The Theoretical Framework of the Intervention

For at least the past 40 years, global and national health policies in the United Kingdom have promoted the idea that modification to habitual lifestyle behaviors, including increased exercise, smoking cessation, and improved diet, benefit health (Flores and

Ojea, 2002; Kennedy, 2002; WHO, 2003b). Unhealthy habitual lifestyle behaviors add to the local, national, and global burden of ill health as evidenced by the World Health Report 2003 (WHO, 2003b) and the U.K. Department of Health White Paper on smoking (Department of Health, 1998). The WHO, for example, has characterized smoking as "the world's leading preventable cause of death" (WHO, 2003b, p. 91), and has characterized the growing problems of obesity as a global epidemic (WHO, 2003a).

Occupational therapists (OTs) have developed their understanding of occupational behavior through theoretical developments such as those provided by Keilhofner's (2007) model of human occupation, Nelson's (1997) promotion of the tripartite structure of occupational form, performance, and synthesis, and in the development of occupational science (Yerxa, 1993). It has subsequently been suggested that "both lifestyle and occupation refer to broadly similar life processes, with both considering occupational form and occupational performance [and that] occupational synthesis can be achieved by a direct intervention based on lifestyle factors" (Lambert, 1998, p. 196).

In panic-disorder clients (International Classification of Diseases [ICD-10] code F41.0) (World Health Organization, 1992), at least six body systems have been shown to have an altered sensitivity (Lambert and Brown, 2007), leading to symptomatic reactions in these systems at lower levels of provocation than among people with other mental health problems and or among normal controls, and it is suggested that this may apply also to other anxiety disorders.

Applying a lifestyle intervention can provide a focus on the occupational form of lifestyle activities such as eating, drinking, and exercise, and the associated occupational performance of the habitual lifestyle behaviors, including the choices made by individuals of either health-enhancing behaviors (such as regular exercise) or health-damaging behaviors (such as smoking, drinking insufficient fluids, or the use of alcohol or caffeine as a major feature of fluid intake). This provides an opportunity for occupational synthesis through working with the client to increase awareness of, and minimize exposure to, elements to which the client has an altered sensitivity. It can also work toward improved fitness and function of specific body systems, as habitual lifestyle behaviors influence the function of bodily systems. In this way, reinterpretation of potential symptom causality can be promoted. Improved physiologic function can result, along with increased individual symptom control, thereby reducing the effect of previously misinterpreted symptoms on anxiety (such as chest pain being misinterpreted as an impending heart attack, leading to admission to the emergency department). Lifestyle review can identify a range of potentially harmful habitual lifestyle behaviors. By negotiating positive changes, these habitual lifestyle behaviors and physiologic responses within sensitive/hypersensitive body systems can be reduced, thereby reducing anxiety and panic.

Historical Development

The author first identified a potential link between habitual lifestyle behaviors and panic disorder in 1992 (Lambert, 1992), reporting this more formally in 1998

(Lambert, 1998). Between 2000 and 2003 a randomized controlled trial was conducted within the period of a National Health Service Researcher Development Fellowship (Lambert and Brown, 2007; Lambert et al., 2007).

Purpose

The *purpose* and fundamental principles for treating alteration of lifestyle for clinical use due to anxiety/panic disorders are to provide a focus on the occupational form and performance related to habitual lifestyle behaviors. This treatment approach can then examine methods of preventing, improving, and containing symptoms by occupational synthesis through active engagement with, and control over, routine habitual lifestyle behaviors. This approach aims to assist clients experiencing these symptoms to identify specific body system sensitivities, and to encourage alteration of potentially detrimental habitual lifestyle behaviors, through which they regain control over anxiety/panic symptoms, thereby improving their everyday occupational behaviors.

Method

Candidates for the Intervention and Epidemiology

The lifestyle intervention is intended for adults (16 to 65 years of age) who have been experiencing anxiety or panic attacks/disorder. Panic disorder is experienced by about 1.5% to 3% of the population (Weissman et al., 1997), and is well characterized in the *Diagnostic and Statistical Manual of Mental Disorders* (fourth edition, revised) (DSM-IV-R) (American Psychiatric Association, 2000) and in the International Classification of Diseases (10th Revision) (World Health Organization, 1992). The prevalence of all anxiety disorders in U.K. primary care services was estimated at 2.38% for men and 5.44% for women in 1998, with an upward trend (Office of National Statistics, 2000), and it has been estimated that this figure may be up to 19% (Ansseau et al., 2004).

This lifestyle intervention is intended to help clients with anxiety symptoms to recognize potential physiologic causes that may be associated with habitual behaviors. When these behaviors are identified, this intervention can then encourage clients to regain control over them.

Settings

The lifestyle intervention has been designed and tested with individual clients in primary care environments, although the principles could be applied in routine

practice in other settings, and potentially also with small groups. Its effectiveness has not yet been tested in groups or other settings.

The Role of the Occupational Therapist in Applying the Intervention

The OT should become familiar with the literature (some examples are provided here, but the reference list is not comprehensive) relating to habitual lifestyle behaviors and health. Key works are those associated with diet (Benton and Nabb, 2003; Rogers, 2001), fluid intake (Gopinathan et al., 1988; Wilson and Morley, 2003), exercise (Atlantis et al., 2004; Broman-Fulks et al., 2004), and habitual lifestyle drug use, such as alcohol (Marquenie et al., 2007; Milani et al., 2004), nicotine (Goodwin et al., 2005; McLeish et al., 2008), and caffeine (Masdrakis et al., 2007; Nardi et al., 2007). These behaviors should not be considered in isolation, however, as evidence suggests high levels of interaction among these habitual lifestyle behaviors (Batra et al., 2003; Gilbert et al., 2000; Johansson and Sundquist, 1999). The OT should, in association with client diary data, identify potential habitual lifestyle behaviors that may represent a risk of increased anxiety, and then negotiate and monitor changes toward the client adopting health-promoting behaviors.

Results

A Brief Guide to Clinical Application

The intervention addresses four areas of lifestyle: diet, fluid intake, exercise, and habitual lifestyle drug use (caffeine, alcohol, and nicotine). It should provide up to ten intervention sessions over a 16-week period (three 1-hour appointments at weekly intervals, then three half-hour appointments at weekly intervals, then three half-hour appointments at biweekly intervals, and then one 1-hour appointment at a monthly interval). The intervention should be delivered in four distinct but largely concurrent stages:

- Lifestyle review using self-report mood and lifestyle diaries.
- Education to increase client awareness of the potential negative health effects of some lifestyle behaviors (such as smoking and poor diet), and the health benefits of other lifestyle behaviors (such as sufficient exercise and sufficient fluid intake).
- Specific lifestyle changes (in diet, fluid intake, exercise, or habitual lifestyle drug use) should be negotiated between therapist and client.
- Monitoring and review between therapist and client of the agreed lifestyle changes and any subsequent symptom change.

Evidence from Practice, and How the Intervention Eases Impairments, Activity Limitations, and Participation Restrictions

Results from a randomized controlled trial have been published in which the lifestyle intervention was compared with routine general practitioner (GP) care (Lambert et al., 2007). However, while this showed a significant short-term benefit, assessed at 20 weeks following 16 weeks of treatment, between-group differences were not significant at the 10-month follow-up. The conclusion was that the lifestyle intervention was at least as cost-effective as routine GP care (Lambert, 2005). It also produced improved results when compared with medication, and was equivalent in efficacy to the use of a full cognitive behavioral therapy program (Lambert et al., 2007). However, that is not the whole story, and the intervention is based on the observation that likely causes of panic and anxiety are diverse, from genetic predisposition to altered sensitivity in neurotransmitter/receptor density and function and body-system function, and include cognitive and environmental factors. As suggested by the Medical Research Council (MRC, 2000), this diversity of potential interaction between etiologic factors has been used to model the resulting complex system within which patterns of mood and behavior emerge (Lambert and Brown, 2007) (Fig. 28.1).

This model helps to identify at which point in the system an intervention can be attempted. For example, medication focuses on the physiologic functions of the

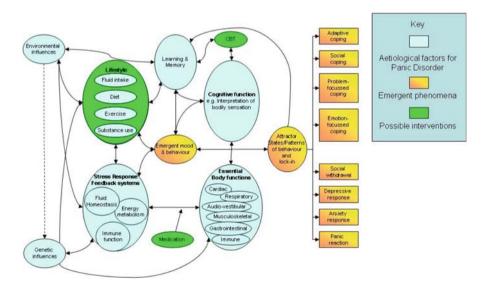


Fig. 28.1 Complex interaction and panic disorder: emergent phenomena and therapeutic implication. [Adapted from Lambert, R. (2007). Complexity, panic and primary care. In: Bogg, J., and Geyer, R., eds. Complexity Science and Society. Oxford: Radcliffe, with permission of the copyright holder.].

body, while CBT focuses on cognitive interpretation, learning, and memory. The lifestyle intervention focuses on a different and already internal part of the system, in terms of habitual lifestyle behaviors that influence emergent mood and behavior through stress-response feedback mechanisms, physiologic function, and cognitive interpretation. Another point of entry (although not shown) may be through environmental influences such as work or other occupational behaviors. Through applying the lifestyle intervention therefore, the OT can assist clients in becoming aware of individual sensitivities within their physiologic system, and to take remedial action to regain control over associated symptomatic responses. Lifestyle review can help clients gain an understanding of how their habitual lifestyle behaviors may affect symptoms of anxiety and panic. Through this, clients can learn what actions can assist them to regain control over such symptoms, and to regain control over their routine occupational behaviors. This places them in a better position to fulfill desired occupational roles and achieve an occupational balance.

Declaration of Interest

The main trial results from the wider study were presented at the 33rd North American Primary Care Research Group meeting held in Quebec City on October 15 to 18, 2005.

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Clinical trial registration details: Controlled-trials.com—ISRCTN51562655 http://www.controlled-trials.com/isrctn/search.asp.

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