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Psychotherapies for Dental Issues

Fujisaki C[1] and Yamasaki A[2]*

[1]Department of Psychology, Faculty of Human Life Science, Tokushima Bunri University, Japan

[2]Graduate School of Medicine, Kyoto University, Japan

Abstract

Although limited attention has been given by dentists to the efficacy of psychotherapy for dental treatment, some psychotherapies are known to be supportive for it. Cognitive behavioral therapy (CBT) is commonly used to treat depression, but also effective for dental phobia and temporomandibular disorder (TMD). Exposure with relaxation is also useful for dental fear. Mindfulness is new treatment originally from Buddhism meditation and expected to reduce dental fear and improve TMD. Nowadays, Mindfulness-based stress reduction (MBSR) and Mindfulness-based cognitive therapy (MBCT) are well known. In addition to them, AEON-HO which was produced from Naikan therapy and mindfulness originally for attachment style issue, is expected to be beneficial for dental anxiety because pattern of attachment affects to the anxiety.

Keywords: Psychotherapy; AEON-HO; Mindfulness; Cognitive behavioral therapy; Exposure; Dental phobia; Temporomandibular disorder

Introduction

Little systematic attention has been given by dental profession to the efficacy of psychotherapy for dental issues, although some of psychotherapies are supportive for them.

Most patients are somewhat apprehensive about dental treatment. Some of them are so fearful that they avoid necessary dental care, and the fears prevent the patients from cooperating fully in treatment. Dental anxiety affects 10–20% of adults in the US [1,2]. The most common included fear of the injection, fear of the drill, fear of extraction, and fear of having an explorer placed in a carious lesion [3].

The objections to psychological treatment that are made by dentists and patients are that psychotherapy is time-consuming, not cost-effective, and unsuitable for emergency treatment [4]. However, using psychotherapy for dental treatment, short interventions has been developed which require only one session and can successfully cope with various phobias [5].

Cognitive Behavioral Therapy (CBT)

Cognitive behavioral therapy (CBT) is known to be one of the beneficial psychotherapies for dental phobia [6]. CBT was originally designed to treat depression, and is now one of the most commonly used psychotherapies for mental health. The CBT model is based on a combination of the basic principles from behavioral and cognitive psychology. CBT is evidence-based practice and focuses on the development of personal coping strategies that target solving current problems and changing unhelpful patterns in cognitions such as thoughts, feelings, beliefs, attitudes emotional regulation and behaviors. In the session, clients learn how to change these negative patterns to improve the way they feel with talking with the psychotherapist. CBT deals with more current problems than focusing on issues from the past.

About the efficiency for mental health, Butler et al. [7] depicted that large effect sizes were found for CBT for unipolar depression, generalized anxiety disorder, panic disorder with or without agoraphobia, social phobia, posttraumatic stressdisorder, and childhood depressive and anxiety disorders. Effect sizes for CBT of marital distress, anger, childhood somatic disorders, and chronic pain were in the moderate range. CBT was somewhat superior to antidepressants in the treatment of adult depression. CBT was equally effective as behavior therapy in the treatment of adult depression and obsessive-compulsive disorder. Large uncontrolled effect sizes were found for bulimia nervosa and schizophrenia.

Also for the dental treatment, CBT is most commonly used among psychotherapy. CBT subjects showed significant improvement on their level of dental anxiety and negative thoughts during the

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Correspondence:
Chieko Fujisaki, Department of Psychology, Faculty of Human Life Science, Tokushima Bunri University, 180 Nishihamahouji, Yamashiro-cho, Tokushima-shi, Tokushima, Japan.
E-mail: *fujinothe@yahoo.co.jp*

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dental procedure [8].

Comparable psychotherapy to CBT, biofeedback-based cognitive-behavioral treatment (BFB-CBT) is often used especially for chronic temporomandibular disorder (TMD) instead of occlusal splint (OS). Mora et al. [9] had a study to compare the efficacies of BFB-CBT and OS with 58 patients with chronic TMD. Patients receiving BFB-CBT showed significantly larger improvements in pain coping skills, and satisfaction with treatment and ratings of improvement were higher for BFB-CBT, although both treatments resulted in significant reductions in pain intensity and disability. Effects were stable over 6 months, and tended to be larger in the BFB-CBT group for all outcomes.

Exposure with Relaxation

Exposure therapy has been commonly used for traumatic posttraumatic stress disorder (PTSD), phobias, panic disorder and so on [10-14]. Also, in CBT, exposure is used sometimes.

Jöhren et al. [4] have used the following psychological treatment, "Relaxation training"; "Applied relaxation (imaginary exposure)": The patients were instructed to relax as soon as they noticed first signs of anxiety; "Positive self-talk (cognitive restructuring)" : The patients had to explore dysfunctional thoughts relating to dental treatment and to replace them with anxiety relieving thoughts; "Brief written summary": All patients received a written account of the treatment session with illustrated instructions for stress management training applied to dental phobia. Two months later, the midazolam group showed a return to baseline fear, whereas the psychologically treated group showed further improvement. Medium-term results after one year showed that compliance and reduction of fear remained only in the psychologically treated group. Therefore, psychological treatment can be expected more chronic effect for dental phobia with less side-effect than pharmaceutical treatment.

Mindfulness

Some studies propose introducing mindfulness into the dental curriculum. Mindfulness practice can be expected to reduce dental fear and improve TMD. The main factors to be expected to achieve in mindfulness arepresent-moment awareness and acceptance, and they can be also beneficial fordental treatment.

Mindfulness is originally from south-east Asian Buddhism ascetic practice. There are some mindfulness-based psychotherapies such as Mindfulness-based stress reduction (MBSR), Mindfulness-based cognitive therapy (MBCT), Dialectical Behavior Therapy (DBT), Acceptance and Commitment Therapy (ACT), Metacognicitve Therapy and AEON-HO.

MBSR was founded by Kabat-Zinn [15,16]. MBSR is a mind-body intervention and used as a psychotherapy firstly. The participants met weekly for eight 2.5-hour sessions. Meditation and yoga techniques were practiced to foster mindfulness (present moment, nonjudgmental, and awareness). In MBSR, participants were instructed some strategies to watch events objectively without any judgement such as the method of observing breath, the method of observing physical sensations, and the method of observing space. Meditation exercises were assigned as daily home practice. MBSR was produced to treat chronic pain, but now the procedure has been employed among patients with a wide variety of chronic clinical ailments. Preliminary reports have suggested substantial benefits for people suffering from depression, anxiety, mental stresses, drug addiction [17-20]. Tellez et al. [21] studied the correlation between modified dental anxiety scale (MDAS) and five facet mindfulness questionnaire-short form (FFMQ-SF), and found the non-judging factor of FFMQ-SF and MDAS have correlation (r=-.27, p<.01).

MBCT was devised from MBSR and cognitive therapyto prevent the recurrence of depression by Segal, Williams and Teasdale [22]. As the differentiation between MBCT and MBSR, MBCT, but not MBSR, contains psychoeducation for depression, and most of the exercises of MBCT take shorter time than the exercises of MBSR [23].

It was indicated that MBSR and MBCT have broad-spectrum antidepressant and antianxiety effects and decrease general psychological distress [24]. However, findings suggest that MBSR participation may provide slightly greater stress reduction benefits for insecurely attached individuals [25]. Eli et al. [26] has depicted that pattern of attachment may have a dominant affect to dental anxiety in their study.Also, it is reported that psychodynamic therapy is more effective especially for the people with the avoiding type of attachment [27].

Regarding the attachment style, AEON-HO can be also effective for the dental fears. "Ae" means love, "On" means gratitude, and "Ho" means method in Japanese. The first two of three stages of AEON-HO was founded mainly from Naikan therapy and mindfulness primarily for attachment style issue and self-actualization by Fujisaki [28]. Naikan therapy was also produced from Buddhism ascetic practice by a Japanese monk, Ishin Yoshimoto, and has been used commonly at psychiatric hospitals/clinics, correctional institution, educational schools, business enterprises for training, and so on especially in Japan since 1960s. In the program, participants introspect their own biography based on three themes of Naikan: "What has she/he gaven to me? ", "What have I returned to her/him ? ", and "What troubles did I cause for her/him ?" about the relationships with their mother, father, brothers and sisters, grand parents, friends, colleagues and so on since their childhood. Naikan is known to be effective for depression, anxiety, bipolar disorders and so on [29-31].

Mindfulness suggests how to accept physical pains without judging, and is also efficiency for TMD [32,33]. The attitude of Nonjudgmental and acceptance with any aversive situation and situation can helpful for undesirable feeling such as TMD. Eisenlohr-Moul et al. [33] studied with 135 TMD patients. The chronic pain patients suffer from chronic self-regulatory fatigue: difficulty controlling thoughts, emotions, and behavior. However, pain acceptance, which involves responding to pain and related experiences without attempts to control or avoid them (pain willingness), and pursuit of valued life activities regardless of pain (activity engagement) has been associated with various favorable outcomes in chronic pain patients, including better psychological functioning.

Additionally, pain acceptance as measured by the 8-item version of the Chronic Pain Acceptance Questionnaire(CPAQ-8) consisted of activity engagement and pain willingness, was associated with less depression, anxiety, pain interference, fear of reinjury, pain catastrophizing, and psychological inflexibility in pain, and higher levels of satisfaction with life, pain self-efficacy, and general acceptance [34].

Conclusion

Some psychotherapies such as CBT, exposure with relaxation and mindfulness are effective for dental issues like dental fear and TMD.

Especially, the effect of mindfulness, acceptance and nonjudgmental attitude, can be beneficial for the dental treatment.

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