

# Behavior Therapy for Generalized Anxiety Disorder with problematic use of Anxiolytics; Case series

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## Abstract

Generalized anxiety disorder (GAD) has been acknowledged for centuries, and the oldest among anxiety disorders. On the other hand, the nature and treatment for GAD is less clear than other anxiety disorders. Considering the increasing number of outpatients in behavioral and mental health services, it is crucial to clarify these issues.

We surveyed outpatients who visited outpatient clinics with “anxiety” or “stress” as a chief complaint. We found GAD was one of the most frequent diagnoses. We compared GAD patients with other anxiety disorder and depressive patients.

We found GAD patients tend to overuse health care services. Benzodiazepine use is almost a rule, and some developed dependence and abuse of anxiolytics. We developed “Benzodiazepine Control Therapy” (BCT) as an application of cognitive behavior therapy. Six patients have been treated by this treatment. HAM-A and Penn State Worry Questionnaire were used as outcome measures. Most of the patients achieved significant improvement (over 50% reduction of HAM-A from base line) after 4 to 6 weeks of treatment episode. We showed illustrative case series who responded to BCT and monotherapy by antidepressants.

The implication of addressing GAD in primary care setting is discussed.

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## INTRODUCTION

Generalized anxiety disorder (GAD) is a prevalent and disabling disorder characterized by persistent worrying, anxiety symptoms, and tension. It is the most frequent anxiety disorder in primary care, being present in 22% of primary care patients who complain of anxiety problems. The natural course can be characterized as chronic with few complete remissions and the occurrence of substantial comorbidity particularly with depression. It has been acknowledged for centuries, and the oldest among anxiety disorders. On the other hand, the nature and treatment for GAD is less clear than other anxiety disorders (Kessler, 2000). The appropriate use of psychological treatments and antidepressants may improve both anxiety and depression symptoms and may also play a role in preventing comorbid major depression in GAD thus reducing the burden on both the individual and society (Wittchen, 2002).

We conducted a questionnaire survey targeted at primary mental health care providers in Kumamoto areas (原井宏明, 2005). Eight providers, either psychiatric outpatient clinics or psychosomatic outpatient clinics responded. GAD was the second most frequent diagnosis after Panic disorder, before depressive disorders. Japanese Ministry of Health, Labor and Welfare reported that the number of patients whose principal diagnosis was

anxiety disorders had increased from 98,000 in 1999 to 140,000 in 2002(厚生労働省, 2005). These findings support the burden of Anxiety disorders are increasing.

This report consists of four parts, 1) Description of GAD patients who visited Kikuchi National Hospital to clarify the nature and health care usage patterns of pure GAD patients, 2) Report preliminary results of our therapy for GAD patients having current benzodiazepine dependence.

## METHOD

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### Participants

This research was approved by the institutional review board and conducted at Kikuchi National Hospital, Kumamoto, Japan. Participants were recruited from the patients who were referred to the emotional disorder treatment program at Kikuchi National Hospital.

The program has started in 1999 and has accepted 312 patients until now. This program offers cognitive behavior therapy both individual and group format, and pharmacotherapy. The program participates in several multi-center clinical trials of new antidepressants sponsored by the industry in Japan. Most of the patients are referred from other health care providers, except patients who are recruited by advertisements for the clinical trials. The primary diagnosis given by the referring physicians were; obsessive compulsive disorder 118, depressive disorders 89, social anxiety disorder 55, GAD 33, panic disorder, 15, and specific phobia 2.

We conducted diagnostic interview to the consecutive outpatients using M.I.N.I. semi-structured interview (Sheehan et al., 1998). diagnosed as having GAD as primary diagnosis. Patients who had current major depressive episode, diagnosis of other anxiety disorders, or psychotic disorders were excluded. Some patients had diagnosis of substance abuse, mainly prescribed medication. These patients were not excluded, unless being involved in criminal activities. We explained the purpose of the research to the patients whose primary diagnosis was GAD, and surveyed patients who submitted written informed consents. 21 patients participated in the study. Six patients (five female and one male) had comorbid benzodiazepine abuse. These patients participated in the treatment study for Benzodiazepine Control Therapy.

### Measure

As an outcome measure we employed Hamilton Anxiety Scale score using SIGH-A (Shear et al., 2001)

To assess other psychopathology, we administered Penn state worry questionnaire (Roemer, Borkovec, Posa, & Borkovec, 1995), Fear Questionnaire (Marks, 1986), and Beck Depression Inventory (BDI).

### Description of the treatment strategy

All participants who had previous treatment episodes had been prescribed benzodiazepines. Some developed dependence and abuse of anxiolytics. We developed “Benzodiazepine Control Therapy” (BCT) as an application of cognitive behavior therapy. This therapy consists of;

- 1) Prevent private event contingent use of benzodiazepine use, and facilitate scheduled use of long acting benzodiazepine

It is argued that as needed use of benzodiazepine would result in decrement of the effect and substance dependence (Westra & Stewart, 2002). As to GAD, patients often use benzodiazepine when they feel anxious, that is when they have worry. Worry process is private cognitive experience. Benzodiazepine is quite effective to suppress autonomic hyperactivities, whereas it has no effect on worry.

- 2) Daily self monitoring of worry and physical symptoms
- 3) Activity scheduling
- 4) Clinical interviewing focusing accepting uncertainty in life, choosing personal goals, and taking action

One of the etiological models of GAD (Ladouceur, Blais, Freeston, & Dugas, 1998) points out that GAD patients have intolerance of uncertainty, beliefs about worry, poor problem orientation and cognitive avoidance. During the interview, interviewer intentionally overly reflects the worry contents of the patients.

Example of interview dialogue:

A working mother living with two sons in high school. The younger son had been diagnosed to have ADHD. He adapted to school environments, however he neglected personal hygiene and trouble with his senior brother was a daily routine.

Thr How was the last week?

Pt Last Friday, my sons fought each other severely. The senior told the younger "I will kill you."

Thr A word like "kill" makes anybody anxious. The senior got quite mad at the younger.

Pt Yes. The younger did not follow the senior's instruction.

Thr Then you thought that there would be a murder. Did you call police?

Pt No. It was not that bad. But, you know, as recent news paper reports unpredictable violence in adolescents. My sons would do something quite bad in future. Watching TV shows, I feel like it would occur pretty surely.

Thr You say, your sons' fighting would eventually result in life threatening wound, and be reported on the front line of TV news reports.

Pt No body has been wounded yet. However, I worry one of my son would take knives or something.

Thr The senior threatened the younger with knife.

Pt No. But, a baseball bat was there.

Thr The senior hit the younger with the bat.

Pt No. The younger hold the bat. The thing was, after being bullied and slapped several times, the younger hold the bat to stop the senior.

Thr The younger swung around the bat, and hit the windows etc?

Pt No. Not that much. The younger was thoughtful not to break important things.

Thr What I heard so far is that the younger tolerated with the senior's bullying and kept being thoughtful. The bat was his protection.

Pt Exactly.

This conversation is based on the skills of Motivational Interviewing. It is intended to conduct worry exposure with an empathic atmosphere.

Concomitant pharmacotherapy was also administered. Five patients were prescribed paroxetine.

## RESULTS

Table 1 Descriptive statistics of the participants

		Female	Male	Total
	No	13	8	21
Age	Mean	43.8	39.5	42.2
	s.d	12.3	9.3	11.5
HAM-A	Mean	25.7	26.5	26.0
	s.d	5.1	4.0	4.8
PSWQ	Mean	56.3	56.0	56.2
	s.d	14.0	9.8	12.6
FQ Agora	Mean	6.0	5.2	5.5
FQ Blood	Mean	10.8	8.0	9.3
FQ Social	Mean	17.2	9.8	13.2
BDI	Mean	17.8	20.3	19.3

Table 2 Summary of Outcome measure of the patients treated with BCT

Measure	Pre	s.d	Post	s.d.	Change
HAM-A	24.7	5.7	6.2	1.86	73%

Table 3 Outcome measure of the individual patients

No	sex	age	Tx	HAM-A		
				base line	after tx	reduction
1	F	44	Px + BZ	32	4	0.88
2	F	47	Px	23	6	0.74
3	F	38	Px + Sulpiride	22	10	0.55
4	F	30	Px	32	6	0.81
5	F	68	BZ	16	6	0.63
6	M	36	Px	23	5	0.78

Px: Paroxetine BZ: Benzodiazepine

### Case 1 Hose wife age 44

Cc: Complaints of fear, anxiety, weakness and suicidal ideation. Worry over car accidents, war, natural calamity, or death of family members. Need continuous supports and supervision from family members, because she exhibits parasuicidal behavior and drug seeking behavior for benzodiazepines.

**Past History:** Major depressive episode at the age of 15 and 29. She recovered from both episodes spontaneously within six months.

**Present Illness:** She had been nervous and jumpy from her childhood. However, she had never needed any professional help for this nervousness, and functioned well as a house wife and a mother of two daughters. A year ago, her mother experienced depressive episode and admitted in a mental hospital. Two months later, her mother died due to sudden cardiac arrest. Since then, she started worry various things, suicide or death in special. Her physical symptoms started simultaneously. She had been treated by a local mental clinic, where the physician gave her anxiolytics and hypnotics, both of which were benzodiazepines. Soon, she had started to take those pills when she felt anxious or worry, and visit physician when felt anxious. The physician administered intravenous injection of diazepam, which resulted in more frequent use of benzodiazepines. She was basically lies in bed over 18 hours in home complaining severe lethargy.

**Present status:** A tall lean lady without make ups. She could not continue conversation over 15 minutes, and start trembling and mumbling “give me anxiolytics.” HAM-A was 32. Her husband, father, and sisters were with her, and supporting her basic functioning.

**Treatment course:** For the first week, she called our hospital every night for asking to prescribe anxiolytics. At every moment, we answered the call with the style described in BCT. At the second week, HAM-A was increased to 43. The third week, 27, Fourth, 17. From the fifth week, the therapist started to discuss about her complicated grief for the sudden loss of her mother. This increased her anxiety (HAM-A 26), and resulted in stabilized state at 18 weeks (HAM-A 4). She recovered her functioning as a house wife.

## DISCUSSION

As the table show our treatment program accepted and worked well for GAD patients.

This study indicates some evidence to support the efficacy of our therapy. This is preliminary research, and we need further research to confirm our findings.

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