

Patients' Acceptance of Psychological and Pharmacological Therapies for Insomnia

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Summary: This study evaluated the acceptance of psychological and pharmacological therapies among chronic insomniacs and noncomplaining good sleepers. After reading a brief written description of two treatment methods commonly used for persistent insomnia (i.e. cognitive-behavior therapy and pharmacotherapy), the subjects rated in a counter-balanced order several dimensions of these two treatment modalities. The results showed that the psychological intervention was rated as more acceptable and more suitable than the pharmacological one among both insomniacs and their noncomplaining significant others. Behavior therapy was also expected to be more effective on a long-term basis and to produce fewer side effects as well as more benefits on daytime functioning. The clinical implications and relevance of treatment acceptance in the management of insomnia are discussed. **Key Words:** Insomnia treatments—Patient acceptance—Pharmacotherapy—Psychological intervention.

There is an extensive literature on the efficacy and shortcomings of psychological and pharmacological therapies for insomnia (1,2). However, an important issue that has generally been overlooked is how acceptable these two treatment modalities are to patients. Whereas pharmacotherapy is the most widely used method for treating insomnia, recent recognition and highly publicized side effects (e.g. amnesia) of some hypnotics (e.g. triazolam) have raised serious concerns among potential consumers (3-5). Although cognitive-behavior therapy has proved an effective alternative in treating disorders of initiating and maintaining sleep (6-8), its presumed acceptance among insomniacs has not been empirically evaluated.

Assessing the acceptance of insomnia treatments is important for several reasons. First, when several effective treatment options are available, acceptance by prospective patients may be an important consideration in seeking, initiating and adhering to treatment (9-12). Secondly, treatment acceptance is an important criterion in evaluating the clinical usefulness of a given intervention. Even though a particular intervention is known to be efficacious, if it produces adverse side effects, is too time consuming, too costly or is perceived

as socially undesirable, adherence is likely to be poor. Thus, regardless of how efficacious a given treatment is, if it is not acceptable to patients, it will be of little clinical use. Treatment acceptance is then an important variable not only in selecting a given intervention, but also in mediating treatment effectiveness.

The present study evaluated the acceptance, suitability and expected effectiveness and side effects of psychological and pharmacological therapies among insomniacs and their noninsomniac significant others. The latter group was included because significant others are often affected by the target problem and by the recommended interventions. As such, they play an important role in determining whether the patient will seek, initiate and continue treatment.

METHODS

Subjects

The subjects were 71 older adults (men = 32; women = 39) whose age averaged 66.5 years old (SD = 8.65) and education level 14.1 years (SD = 3.12). Of those, 39 were seeking treatment for chronic insomnia in response to media advertisements. The remaining 32 subjects were significant others with no sleep complaints. Insomnia sufferers presented with severe and persistent (mean duration = 13.1 years) difficulties initiating and/or maintaining sleep (DIMS). Their aver-

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age sleep efficiency based on 2 weeks of sleep diaries was 68.1%, and that based on 2 nights of polysomnography was 76.1%. All subjects met criteria for either a primary or secondary diagnosis of psychophysiological insomnia (13) while more than one half also presented concomitant but stable medical disorders. There were eight patients with a past history of major depression, alcohol abuse or anxiety disorders, but those with current major psychopathology (axis I) were excluded. Fifteen of the 39 insomniacs were currently using or had previously used sleep medications, whereas none had received psychological therapies for insomnia. All eight patients with a past history of psychopathology had been treated in the past for these disorders with pharmacotherapy, psychotherapy or both. The significant others were 28 spouses, 3 immediate family members and 1 close friend. They all expressed a high level of awareness of the patients' sleeping problem (awareness rating >3 on a 1-5 Likert scale). None of them complains of current sleep difficulties, though 11 had previously suffered insomnia for more than 1 month and 4 had previously been treated with pharmacotherapy.

Measure and procedures

The present data were collected during the course of an ongoing insomnia treatment study conducted at a sleep clinic of a university medical center between January and June 1989. As part of a comprehensive assessment battery (e.g. sleep diaries, questionnaire/symptom checklists, polysomnogram, psychometric measures) prior to enrollment in treatment, all subjects were administered the *Insomnia Treatment Acceptability Scale*. (A copy of the scale and treatment descriptions are available upon request from the first author.) The significant others also completed this measure and were asked to mail it directly to the project without discussing their ratings with the person involved in the study. The subjects were provided with a brief written description of two interventions commonly used for treating insomnia. The behavioral treatment was described as a self-management program aimed at changing poor sleep habits, regulating sleep schedules and altering dysfunctional thoughts about sleeplessness and its impact on daytime functioning. The pharmacological treatment was described as a new hypnotic medication (no medication was named) designed to induce sleep by reducing physiological and cognitive arousal. Both treatments were described as equally effective, and the order of presentation was counter-balanced. After reading each treatment description, the subjects completed nine ratings on 100-mm visual analog scales. Each rating received a score from 0 to 100. These ratings covered several

social validation issues (see Table 1) including treatment acceptance, willingness to comply, suitability for sleep onset and maintenance problems and perceived effectiveness and side effects associated with each treatment method. The items were phrased as follows: (Item 1) How acceptable would you consider this treatment for your insomnia? (Item 6) How effective do you believe this treatment would be in the short term?

RESULTS

Mean ratings for types of treatment across groups are presented in Table 1. Because there was only one between-group difference (see below), these ratings were pooled across both patients and significant others. The nine items were analyzed with separate 2 (groups) \times 2 (treatments) repeated-measures analyses of variance (ANOVAs). There was no significant interaction on any of the items. Significant main effects for treatments were obtained on eight of the nine ratings (see Table 1). Both the patients and their significant others viewed the behavioral treatment as more acceptable for oneself (see Fig. 1) as well as for others than the pharmacological one (p 's < 0.001). Behavior therapy was also perceived as more suitable for both difficulties initiating and maintaining sleep. Expected short-term effectiveness was the only nonsignificant item, suggesting that both treatments were perceived as equally effective on a short-term basis. However, both patients and sig-

Table 1. Pooled ratings for type of treatment across groups (100-mm visual analog scales)^a

	Type of treatment		F	p
	Behav- ioral	Pharma- cologic		
1. Acceptance of treatment for self	75.67	30.87	60.7	0.001
2. Acceptance of treatment for others	73.99	38.66	60.6	0.001
3. Willingness to adhere to treatment/to support partner	84.04	47.88	42.3	0.001
4. Suitability for difficulty falling asleep	68.55	45.07	21.3	0.001
5. Suitability for difficulty staying asleep	68.09	44.90	15.0	0.001
6. Expected short-term effectiveness	59.40	54.16	1.2	ns
7. Expected long-term effectiveness	69.64	25.10	83.3	0.001
8. Expected benefits on daytime functioning (e.g. alertness, mood, performance)	69.09	30.76	56.9	0.001
9. Expected adverse side effects	35.79	85.53	113.8	0.001

^a A high score indicates higher acceptance, willingness, etc.

nificant others expected the behavioral treatment to be more effective on a long-term basis, to produce fewer side effects and to yield more benefits on daytime functioning (all p 's < 0.001). There was one main effect for groups (Item 3) with the significant others being more supportive of their partners in following a given treatment than the patients were themselves willing to adhere to the treatment regimen [mean ratings = 73.1 vs. 58.8, $F(1,66) = 7.8$, $p < 0.01$].

There was no significant difference on acceptability or effectiveness ratings for gender, suggesting that behavioral therapy is more desirable than pharmacotherapy in both males and females. There was no significant difference on any of the ratings between subjects with or without prior use of sleep medication and between those with or without concomitant medical disorders.

DISCUSSION

The findings indicate that psychological treatment is more acceptable than pharmacotherapy among community-recruited psychophysiological insomniacs. The behavioral intervention was viewed as more suitable for both sleep onset and sleep maintenance difficulties and induced a higher degree of willingness to comply than did the pharmacological treatment. Although expected short-term benefits were equivalent for both treatments, sleep improvements were expected to be more durable with behavioral therapy. This latter condition also generated greater expectations of improved daytime functioning and of lower side effects than did pharmacotherapy. These results were essentially the same for both chronic insomniacs and for individuals with no sleep complaints. This finding is of interest because significant others may play an important role either in encouraging or impeding adherence to a recommended treatment regimen.

Despite the widespread prevalence of sleep complaints, it is estimated that 85% of insomnia sufferers remain untreated (14). If the present findings generalize to these individuals, it is plausible to assume that their failure to seek treatment may result from the expectation that a drug is the only treatment modality currently available for insomnia. Instead of being prescribed a sleeping pill, a large segment of these people may elect to continue enduring insomnia. This hypothesis is in part supported by anecdotal evidence from patients who indicate that they have waited several years before seeking help because they were unaware of nonpharmacological therapies. Whereas empirical validation of such observation is warranted, additional public education is also needed to inform potential consumers that effective nondrug alternatives are indeed available for the management of insomnia.

TREATMENT ACCEPTABILITY

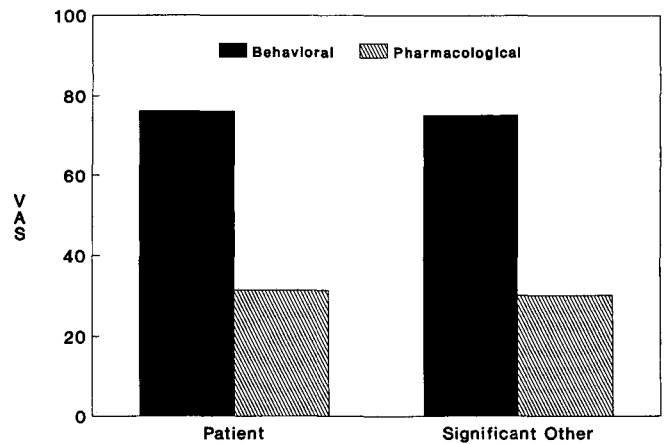


FIG. 1. Treatment acceptability among insomniacs and good sleepers. VAS = visual analog scale.

The present findings are somewhat surprising as they are based on an elderly sample, and older adults represent the population segment consuming most of the prescribed sedative-hypnotic medications (14–16). Higher consumption of hypnotics among older people might intuitively suggest that pharmacotherapy is more readily accepted in late life. The present data, however, do not support this hypothesis. The lack of gender difference is also unexpected as women consume more sleeping aids than men. To clarify these issues, additional research is needed to compare treatment acceptance among individuals spontaneously seeking treatment in various clinical settings (psychiatric, psychological, sleep clinics or family practice) relative to those solicited from the community to participate in outcome research. Likewise, it would be important to determine whether the present results generalize to insomniacs who also suffer from chronic medical illnesses or major psychopathology.

Although this study did not actually address the issue of relative effectiveness of behavioral and pharmacological therapies, the present data may prove useful in future comparative research. Subjects are typically randomized across therapy conditions in controlled trials (17,18) and do not have a choice of the treatment they receive. As a result, some subjects may fail to adhere to a given treatment protocol and may account for some of the treatment failures. Thus, treatment acceptance may prove an important process variable to consider in explaining differential outcome (19). It may also be useful to evaluate the acceptability of combined behavior therapy and pharmacotherapy relative to either condition alone. Likewise, although stimulus control (20) and sleep restriction (21) therapies are two of the most effective behavioral interventions (7,8), it is

unclear how acceptable these methods are to patients relative to biofeedback, relaxation or meditation.

The present results highlight the importance of patients' acceptance in selecting a treatment method and in evaluating its clinical usefulness. Consumer acceptability, perceived effectiveness and expected side effects associated with different interventions may affect treatment adherence, outcome and relapse. Consequently, it is important to evaluate these social validation issues. Regardless of how efficacious a particular intervention may be, it must be acceptable to the patients in order to be clinically useful.

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