INVITED ARTICLE
ASPECTS OF ABNORMAL ILLNESS BEHAVIOR
ISSY PILOWSKY

In 1969, the concept of Abnormal Illness Behavior (AIB) was introduced (Pilowsky, 1986) in an attempt to clarify the confusion over such terms as "hystera" and "hypochondriasis". The concept and some related terms were further refined in a paper entitled "A general classification of abnormal illness behaviors" which also described a way of classifying such behaviors (Pilowsky, 1978). In recent years attempts have been made to clarify the concept further, since it seems to have been frequently misunderstood and misapplied.

Abnormal Illness Behavior (also named "dysnosognosia") (Pilowsky, 1986) is defined as "the persistence of an inappropriate or maladaptive mode of perceiving, evaluating or acting in relation to one's own state of health, despite the fact that a doctor (or other appropriate social agent) has offered an accurate and reasonably lucid explanation of the nature of the illness and the appropriate course of management to be followed (if any)" with opportunities for discussion, negotiation and clarification based on an adequate assessment of all biological, psychological, social and cultural factors. It should be recognized at the outset that the starting point of this definition is that of "hypochondriasis" which, in most texts, includes criteria such as "persists despite medical reassurance". The definition of AIB simply spells out more clearly what "medical reassurance" should mean.

The classification of AIB (Pilowsky, 1978) recognizes that denial of illness may be just as abnormal as illness affirmation under certain circumstances, and indeed, recently Strauss et al (1990), have suggested that Maladaptive Denial of Physical Illness be included in DSM-IV. Furthermore, both "somatic" or "psychological" illness may be the focus. These syndromes or clinical phenomena do not all have the nosological status of "illness" in official classifications, but they do present clinical challenges which call for particular management strategies.

Since the definition of AIB had given rise to some controversy, it is worth examining its elements in some detail.

(1) "The persistence of an inappropriate or maladaptive mode of perceiving, evaluating, or acting in relation to one's own state of health"

Comment: The second half of this sentence (mode of behaving) is, of course, a description of illness behavior (a concept first introduced by Mechanic and Kaplan (1969)) which underlines the fact that it does not refer to overt behavior only, but also includes the nature of the individual's subjective experience of his health status. The importance of this is that when a psychiatric diagnosis is made, it is the subjective experience and way of thinking about illness, i.e., the phenomenology, which is crucial to the making of distinctions between the various forms of AIB (Pilowsky & Spence, 1983). Indeed, it is unfortunate that the term AIB based as it is on the term "illness behavior", has lead some to take a purely behavioral approach to diagnosis. It might be that the use of the term "dysnosognosia" rather than AIB may help to counteract this tendency, but it is difficult to feel optimistic about such a possibility.

(2) "Despite the fact that a doctor (or other appropriate social agent) has offered an accurate and reasonably lucid explanation of the nature of the illness and the appropriate course of management to be followed (if any)"

Comment: As mentioned above, this simply spells out what is meant by "medical reassurance." Nonetheless, the valid criticism may be made that the doctor could be wrong in his opinion. There are two points to be made here. The first is that the patients being discussed are invariably non-responsive to the opinions of any number of doctors. The second is that if the doctor is wrong, then the diagnosis cannot be made. Hence this definition of AIB has the effect of making the doctor self-reflective and cautious about making the diagnosis. Actually, this may hardly be necessary when one considers Beaber and Rodney's (1984) findings that the family physicians they studied never recorded such a diagnosis in a series of patients, some of whom scored extremely high on the Whiteley Index of Hypochondriasis (Pilowsky, 1967). Nonetheless, it should also be said that no doctor can ever be absolutely certain about an opinion or recommendation, and it is the patient with AIB who manifests what is regarded as an unjustified certainty as to the diagnosis. Thus, in presenting any diagnosis, a doctor should be prepared to acknowledge the possibility that he may not be accurate in his advice, and this brings us to the next part of the definition.

(3) "With opportunities for discussion, negotiation and clarification"

Comment: Here the definition takes into account the fact that diagnoses and plans of management are not infrequently a basis for negotiation between doctor and patient; and rightly so, since in the course of negotiation, the doctor will discover if his communications require further clarification and elaboration. In particular, patient and doctor need to work towards congruence in their ways of conceptualizing the aetiology, pathology, diagnosis, treatment and prognosis of the condition under discussion. Here the doctor will need to take pains to allow the patient to feel that his lay opinion is respected and welcomed, an issue which arises in the first part of the definition.

(4) "Based on an adequate assessment of all biological, social and cultural factors"

Comment: Whatever the doctor has to say to the patient should be based on a proper clinical evaluation, i.e. one which considers all aspects of the patient's functioning.
The word "adequate" is used to indicate that no assessment is perfect, but in this context should be the type of assessment most peers would regard as appropriate to the circumstances. It is appreciated, of course, that this part of the definition sets high standards, higher perhaps than many doctors could meet. If so, it reminds us to what extent the conditions under the rubric of abnormal illness behavior act as a challenge to the medical profession to review its standards of medical care and education, particularly if unusually large numbers of patients in a particular population are being diagnosed as manifesting abnormal illness behavior.

The psychological factors referred to the definition include cognitive, attitudinal and emotional issues. For example, a patient may be excessively concerned about a symptom because of insufficient or inaccurate information about its significance, and their "AIB" may promptly disappear once they have been provided with the facts. Such a presentation can be named: Somatic misattribution. The condition from which they suffer may be labelled with a psychiatric diagnosis, such as "Anxiety disorder" or "Depressive disorder", and on being so informed, the inappropriate illness behavior does not persist, and indeed, the patient accepts a psychological or psychiatric approach to the illness. In many instances it may be necessary to explain to the patient that their illness includes both somatic and emotional elements which the patient may also accept. In other words, this definition rests on the premise that AIB cannot be established with confidence, unless the doctor has proceeded in an appropriate fashion and the patient has shown an inability to accept the doctor's view, or to negotiate towards a mutually acceptable characterization of the illness.

"Social and cultural" factors also need to be emphasized because a person's sociocultural background involves belief systems about illness and its treatment which may not be shared by the doctor. These differences must be acknowledged, and the patients' views respected. The experience of many doctors working in cultures other than their own suggests that under these circumstances...
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A different belief systems can coexist in harmony for the individual patient who may feel quite comfortable about using a doctor, a diviner and a herbalist at the same time or, similarly, an orthopaedic surgeon, an osteopath and an acupuncturist. Finally, it goes without saying that when the doctor and patient do not share a common language, professional interpreters should be used. The problem is more difficult where differences are sociolinguistic and this requires particular sensitivity on the doctor's part.

Finally, we may recall the doctor's special social role in establishing to whom the sick role may be granted. As Parsons (1964) has described, in order to be accorded the sick role the patient is obliged to cooperate with an appointed agent of society (usually a doctor) or the role and its privileges of the role will not be granted.

The forms of illness behavior which will be seen by a clinician will vary, depending on whether patients are seen in the community, in a general hospital or a psychiatric service. They may be usefully subdivided as follows:

1. Somatic Misattribution

Misattribution is frequently encountered in the community by G.P.'s and physicians. The overwhelming majority of patients attending G.P.'s present with a somatic symptom. Of these, up to a half may have a somatic cause. In the remaining patients the symptoms will be part of an emotional response to a stress which will be readily identifiable e.g. bereavement, loss of employment etc. The stress may be ongoing or there may have been a recent crisis. After a careful history and physical examination (i.e. complete clinical evaluation) has been carried out, the doctor is in a position to explore psychosocial issues and then explain to the patient how somatic symptoms may be the most prominent features of a response to a stress. Most patients will respond to an educational and, most importantly, non judgmental, approach at this stage. They will be ready to engage in a counselling and problem solving program of therapy.

Many of these patients are seen by specialist physicians, neurologists, gastroenterologists, thoracic physicians and cardiologists, depending on the localization of symptoms e.g. headaches, dyspepsia, diarrhoea, palpitations, hyperventilation or combinations of these. It has been suggested that these syndromes be labelled "Autonomic Arousal Disorders" [DSM-IV Options book: Work in Progress 9/1/91 Task Force on DSM-IV, American Psychiatric Association]. However diagnoses such as Adjustment disorder, Anxiety disorder, Phobic disorder and Panic disorder may apply.

2. Abnormal Illness Behavior - Neurotic

Abnormal Illness Behavior of the neurotic type encompasses a number of diagnoses which have been grouped as somatoform disorders, e.g. hypochondriasis, conversion disorder, somatoform pain disorder etc. In these conditions the sick role is adopted as a means of achieving psychological equilibrium on the basis of current stress and predisposing personality factors arising from childhood developmental experiences such as hospitalization, parental models, being labelled as "sickly" or "almost died at birth," over protective parents etc. Eventually many of these patients will reach psychiatrists, especially those working in general hospitals on consultation-liaison services or in pain clinics.

Detection of abnormal illness is not always easy in busy community or hospital settings. The Illness Behavior Questionnaire can be used a screening instrument, as an aid to clinical evaluation and for research purposes (Pilowsky & Spence, 1983; Chaturvedi & Bhandari, 1989; Varma et al., 1986).

3. Abnormal Illness Behavior - Psychotic

In their most obvious forms such conditions present with delusions, of which the most commonly described are hypochondriacal in nature. These syndromes are usually encountered as part of affective (especially depressive) psychoses or schizophrenia. In some cases the delusion is the most prominent, if not the only feature, such that it is considered to represent a form of paranoia. Monosymptomatic hypochondriasis and body dysmorphic disorders may be grouped with these conditions.

These patients are seen most commonly by psychiatrists. They may be treated as outpatients, in-

Table III. Psychologically abnormal illness behavior

| I. Illness affirming |
|----------------------|
| A. Motivation predominantly conscious |
| 1. Malingering |
| 2. Factitious disorder with psychological symptoms (Ganser syndrome) |

| B. Motivation predominantly unconscious |
|---------------------------------------|
| 1. Neurotic: |
| 'Psychic hypochondriasis' |
| 'Phrenophobia' |
| Dissociative reactions |
| Psychogenic amnesia |
| 2. Psychotic: |
| Delusions of memory loss or loss of brain function |

Table IV. Psychologically Focussed Abnormal Illness Behavior

| II. Illness denying |
|---------------------|
| A. Motivation predominantly conscious |
| Denial of psychotic symptomatology to avoid stigma, hospital admission, to gain discharge from care |
| Denial of psychotic illness to avoid discrimination by health care professionals or employers |

| B. Motivation predominantly unconscious |
|---------------------------------------|
| Neurotic: refusal to accept 'psychological' diagnosis or treatment in the presence of neurotic illness, personality disorder of dependency syndromes (alcohol, opiates, etc.) |
| Psychotic: denial of illness ('lack of insight') in psychotic depression, manic states and schizophrenia syndromes |
| Neuropsychiatric confabulatory reaction in Korsakoff's psychosis and other organic brain syndromes |

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patients on general hospital psychiatric wards, or in psychiatric hospitals. Studies of hypochondriasis in these settings are likely to conclude that the condition is secondary, usually to a depressive illness.

Treatment in these cases depends on the underlying condition and may involve pharmacotherapy with (a) major tranquilizers - pinza (pimozide appears to have a special role in monosymptomatic hypochondriasis), (b) antidepressants and, (c) ECT. In addition, the somatic concerns may be helped by a supportive-educational psychotherapeutic approach once a therapeutic alliance has been established, during which the psychiatrist should always be prepared to monitor the progress of the somatic complaints, note any changes, be prepared to carry out physical examinations and investigations as well as provide or arrange for symptomatic treatment of the type which may be provided by a physiotherapist. It goes without saying that the role of the family should always be considered and whenever appropriate they should be involved. Referral to other medical specialists may be necessary from time to time.

TREATMENT ISSUES

There have been considerable developments in the treatment of the somatoform disorders over the past twenty years, especially in the case of somatoform pain disorders and hypochondriasis.

1. Pharmacological treatments

The tricyclic antidepressants have been widely used in the treatment of chronic pain and they are very effective when a depressive syndrome is present. However, it has also been proposed that the tricyclics may reduce pain intensity by enhancing the activity of the endogenous pain suppression system (which is dependent on both serotonin and noradrenaline).

Pilowsky et al (1990) conducted a double-blind placebo controlled cross-over trial of amitriptyline in patients referred to a pain clinic. Patients were given 6 weeks of amitriptyline or placebo, in a fixed dosage schedule rising to 150 mg daily if tolerated, in order to achieve blood levels which would be regarded in the therapeutic range for the treatment of depression. At the six weeks point the patient was switched to the other tablet (amitriptyline or placebo). The results showed that patients on amitriptyline recorded lower levels of pain at 2 and 4 weeks than on placebo. However, at 6 weeks, there was nosignificant difference on the visual analogue scores or on global assessments coping. The changes in pain scores were not related to changes in depression scores. It was felt that the dropping off of the advantage to amitriptyline by the sixth week may have been due to the high dosage of drug used, and that lower doses might be more effective.

2. Somatic Treatments

We have found somatic treatments such as relaxation training, physiotherapeutic massage and transcutaneous nerve stimulation to be helpful in providing some patients with a degree of relief. In addition, these treatments help to convince the patient that the somatic dimension of the pain experience is being taken seriously and thus helps to establish rapport. As yet the precise role of these treatments in the management of chronic pain has not been systematically evaluated. Nonetheless there is considerable clinical experience which supports the importance of the role of the physiotherapist in any pain management team (Paris, 1985). The role of acupuncture will not be discussed in detail, but the reader may refer to the paper of Ronald Melzack (1985) for an excellent overview. As yet there appears to be no good evidence to suggest that it has any special advantage over other similar methods of intense sensory stimulation, nor that specific acupuncture points are relevant to its effectiveness.

3. Cognitive and Behavioral therapies

The purpose of these approaches is to modify the individual's pain related illness behaviors and the ways in which he thinks about the pain, its consequences and his own capacity to cope with it. The cognitive-behavioral approach, typically requires a 3-6 weeks inpatient stay and participation in a highly structured program involving graduated exercises and activities, cognitive restructuring, individual psychotherapy and family therapy. It is most important that patients are well prepared for the program and show motivation for change. Fordyce who pioneered this approach has described the methods well (Fordyce, 1976). Excellent reviews of the effectiveness of these approaches have been presented by Turner and Chapman (1982). Clinical experience suggests that the cognitive-behavioral approach is particularly helpful in patients who have become inactive due to pain, and are spending many hours of the day sitting or lying down.

Recent reports have described novel treatment approaches to hypochondriasis. Barsky et al (1988) describe a cognitive-educational treatment for hypochondriasis based on the idea of somatosensory amplification. Four factors are considered to amplify somatic symptoms:

1. attention expectation;
2. symptom attribution and appraisal;
3. the context used for interpreting the symptoms, and
4. disturbing affect and dependency needs.

Groups of 6 to 8 patients meet for 6 consecutive weeks for a 'course' on the perception of physical symptoms. The educational component is stressed in order to reduce patient resistance and the 'stigma attached to psychiatric treatment'. Patients are introduced to techniques for reducing somatic 'hypervigilance' such as attention and relaxation exercises and distraction techniques. A good deal of didactic material is presented, and this approach to hypochondriasis seems to be acceptable to patients and to help by offering a logical, internally consistent model within which to gain sense of mastery over their abnormal illness behaviors.

Hypochondriacal patients are approached somewhat differently by House (1989), who has reported on 100 patients referred to a district general hospital in the UK. Again, the need to establish credibility during a transition
phase by behaving as a conscientious open-minded clinician is described. Amongst other components of the treatment, the discussion of attitudes to medical management, physical investigation and psychiatric referral are explored. The therapy is short-term, flexible and based on a cognitive-behavioral approach. It was found that 80% of those who attended showed a marked or moderate improvement. Patients with a major depression had the best prognosis. A worse outcome was seen in younger patients, those with a past psychiatric history, and those receiving state benefits.

The cognitive-behavioral approach has been used widely in the treatment of somatoform pain disorders, especially in North America. Benjamin (1989) has reviewed the psychological treatment of chronic pain and concluded that the various approaches may well be complementary. He urges that approaches should be eclectic, be free of dogmatism and employ methods which have been shown to work.

4. Psychotherapeutic approaches

In many patients with abnormal illness behavior of the somatoform type, it is extremely difficult to institute or sustain individual psychotherapy if a conventional approach is taken (Pilowsky & Basset, 1982). As mentioned above, this is because rapport can only be established on the basis of an initial acceptance of the patient's pain as evidenced by the appropriate use of physical therapies. We have found that an assessment by a multidisciplinary panel and the use of physiotherapeutic methods leads to greater receptiveness to a psychiatric/psychological approach.

A variety of psychotherapeutic approaches may be taken, including individual, group, marital and family. In our work, we have focussed particularly on the brief individual psychotherapeutic approach (Pilowsky & Basset, 1982). In a pilot study on a small group of chronic pain patients, we found that dynamically orientated psychotherapy consisting of 12 weekly 45 minute sessions produced better results as regards global functioning, than compared to 6 fortnightly 15 minute supportive sessions (Basset & Pilowsky, 1985). In the course of our experience with the use of individual psychotherapy, we have found that reduction in pain complaints cannot be regarded as the only index of improvement. Indeed, patients may report that their pain is unchanged or worse, but that they feel generally better and are less disabled.

The use of group psychotherapy has been well described by Finsky working at the City of Hope Medical Centre (Finsky, 1978). In any program where patients are admitted in cohorts for a fixed period, groups have a part to play in facilitating information exchange and therapeutic modeling.

It is crucial that the role of the spouse and family not be overlooked in the management of abnormal or discordant illness behaviors. As Jeans and Rowat have written, "learning to live with chronic pain is a family affair". They emphasize the need for professionals and family to collaborate in order to achieve mutually agreed goals.

Hypnotherapy is an approach which has been poorly evaluated for its contribution to the treatment of somatoform disorders in general, but it would appear to have a role in pain control when used for certain individuals in appropriate contexts (Turner & Chapman, 1982; Barber & Adrian, 1982; Chapman, 1985).

5. Combination Therapy

In practice most patients are treated with combinations of therapies. Pilowsky and Barrow (1990) have reported on a controlled evaluation of brief psychotherapy and amitriptyline (AMI). The study involved for treatment groups viz:

1. AMI + psychotherapy (n=26)
2. AMI + support (n=26)
3. Placebo + psychotherapy (n=26)
4. Placebo + support (n=24)

Outcome was independently assessed in terms of 'categorical' variables (pain, well-being and activity) and a number of 'continuous' variables (intensity of pain, amount of time in pain and 'productivity', i.e. ability to carry out usual tasks and duties). Analysis of the categorical data showed significant findings only for 'activity' in that patients receiving supportive psychotherapy (i.e. 6, 15 minute fortnightly sessions) did better with AMI than with placebo. Further, those on AMI did better without psychotherapy (12, 45 minute, weekly sessions). Overall, those on AMI showed improved activity levels. An interesting finding which emerged was that patients on psychotherapy and placebo reported a significant increase in pain intensity, but also a significant increase in productivity.

OVERVIEW

Finally it should be emphasized that an integrated approach to diagnosis and therapy in the treatment of Abnormal Illness Behavior is most important. The approach involves a comprehensive clinical assessment and a readiness to communicate and negotiate with patients in a manner which respects their capacity to understand, as well as their personal theories about the health problem. The describe approach is multidisciplinary, but it must be acknowledged that the composition of the multiprofessional team will vary from setting to setting, depending on the resources available. Nonetheless, the principles of collaborative medicine and interprofessional respect are the same no matter how great or small the number of participants. Multidisciplinary pain clinics are the best models of collaborative medicine currently available.

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Issy Pilowsky MB, ChB, MD, DPM, FRANZCP, FRCPsych, FRACP, FASSA, AM, Professor and Head, Department of Psychiatry, University of Adelaide, Royal Adelaide Hospital, Adelaide, South Australia.