

REVIEW ARTICLE

**EVOLVING CONCEPT OF ABNORMAL ILLNESS
BEHAVIOR & CLINICAL IMPLICATIONS**

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Abstract

Objectives: The concept of “Abnormal illness behavior (AIB)” has been evolved to a greater extent in the last century. Henry Sigerist introduced the concept of “illness behavior” in 1929. Mechanic & Volkart defined and further conceptualized the impression on illness behavior. Talcott Parson had given the concept of “Sick role,” and Issy Pilosky had familiarized the notion of “abnormal illness behavior.” The main objective of this article is to review the conceptual evolution on “abnormal illness behavior” and to analyze its current clinical implications. **Methods:** Extensive search of literature was performed regarding abnormal illness behavior, illness behavior and sick role in online web searching sites like – Google Scholar, PubMed and individual journal sites as well as google books. The literature was critically reviewed with personal inputs from authors. **Results:** Abnormal illness behavior ranges from denial of illness in one extreme to conscious amplification of symptoms on the other. Abnormal illness behavior is noticed in various clinical conditions like stress-related disorder, stress-related disorders, factitious disorder and malingering. **Conclusions:** Identifying abnormal illness behavior can prevent unnecessary and excessive utilization of medical aids for the same. *ASEAN Journal of Psychiatry, Vol. 16 (2): July – December 2015: XX XX.*

Keywords: Illness Behavior, Sick Role, Abnormal Illness Behavior, Somatoform Disorder, Stress Related Disorders

Introduction

Presentation of a particular illness in an individual may differ from another individual suffering from the same illness. Differential presentation of illnesses in different individuals depends upon several important factors, which can be broadly categorized as – illness-related factors, individual specific factors and contextual factors. The illness-related factors may be - the nature of illness, severity of illness, chronicity of illness and response to treatment. Similarly individual specific factors like – personality of the individuals, coping skills, defense mechanisms used also play a role in coloring the illness expression. Socio-economic status, stigma,

secondary gains are some important contextual factors, which are also liked to influence the presentation of an illness.

When the presentation of an illness is perceived to be out of proportion to the clinical expectations and underlying pathophysiology, the possibility of abnormal illness behavior is more likely.

“Abnormal illness behavior (AIB)” term was introduced by Issy Pilowsky. Pilowsky defined the term “Abnormal Illness Behavior” as – “*An inappropriate or maladaptive mode of experiencing, evaluating or acting in relation to one's own state of health, which persists, despite the fact that a doctor (or expert) has*

offered accurate and reasonably lucid information concerning the person's health status and the appropriate course of management (if any), with provision of adequate opportunity for discussion, clarification and negotiation, based on a thorough examination of all parameters of functioning (physical, psychological and social) taking into account the individual's age, educational and sociocultural background" [1]. The phenomenon "abnormal illness behavior" is a continuum with unconscious symptom exaggeration in one extreme and conscious symptom manipulation (malingering) in the other extreme [2].

Concept of Abnormal illness Behavior

Pilowsky is considered as the pioneer for conceptualizing the model of AIB. His classic article "The Diagnosis of Abnormal Illness Behaviour" was published in 1971, which focuses on concept and different clinical aspects of abnormal illness behavior [3]. Prior to the work of Pilowsky on "Abnormal Illness Behavior", Mechanic and Parsons had given the concepts of "Illness behavior" and "Sick role" respectively [4, 5]. However, the early impression about "illness behavior" was introduced by Henry Sigerist in 1929 through his essay – "Special position of the sick" [6]. Mechanic and Volkart explained illness behavior as - *the way an individual perceives experiences, evaluates and responds to his or her condition of health* [4].

Talcott Parson emphasized the attribution of social pressure to the sick role, explaining it an effort to get exempted from social roles [7]. The attribution to self is not there in sick role and the onus to get healthy as well as to seek expert's help lies on the patient [7]. Gordon had given the concept of the impaired role in 1966, looking at the difficulties in applicability of "sick role" in chronic illnesses [7, 8]. It is assumed that the disability is permanent in impaired role and the condition is not serious enough to make the individual incapable of carry out the expected role and responsibilities using the existing capabilities [7]. As the

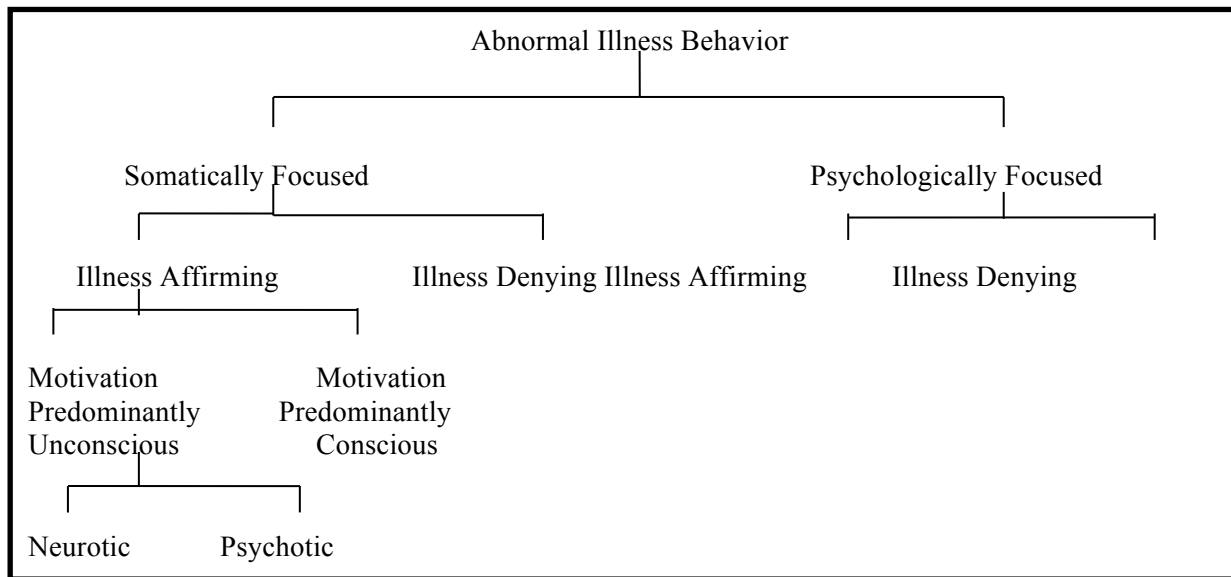
impaired role is the resultant of chronic illnesses where there is stable disability, and focus is on maximum use of available resources (capabilities), there is plenty of scope for rehabilitation [7].

Abnormal illness behaviors demonstrated by patients are usually not proportionated with the underlying physical illness; rather they are the exaggerated or curtailed form of the underlying illness [9, 10]. Abnormal illness behaviors may develop from childhood and are affected by several factors like – bio-psycho-social, culturo-ethnic and demographic factors [11]. Childhood adversities, particularly affecting parenting, care pattern, attitude towards illness and health attribute to abnormal illness behavior, which may persist or recur in adulthood [11].

The presentation of illness behaviour may occur in one of the two ways – (1) Complete denial of illness and help seeking and (2) Excessive concern for minor ailments and exacerbating ignorable symptoms [1].

Pilowsky's descriptions about abnormal illness behavior were directed towards psychiatric disorders like somatization disorder, hypochondriasis and denial of illness [10]. Abnormal illness behavior can be explained through the bio-psycho-social model of disease causation and the factors that may have causative role are - physiological dysregulation, exaggerated somatic attention, exaggerated sensitivity to pain and catastrophization of medical illness roles [10].

Leveling a particular illness-related behavior is usually decided by the physician. The patient gets the privilege of the sick role due to his or her compliance to the system that provides the sick role related benefits. The clinical form of abnormal illness behavior differs from setting to set (Mental health units, general hospital units, community setups; etc.). Pilowsky (1993), in the review - "*Aspects of abnormal illness behavior*", broadly classified the forms of AIB, which is highlighted in the flow diagram below [12].



(Source: Pilowsky I. Aspects of abnormal illness behavior. *Indian J Psychiat.*, 1993, 35(3), 145-150.)

A normal individual's response towards illness remains in between these two extremes of illness behaviors. Illness behavior acts as a social currency as it yields social attention, health care service and health care goods in return [1]. The attention and care obtained due to the illness behavior acts as a reinforcer for the same and the vicious cycle repeats. Interplay of psycho-social factors also attributes to the illness behavior. Abnormal illness behavior is usually presented with exacerbated complaints of an absence of definite, proportionate objective signs and claim for disability [13]. Ravenzwaaij et al (2010) had reviewed 710 articles on medically unexplained symptoms and identified 19 articles, which were suitable for meta-analysis as they satisfied the selection criteria [14]. After extensive review of literature on abnormal illness behavior Ravenzwaaij et al (2010), had identified nine different explanatory models and one meta-model (cognitive behavior therapy model) to enlighten the understanding of "abnormal illness behavior" [14]. There are several theories, which explain the developmental basis of AIB, which can be summarized as- Theories of body system dysregulation (Immune system sensitization theory, Theory of endocrine dysregulation, Theory of Autonomic nervous system dysfunction), Theories related somatic perception and sensitivity (Somatosensory amplification theory, Sensitization theory, Sensitivity theory,

Signal filter theory, Theory of abnormal proprioception) and Other theories (Illness behavior theory, Cognitive behavior theory or model) [14]. The explanatory models try to explain the abnormal illness behavior through the perceptual, behavioral, organ system (Endocrine, Immune, Autonomic nervous system) oriented explanations [14].

Individuals with abnormal illness behavior are so preoccupied with the illness or organicity or definite physical manifestations that non-organic explanatory model will not be convincing for the individual [13, 15 - 19]. The illness behavior or sick role is influenced by many factors like - age, gender, marital status, poverty, past experiences, etc [7]. Many factors predict abnormal illness behavior in an individual, which are - secondary gains like financial compensation, involvement in legal conflicts, social issues, environmental factors (family/ workplace) and sleep disturbances [20].

In a study, it was found that if any three of the above predictors are present together in an individual, the risk of abnormal illness behavior is approximately 40%, but it becomes 98% when there are four or more predictors are present [20]. In another study on 105 patients in acute pain to the abdomen admitted to a surgical unit, it was found that 18 patients had no organic cause of pain, and they had abnormal psychological perception of pain or

denial of illness when rated on the illness behavior questionnaire [21].

Clinical implication of Abnormal Illness Behavior

Illness Behavior Questionnaire (IBQ) is used in research for assessment of abnormal illness behavior, which is a 62-item questionnaire with sensitivity of 97% and specificity of 73.55% [22]. Prior and Bond (2010) derived three IBQ scales focusing on the dimensions “Affirmation of illness”, “General affective state” and “Concern for health” for study by exploratory factor analysis [23].

There are many tools to assess the illness behavior developed following the development of IBQ by Pilosky et al (1975) [24]. The tools for assessment of illness behavior are – Illness Behaviour Questionnaire (IBQ) [24, 25], Illness Attitude Scales (IAS) [25, 26], Symptom Response Questionnaire (SRQ) [25, 27], Scale for the Assessment of Illness Behaviour (SAIB) [23, 26], Brief Illness Perception Questionnaire (Brief IPQ) [25, 28, 29], Diagnostic Criteria for Psychosomatic Research (DCPR) [25, 30, 31], Illness Cognition Questionnaire (ICQ) [25, 32], Illness Cognitions Scale (ICS) [25, 33].

Trigwell et al (1995), in their study in the patients of multiple sclerosis and chronic fatigue syndrome, applying “Illness Behavior Questionnaire” found that a variety of abnormal illness behaviors seen in those patients [34]. Patients presenting with abnormal illness behavior may have suicidal ideations and attempts, which are usually perceived of low risk. However it cannot be kept aside as there are reports of completed suicide [35].

Patients with abnormal illness behavior used to present with various psychiatric disorders and frequently abuse medical services [36]. Guo et al (2000), in their study on Japanese population found that patients with abnormal illness behavior, who present with psychiatric disorder usually have anxiety disorder as prominent manifestation and the characteristic of abnormal behavior is affected by the sociocultural background [36].

Desai et al (2014), in their preliminary report on AIB in post-stroke patients explained that depression, anxiety, neurological deficits might be attributing to AIB which in turn lead to increased health care expenditure, multiple consultations, increased burden of care and poor doctor – patient relationship [37]. Grassi et al (1989), in their study on cancer patients found that depression is linked to different abnormal illness behaviors like – irritability, denial of illness, disease conviction and hypochondriasis [38]. They also found that - high level of denial is seen in female patients and patients receiving treatment were as high level of irritability is reported in patients who are hospitalized [38]. In a study on patients attending different medical facilities with pain complaints, Pilosky & Spence (1976) found that abnormal illness behavior – somatic pre-occupation was more frequently associated [39]. Patients who present with intractable pain may have different forms of illness behavior [24]. Pilosky & Spence had studied in and identified seven types of illness behavior in those patients who can be in the form of affective disturbance, affective inhibition, denial, disease conviction, hypochondriasis, irritability & psychological versus somatic factor [24]. AIB may be displayed along with persistent low back pain possibly due to excessive somatic attention [40]. AIB is also reported with somatoform & somatization disorder resulting in unnecessary investigations and treatments, as supported by many studies [41].

Somatosensory amplification phenomenon is an exaggerated manifestation of the somatic symptoms, not unique to the somatizing states, rather found in numerous other clinical states like – depression, anxiety, neuroticism and alexithymia [42]. Patients with somatization, used to attribute to organic pathology for their somatic symptoms [42]. C V Ford (1997) in his article “Somatization and fashionable diagnoses: illness as a way of life” explained the entity fashionable diagnosis which includes anxiety, depression and somatization group of disorders [43]. An individual can successfully hide his or her psychosocial distress by channelizing it into some bodily manifestations as seen in dissociative disorder, somatoform disorder, depression and anxiety [43]. The behavior therapy intended to treat these groups of disorders also emphasizes in

cutting down or avoidance of the illness behavior [44]. Culture has a strong influence on the abnormal illness behavior. Kirmayer & Sartorius (2007) in their article “Cultural models and somatic syndromes” explained about the impact of different cultural models of the illness behavior in patients with somatic syndromes [45].

Psychological distress may have somatic manifestations. An individual tries to attribute a reason for the somatic manifestation and culture provides a set of explanations for different bodily symptoms, which may not be a fixed one or non-negotiable [45 - 47]. It may get cognitively reorganized by the cultural explanatory models [45]. Some of the cultural attributes are stigmatizing and threatening to the ego system, which led to symptom ignorance or denial [45, 48]. This cultural model can explain the somatic manifestation of culture bound syndrome – Dhat syndrome. The individuals with “Dhat syndrome” ignore or suppress the stigmatizing “loss of semen” and focus on somatic symptoms. They attribute their somatic symptoms to ‘loss of semen’ as believed by the culture and society. The common manifestation of “Dhat syndrome”, fatigue is a result of cultural misattribution, somatic amplification and is an abnormal illness behavior [49, 50]. Similarly in females, leucorrhoea is a common complaint which is often physiological, but perceived as an abnormal phenomenon and the individual may present as weakness, lethargy, fatigability, multiple pain symptoms and unexplained somatic symptoms [51]. It is commonly reported in Asian women [51].

Adverse experiences in Childhood (physical and sexual abuse) have a significant impact on an individual’s life, which in adulthood is manifested as abnormal illness behavior, a consequence of which may be increased health care expenses and utilization [25, 52 - 54]. Anxiety and depression led to focused attention on bodily symptoms and negative interpretation of them resulting in exaggerated somatic manifestations [25, 55 - 56]. In Munchausen syndrome, patients usually produce symptoms in conscious awareness and play a sick role, which need to be dealt cautiously [57]. Patients with medically unexplained symptoms, commonly present with headache, backache, fatigue, pain in

muscles or joints which lead to unnecessary investigations and health care utilization [14]. In a recent study, it was observed that caregivers, who have somatoform disorder or factitious disorder, often induce illness in their offspring, which may be presented in the form of Munchausen syndrome by proxy [58]. Hence, when a clinician doubts a child’s illness as a fabricated one, one needs to explore about the illness / health-related attitude of the caregiver.

Abnormal illness behavior has a significant impact on the health care costs and burden of work of the treating physician [25]. The legal consequences of abnormal illness behavior are a matter of concern. S J Eisendrath (1996) highlighted the concern towards the negative impact of abnormal illness behavior on the judgment in the legal systems as it may bias the judges to give incorrect judgments, again adding the burden of care on the medical system & society and increasing financial costs [59]. By adopting an abnormal illness behavior, an individual may consciously manipulate the illness presentation and may attempt to gain undue attention or advantage. Hence it is of utmost importance to understand the illness symptoms considering all the illness related, individual specific and different contextual factors as a whole in the background.

The illness behavior can also be a learned behavior, and the individual may use it as a defense or a route of escape in stressful situations. Repetition of the illness behavior for secondary gains in the long run may result as a stable, maladaptive behavioral pattern. Excessive medicalization of the symptoms may also lead to abnormal illness behavior. Abnormal illness behavior results in disability, chronic absenteeism from work, excessive & inappropriate utilization of health care facilities, decreased productivity at work and increased burden of care for the caregivers and society.

Management approach

Management of abnormal illness behaviour is often a difficult and challenging task. Multidisciplinary management approach is believed to be the best management approach in abnormal illness behavior [12, 60].

Abnormal illness behavior depends upon many variables, which needs to be explored during clinical assessment. The important variables, that needed to be focused during evaluation are - Psychosocial stressor, Personality factor and coping mechanisms, underlying affective disturbances, Quality of life, claims, benefits & other legal aspects [61 – 66].

Assessment of abnormal illness behavior, also need to focus on the validity of the symptoms [2]. The patients with abnormal illness behavior in the background of different psychiatric disorders like somatoform disorder and hypochondriasis can be treated by tricyclic antidepressants, relaxation exercise, cognitive behavior therapy, cognitive restructuring, individual psychotherapy, family therapy, etc, but the combination of pharmacotherapy and psychotherapy was found to have a better result than these therapies alone [12].

The somatic symptoms, before being labeled as abnormal illness behavior, needs to be evaluated to exclude organicity. Similarly, the psychiatrist and psychologist should focus on differentiating the abnormal illness behavior from the real illness in order to identify factitious disorder and malingering which, otherwise may result in legal complications [59].

Conclusion

Abnormal illness behavior is more of a subjective and contextual entity. It frequently goes unnoticed. Missing abnormal illness behavior in clinical evaluation, often leads to inappropriate, excessive, unnecessary use of health care facility erroneous impression on disability [2]. It is not limited to any particular medical specialty. Usually, patients with abnormal illness behavior sought opinion from physicians of multiple specialties due to unsatisfactory response or variety of symptoms suggestive of multisystem involvement. Clinicians should be aware of “abnormal illness behavior” and should explore about it, when the symptoms appear disproportionate to illness severity and nature of illness, persist for long time, presence of obvious secondary gain, and in presence of maladaptive personality.

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