REVIEW ARTICLE

INTENTIONAL PRODUCTION OF SYMPTOMS: A NARRATIVE REVIEW

Nimmy Chandra, Igam Bagra, Ramandeep Pattanayak

Department of Psychiatry, All India Institute Of Medical Sciences (A.I.I.M.S.), Ansari Nagar, New Delhi 110029, India.

Abstract

Objective: **Illness deception or the intentional production of symptoms holds special significance in the mental-health field. Mental health professionals need to be aware about the various presentations of such cases, including how to identify and manage them. Further, management is also complicated by several ethical and legal issues.** ***Methods:*** **A narrative review covering the various aspects of intentional production of symptoms is presented here, with articles searched at pubmed-indexed literature, supplemented with cross reference search and manual search of title/abstract of relevant articles, using suitable key words.** ***Results:*** **Overall, relatively few publications were found from the more recent years. The prevalence of intentional production of symptoms seems substantial, yet is likely to be undetected in the majority of the cases. The boundary of the current conceptualization of illness behavior/intentional production of symptoms is blurred and warrants further exploration with well-designed studies and robust debate. Clinical interview is the cornerstone of assessment. Further, psychological tests are available for detecting illness deception, which may be employed.** ***Conclusion*****: Clinicians should consider a possibility of illness deception whenever is in doubt and extreme care needs to be taken in documenting such cases. Further research is needed in this area to clarify the current controversies in the concept of this entity to help in better detection, and objective assessment of such cases.** ***ASEAN Journal of Psychiatry, Vol. 18 (1): January – June 2017: XX XX.***

Keywords: Factitious, Malingering, Illness Deception, Intentional Symptom Production

Introduction

Illness deception or the intentional production of symptoms is as common as is deception in any other field. However, it holds special significance in the mental-health field as the prevalence of illness deception in medico-legal cases is as high as 20-50% [1]. Therefore, mental health professionals need to be aware about the various presentations of such cases, including how to identify and manage them. The prevalence of factitious disorder, as per the survey of senior consultants and physicians, was reported to be 1.3% in clinical settings [2]. Understandably, the exact prevalence was unknown. The studies on illness deception pose several challenges as it is difficult to identify such patients and even if identified, there will be issues pertaining to consent and reliability interfering with assessment.

A narrative review of pubmed-indexed literature was planned. Appropriate search terms (such as factitious disorder, malingering) were employed- which generated over 200 publications. These were supplemented with cross reference search and Google's scholar search. However, there were relatively few publications from recent years.

The title/abstract was manually searched, and relevant articles were reviewed. A narrative review covering various aspects of intentional production of symptoms is presented here.

Nosological evolution and current update

The history of illness deception starts from the ancient times, however,it was Galen (Greek born physician) who first reported about patients simulating symptoms like vomiting and rectal bleeding. Illness deception is closely related to the military. Hector Gavin reported factitious disorders in soldiers after he started noticing soldiers inciting compassion and attention in 1838. There was a steady increase in the interest due to the rise of Workmen Compensation Act. It became a real challenge to doctors to identify the malingering patients and apparently, they started to show 'malingerophobia'.After the First World War, the rates of malingering increased further and soldiers had even tried various ways to mutilate themselves to escape the war. The term "Munchausen's syndrome" was coined by Asher, whereby Munchausen was a German baron who liked to emboss stories of his military exploits to impress the listeners [3].

It was the diagnostic and statistical manual, 3rd edition (DSM-III) which first recognized factitious syndrome but was focused only on Munchausen's syndrome. Further in DSM-IIIR it was categorized as factitious disorder with physical symptoms and with psychological symptoms. DSM IV categorized it into 3 sub- types -physical, psychological, and combined. DSM-5 categorized this as factitious disorder imposed on self and imposed on another. ICD-10 included this under other disorders of adult personality and behaviour. ICD-11 beta draft is similar to DSM-5, which categorizes this as factitious disorder imposed on self and another [4,5].

Concept and controversies

Intentional production of symptoms (illness deception- includes malingering and factitious disorder) can be clinically classified in many ways:1) predominantly physical symptoms; 2) predominantly psychological symptoms; 3) mixed physical and psychological symptoms; and 4) by proxy. Other classification includes 1) feigned symptoms; 2) feigned illness; 3) induced symptoms; and 4) exaggeration of symptoms [5,6].

Malingering is defined in DSM-5 [5] as "the intentional production of false or grossly exaggerated physical or psychological symptoms motivated by external incentives such as avoiding military duty, avoiding work, obtaining financial compensation, evading criminal prosecution or obtaining drugs''. Factitious disorder was initially considered as consisting of simulation of disease; 'pseudologia fantastica'(pathological lying with fantastic stories centering on the patient) and peregrination or wandering. Subsequently, different typology of factitious disorder is also being raised, which includes: 1) dramatic, deceptive, hostile, sociopathic wandering type-mostly male (Munchausen's syndrome); 2) self-induced infections, mainly chronic or acute-on-chronic seen largely in females; 3) willful interference with chronic wounds and cutaneous ulcers; and 4) simulating disorders by falsification of data and fabrication of signs and symptoms [7]. Apart from these two, there was one term which was more prevalent in the mid 1900s- 'compensation neurosis'. Compensation neurosis occurs after a trauma which consists of exaggeration of symptoms brought out by internal motivations, coupled with anticipation of secondary gain (legally awarded compensation) [8].

The motivation of the physical symptoms without adequate physiological basis can be different-unconscious, unintentional as we know in the somatoform disorders, unconscious and conscious intention in the compensation neurosis, and conscious intention in malingering and factitious disorders. So, this can be considered as lying on a spectrum (Figure 1).

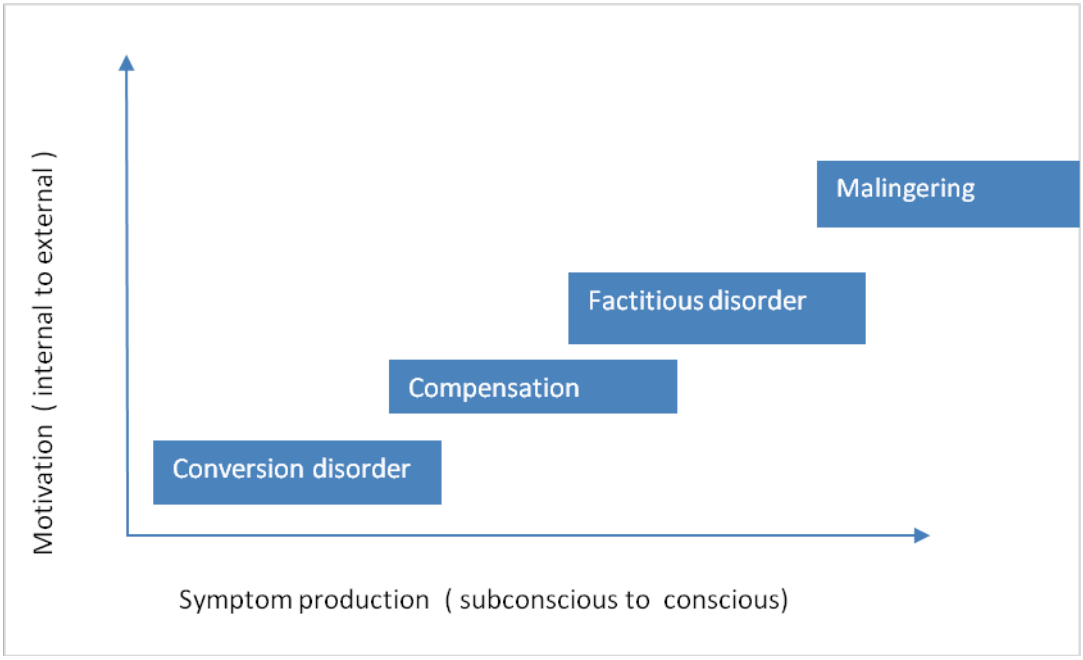

Figure 1. Spectrum concept of Intentional Production of Symptoms

Still the debate of categorical and dimensional concept holds true for the intentional production of the symptoms. Furthermore, categorical model is silent on the marginal cases and provides the classification for only compelling cases of feigning. Whereas the continuum approach can have many consequences in the legal cases as they can wreck the insanity defense.

Concept of sick role needs to be made clear, to know the underlying mechanism of the intentional production of symptoms [9]. The term disease denotes the underlying pathology while the term illness means how the person experiences the disease. The term sickness refers to the performance of illness. It is how illness affects the patient's social responsibilities, self- image behavior, and social functioning. It has a dynamic image- first phase is the entry into the sickness with symptoms, and second luminal phase is the indefinite period before the diagnosis, and third stage is the exit phase of adoption of new sickness identity. Parson described sick role as an approved withdrawal of sick person from his duties and expectation of others, and the sick person needs to do whatever they can get well, which includes seeking competent care from medical professionals. It is understandable that the sick role is a partly and conditionally legitimated state and desirable, as it helps in adapting to life's troubles and advantages like socially mediated secondary gains. Moreover, society readily accepts the physical disorders as a suitable entries into the sick role than the psychological and emotional disorders [10].

Keeping this in mind, there will be so many questions arising as when we come under the concept of malingering and factitious disorders. Theoretically, the key differences that the patients with factitious disorder have no other motivations apart from that to assume a role as a patient. Is the distinction between them conceptually meaningful and empirically valid? It is tricky to establish the motivation as data from the individuals with factitious disorders are suspected, because of their established dishonesty and assumed ignorance of their intrapsychic motivators. Furthermore, health care professionals can simply infer the motivators by only looking at the potential consequences. Some kind of gains in the form of freedom from duties or any incentives are escorted with the sick role which we might not be able to discern clearly. So it is impossible to identify the sick role as the only aim of the patient. Hence the clinical distinction between the factitious and malingering is blurred. Various explanatory models have been given for illness deception. Roger described three models of motivation for malingering, which

include pathogenic model, criminological model, and adaptational model [11].

According to pathogenic model, the motivation for malingering stems from the intrapsychic and unconscious needs. Thus it is a psychopathology which has a poor prognosis and as the impairment increases, the intentional act of malingering will transform into the involuntary behaviour. Criminological model was first used in the DSM-III and was reaffirmed in the DSM-IV. Criminological model can be explained by four variables. One is the clinical presentational variable as patients will be uncooperative and second variable is that there will be discrepancies with the objective findings. Third is the diagnostic variable which is the antisocial personality disorder and the last but not the least, is the context which will be medico legal. The third model is the adaptational model which says that the malingerer tries to solve a difficult situation by some form of cost-benefit analysis. He will weigh the options and will conclude that he has nothing to lose. There is also explanatory model of factitious disorder given by Kinsella [12] as shown below.

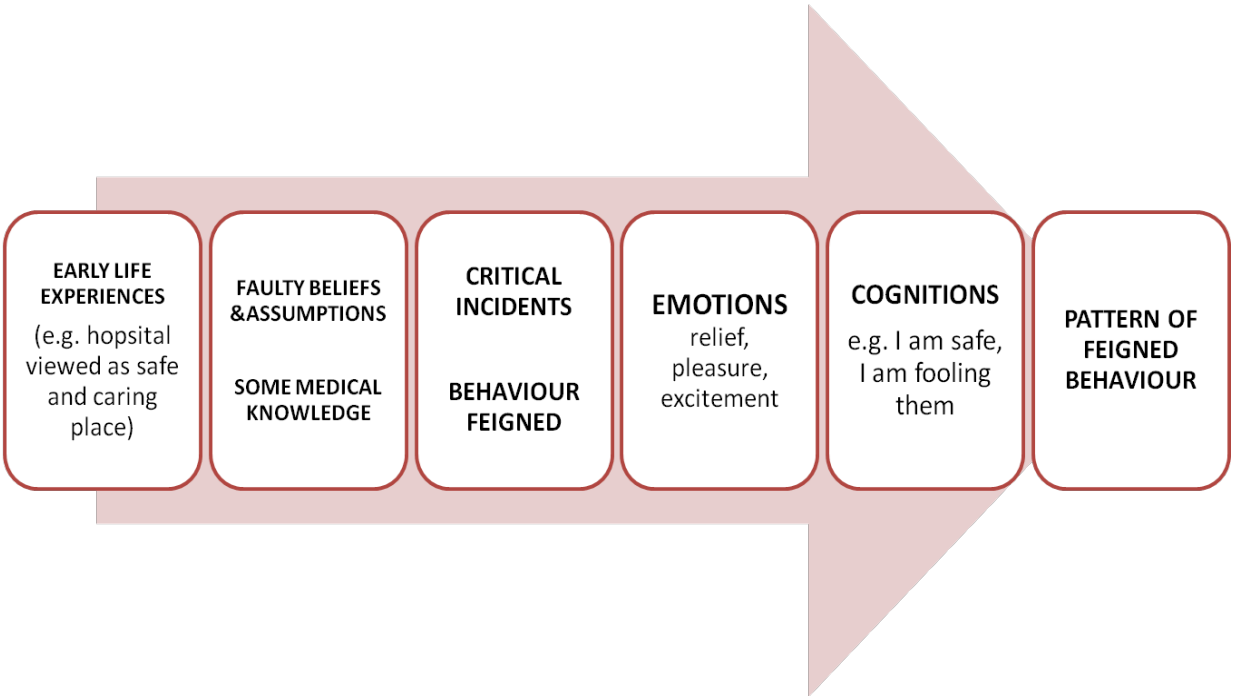

Figure 2. Factitious disorder - Theoretical model

There are numerous determinants for the illness behaviours like developmental factors (childhood illness, childhood loss, and parental models); family influences (how family considers and treats illness, patient's beliefs about the illness and the resources, his personality traits, his previous illness history, and other social and cultural factors) [13, 14]. Mothers who fabricate illness in children are found to have history of childhood abuse, loss and bereavement, relational dangers and disputes, somatoform and factitious disorders, and personality disorders in order of high to low frequency- antisocial, histrionic, borderline, and narcissistic [15].

The question remains unanswered – is illness deception a deliberate outcome of one's drive or psychopathology, or an impact of one's social environment or perhaps all? The biomedical model originates from the words of Blueler, that "the simulation of insanity,

irrespective of how conscious or unconscious the patient's motive, should be regarded as a manifestation of a mental illness". Biomedical model says that a healthy minded person would never follow such a difficult path to attain any trivial incentive and hence, one has to be really sick to simulate sickness. Whereas the socio-legal model says that cheating is a usual pattern of human interaction and the persons might pretend to be sick to gain anything they need. There is no reliable and valid method to determine the motivation. Neither international classification of disease (ICD) nor DSM considers malingering as a valid diagnostic term.

Epidemiology

The prevalence of illness deception is difficult to estimate and there is lacked of studies looking into the prevalence of malingering and factitious disorders. In general population, it ranges from 0.5 to 2% and prevalence of Munchausen's by proxy is found to be 1 in 1100. In 1 study of consecutive patients with hand weakness, it was found that 32/400 (8%) exhibited illness deception (29 malingering and 3 factitious disorder) [16]. When Greve and his colleagues retrospectively reviewed cases of chronic pain, they found the prevalence of malingering for financial incentive is 20% to 50% [1]. A retrospective chart review conducted in India found only 8 patients out of the 81,176 patients were given the diagnosis of factitious disorder. Age group of patients diagnosed with factitious disorder ranged from 16 years to 40 years. Personality problems (anxious, avoidant, and histrionic personality), major depressive episode, sub-syndromal depression, and psychosocial issues were found associated with the factitious disorder [17].

Clinical approach and considerations

The interview is the corner stone of the assessment. Clinicians should use a biographical approach and should interview the patient separately from the third parties. All the records should be checked carefully. Clinicians should use an empathic interview style and should refrain from showing suspicion. Questions should be open-ended, and one should avoid the use of leading questions. It is important to double-check the answers provided. The attainable information should be carefully looked for: 1) inconsistency in history; 2) information given by the patient and other informants; 3) among the available information and observed behavior; 4) between complaints of the patient and the set of symptoms pertaining to a diagnosis; 5) between patient's version and that of medical records; 6) between history and other sources of information and inconsistency which arise over time [15, 18]. Video surveillance can be done if needed. Specific strategies like hand grip measurement by hand, dynamometer can also be done in cases of reported motor weakness. Hand dynamometer helps to measure the hand grip accurately and can be compared with the reported weakness.

How are we going to approach to such cases? There are certain warning signs which we should keep in mind before looking into such as case.

- The patient has already sought treatment at various hospitals and clinics.
- Patient is found to be an inconsistent, selective, and misleading informant.
- Resists allowing the treatment team access to outside source of information.
- The course of illness is atypical and does not follow the natural history of the presumed illness.
- A diagnosis of factitious or malingering has been considered by atleast one health careprofessional.
- Patient has a history of work in the health care field.
- Patient engages in unwarranted lying.
- History of previous law suits, run-ins with law, acting out behaviour in the school or work place.
- History of substance use.
- Magnitude of symptoms exceeds the objective pathology or symptoms have proved to be exaggerated by the patient.
- Some finding discovered to have been self-induced or at least worsened through manipulation.
- The patient, in factitious disorder, might eagerly agree to or request invasive medical procedures or

surgery whereas, the malingerers will be unwilling to undergo clinical procedures or medical trials.
- Evidence from the laboratory or other tests disputes the information provided by the patient.
- A remarkable number of tests, consultations, and medical and surgical treatments have revealed nothing.
- The patient is non-compliant with the treatment recommendations or is disruptive in the unit.
- Patient predicts deterioration or there are exacerbations shortly before their scheduled discharge.

There are specific warning signs of malingering of psychiatric symptoms, for example, hallucinations and delusions (as shown in box 1) [6, 19].

Box 1. Pointers towards malingering

Hallucinations
- Which are constant rather than intermittent
- Hallucinations not associated with delusions
- Overly formal language reported in the hallucinations
- Inability to provide tactics used to reduce the voices
- Never hearing voices with same theme or content
- All voices being vague, inaudible, and mumbling
- Hearing no repetitive voices
- Not at least sometimes have any control over the voices
- Having voices that are not affected by context (eg. mood, place or circumstances)
- Voices neither criticizing nor abusing them, and not making comments related to ongoing activities

Delusion
- Sudden onset or resolution of delusion
- Over-enthusiasm to gain the attention of others to delusions
- Behave unpredictably in relation to the delusions
- Unusual thought content without any formal thought disorder

However, these clinical features are pointers only towards the diagnosis, and we cannot rely on them completely, and the case must be seen in totality.

Assessment issues

Many psychological tests are available for detecting illness deceptions, which include symptom validity tests and embedded tests. Symptom validity tests are developed as stand-alone tests to detect specifically deception (e.g. Word memory test). Whereas embedded tests use the information from already existing neuropsychological batteries (eg. Minnesota Multiphasic Personality Inventory) [6, 20 – 22].

There are also scales to help in clinical assessment like Computerized Binary Scale Of Auditory Speech Hallucinations. This scale contains a total of 168 items of which 30 are atypical symptoms. If the score is more than 7, the patient is deemed to be malingering [23]. Detection strategies used by the scales like Miller Forensic Assessment of Symptoms Test (M-FAST) and Structured Interview of Reported Symptoms (SIRS) for detecting the malingering of psychotic symptoms include capitalizing on the very infrequently reported symptoms by clinical population [11, 16, 17]. The above-mentioned scales also focus on the rare symptom combinations- symptoms which can occur independently but very rare in combination. Spurious patterns of psychopathology- like extensive elaboration of symptoms were used by scales like Personality Assessment Inventory (PAI). Scales also use the strategy of symptom severity-that malingerers will hava wide e array of

symptoms with extreme severity, and also uses the discrepancy between the reported symptoms and the clinical observations.

For feigned cognitive symptoms, scales use different strategies, which include floor effect- which says that malingerers will make simple mistakes which the impaired persons can also answer correctly. Magnitude of error is another strategy which measures the degree of the error. The person with genuine impairment will be making mistakes, but the answers will be close to the original answer whereas the malingerer will be making gross mistakes unrelated to the original answer. Performance curve looks at the predictable pattern of error of the impaired persons and compares with the malingerer. Symptom validity tests use the forced choice paradigm and analyzes the minimum level of performance below which is impossible. Other methods for the detection of deception include polygraph, which was the primary method of lie detection of the last century. It measures the activity of peripheral nerves to gauge the truthfulness. It has a sensitivity of 59% and specificity of 92%, but there is lacked of consensus on the reliability of the instrument [26]. Other psycho-physiological methods include script driven imagery and sudden loud tone methods used for Post-traumatic stress disorder (PTSD). Subjects are exposed to sudden loud tone and engaged in the script driven imagery of their traumatic event while their physiological responses are measured [18].

Apart from these, there is also the electroencephalogram (EEG) based method, which was introduced by Rosenfiled. Another interesting method is Narcoanalysis. The term Narcoanalysis was coined by Horselley. It is the controlled administration of intravenous hypnotics to obtain information from the subjects who are unwilling to provide it. Commonly used chemical substances are sodium thiopental, short-acting benzodiazepines, short-acting barbiturates, and scopolamine. The principle behind this is that in a semi-conscious state, the person will not be able to execute lie but only able to answer the facts which he is aware of. This is conducted by a team, including psychiatrist, anesthesiologist, clinical psychologist, audio videographer, and nursing staff. Many questions like violation of human rights and autonomy have been raised about this method. Section 45 of an Indian evidence act, 1872 allows experts opinion in special cases, and it has been used in many famous cases [27].

Few neuroimaging studies have found that deception is associated with increased activity in the prefrontal cortex and anterior cingulated cortex. However, these studies had many methodological and ethical issues [28, 29]. The subjects were asked to lie, and the brain activity was measured by functional magnetic resonance imaging (fMRI) and compared when they were truthful. Apart from these methods, there are few simple methods available for observation like two way mirrors, which act as a window from one view point and mirror from the other view point, and also video surveillance.

How to proceed further?

The subsequent management shall differ based on whether the person suspected to have intentional symptoms was diagnosed as facititious disorder or had been malingering the symptoms for an external benefit or motive. There are no pharmacological and non-pharmacological measures available for management of malingering. Careful documentation needs to be done, and patient should not be accused of faking an illness as it can lead to breakdown of doctor-patient relationship and can even lead to hostility and violence and law suit against the doctor. So the clinician should confront the patient indirectly that the findings do not go with the objective criteria for the diagnosis [30].

In case of factitious disorder by proxy, immediate separation of child from the caregiver should be done. For patients with factitious disorder and for perpetuator of factitious disorder by proxy, detailed assessment needs to be done- of the personality, underlying reasons for the behaviour, parenting capacity (factitious disorder by proxy), and other co morbidities. All the interventions done in the hospital should be documented. Supportive confrontation of patient should be done. However on confrontation, only 13 out of 33 patients acknowledged their deception as shown in a case series by Reich and Gorttfried [31]. Initial focus of psychotherapy should be to make them acknowledge the harm they have

produced to themselves or others. Clinicians should manage the shame, guilt, and suicidal ideations if present. Co morbidities should be treated. Reunion of child with caregiver may be done only if there is a clear evidence of response to the treatment [32].

The course of factitious disorder is variable, could be chronic or episodic [33]. Recovery is unknown and very rare. In case of factitious disorder by proxy, the abuse recurs in 20% of cases if the child stays with the parent [34]. Most cases of malingering do not recover even after it is settled.

Managements of such cases are complicated by many ethical and legal issues, like a breach to patient's privacy and confidentiality. If the patient needs to be treated or not, and if treatment is to be given, most of them will not be ready for treatment. Then there arises from the question, whether involuntary treatment needs to be given or not. Large number of patients will also initiate law suits against doctors [35].

Conclusion

Clinicians should consider a possibility of illness deception whenever is in doubt and extreme care needs to be taken in documenting such cases. There is a need to explore newer conceptualizations by defining the underlying mechanisms and defining the various constructs for intentional production of symptoms. Objective tests and scales with good psychometric properties for differentiating various symptoms in the diseased and non-diseased state need to be developed. There is little, if any, Indian research on the intentional production of symptoms in a cultural context. Further research is needed in this area to clarify the current controversies in the concept of this entity to help in better detection, assessment, and management of such cases.

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Corresponding author: ***Raman Deep Pattanayak , Associate Professor, Department of psychiatry, All India Institute of Medical Sciences, New Delhi, India.***

Email: drramandeep@gmail.com

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