ANOSOGNOSIA – Related Factors and Theories

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Abstract:

For a number of years, lack of awareness of cognitive failing has been described in dementia with souring prevalence in psychiatric disorders or following stroke. Although some regions are commonly affected in relation to the lack of awareness, it is seen that this phenomenon is pathology contingent. Awareness of cognitive dysfunction shown by MCI patients varies from clear insight and pronounced concern about cognitive struggles to severe anosognosia.

This article highlights anosognosia, its related factors and proposed theories.

Introduction

For a number of years, lack of awareness of cognitive failing has been described in dementia with souring prevalence in psychiatric disorders or following stroke. Although some regions are commonly affected in relation to the lack of awareness, it is seen that this phenomenon is pathology contingent. Awareness of cognitive dysfunction shown by MCI patients varies from clear insight and pronounced concern about cognitive struggles to severe anosognosia. In its original use, the term anosognosia described complete unawareness of hemiplegia in stroke patients as described by Babinsky in 1914. However, application of this term has since stretched to indicate impaired wide ranging sensory and motor awareness and higher cognitive deficits.

Anosognosia

When someone rejects a diagnosis of mental illness, it’s appealing to say that they are “in denial.” Anosognosia is different from denial. In anosognosia the patient is unable to apprehend that they are not well (due to harm to area of the brain responsible for awareness of self) in comparison to denial where the person is reluctant to embrace the fact that they are ill. But a person with acute mental illness may not be making a conscious selection. They may instead be experiencing “lack of insight” or “lack of awareness” because of symptom of anosognosia. Joseph Babinski in 1914 introduced the term anosognosia (from the Greek, α=without, νόσζ=disease,γνώσιζ=knowledge) and gave an insightful postulation that anosognosia may be specific to right hemispheric lesions.

When we talk about anosognosia in mental illness, we mean that person is not aware of their own mental health condition or that he can’t perceive their condition accurately. Anosognosia is a usual symptom of certain mental illnesses, perhaps the most difficult to follow for those who have never experienced it. Anosognosia is relative in existence. Self-awareness can change over time, allowing a person to accept the existence of their illness at times and making such acceptance impossible at other times. When insight shifts to and fro over time, we might think people are denying their condition out of fear or strong headedness, but fluctuations in awareness are typical characteristic of anosognosia.

Insight – Its Importance

For someone with anosognosia, this incorrect insight feels as true and convincing as alternative people's ability to understand them. However these misperceptions cause a heavy disagreement with others and an exaggerated level of anxiety. Lack of insight conjointly causes one to avoid treatment. This makes it the foremost reason for patient to prevent taking their medications. And, because it is usually combined with mental disease or mania, lack of insight will cause careless or disagreeable behavior. High frequency of anosognosia results in personal, family and social consequences. Lack of awareness is related to larger risk of life threatening behaviour likewise as exaggerated care giver burden. It will also cause non-compliance of treatment, and hinder some basic tasks like driving, managing personal finance etc. Individuals with Alzheimer’s illness are usually unaware of their deficits. This higher level of disordered knowliness, or anosognosia, has been associated with totally different negative personal and social consequences, with “unaware” people involving in and profiting less from clinical management, exhibiting diminished capability to choose treatment selections, and manifesting exaggerated risky behaviors than people who are conscious of their condition. Moreover,
those in charge of the care of these patients communicate higher degrees of tension and worry, even in case of little cognitive impairment. Dealing with psychological conditions is far difficult if lack of insight is one among the symptoms. Patients with anosognosia are placed at exaggerated risk of homelessness or arrest. Learning to apprehend anosognosia and its risks will ameliorate the chances of helping patients with this tough symptom. It's vital for family and mental health professionals to know that anosognosia in somebody with severe mental state may be a real risk and it's very important to concentrate and sympathise with the patients, gain their trust and inspire them to adjust to medications and treatment.

Prevalence

Anosognosia is has relation with many neurological disorders that end in reduced cognitive ability. Anosognosia is most frequent symptom of AD even in early stages but also found in stroke, brain tumors, frontotemporal dementia and Huntington’s disease. There is accumulating evidence, which suggests that anosognosia is also prevalent in several psychiatric conditions. For example, anosognosia is the major reason why patients suffering from bipolar disorder or schizophrenia refuse to take medicines prescribed by their doctors. Research indicates that about 40% of bipolar disorder patients and 50% of schizophrenia patients suffer from anosognosia. Another condition that can be associated with anosognosia is major depression, with psychotic features. Previous studies on prevalence rate of anosognosia in AD gives different results because of use of different tools for measurement and disparities in conceptualization. Difference in prevalence rates ranges from 5% to 70%. Also early studies of anosognosia indicated that approximately 30% of people with schizophrenia and 20% of people with bipolar disorder experienced “severe” lack of awareness of their diagnosis.

Anosognosia and Denial

This obscure word, which is pronounced "uh-no-sog-no-zha," means "denial of illness," and is more serious than you might think. Most people understand the psychological concept of denial, which is a refusal to believe an uncomfortable truth. Who hasn't heard of a heavy drinker, eater, smoker, or drug user say, “I can quit any time I want,” or someone with a chronic cold (which may indicate a serious illness) say, "It's not important--It's just a flu.” Pressing the denier on the obvious gap between reality and his belief typically yields a flurry of thin excuses that support his position, and can provoke an outburst of anger if continued long enough. Denial serves a useful purpose in helping people cope with sudden change, and is harmless as long as it is not maintained too long. Denial becomes harmful when it interferes with a person's ability to cope effectively with the challenges he faces. Fortunately, denial is temporary in most cases, and even chronic deniers can learn better over time.

Anosognosia is quite different. It is not simply denial of a problem, but the genuine inability to recognize that the problem exists. It is a common consequence of brain injuries, and occurs to varying degrees in such disorders such as schizophrenia, bipolar disorder, and Alzheimer's disease. (I would like to stress here that "common" does not mean "universal!" Most people who suffer from these illnesses are quite aware that they are sick). Someone who has anosognosia isn't being difficult, or refusing to face the truth. He is literally unable to believe that his illness is, in fact, an illness. As a result, he does not see any reason to take medication that can control his illness. Many people who have anosognosia will refuse to take medication for schizophrenia or bipolar disorder, because they do not believe they are ill. If pushed, they may give the appearance of cooperation, while secretly discarding their medication. In the case of paranoid schizophrenia, where the patient believes others are conspiring to harm him or control his life, the combination of anosognosia and paranoia can provoke the him to violent action in an attempt to escape his "persecutors." (Sadly, the often debilitating side effects of antipsychotic medication, which, unlike his illness, are all too apparent to the patient, provide supporting evidence for his beliefs.)

Anosognosia and Related Factors:

Anosognosia has no anatomical or biochemical correlates. It is a very intricate and multidimensional phenomenon of changing nature and intensity. Studies with Perfusion SPECT and functional MRI suggest that it is associated with right dorsolateral frontal lobe, right inferior frontal gyrus, anterior singulate cortex and right parieto temporal region. Patients with anosognosia showed poorer performance on neuropsychological tests that assess these areas as well as those evaluating executive and visuospatial functions. Importantly, damage to those anatomical areas of the brain involved in “self-reflection” and “introspection” can cause anosognosia. Because of this condition, the patients cannot recognize that they are ill.
However, while some authors reported a positive correlation between anosognosia and neurocognitive capabilities in MCI patients (i.e., the more anosognosic the patient, the more intense the cognitive disability), other described a specific alteration of executive functions, in agreement with executive anosognosia or a specific variation in memory function in anosognosic AD patients. In 2013, this model was modified by amalgamating the role of emotional processes. Positive correlation between anosognosia and apathy have earlier been communicated in the literature in AD patients (i.e., the more anosognosic the patient, the more apathetic they are) and could display a significant part in awareness processes. Therefore, the order of cognitive disability may not predict anosognosia symptoms or its intensity. In this background, neuroimaging analysis could contribute to this understanding.

What Happens in Anosognosia:

We continually update our mental image of ourselves. When we get a new haircut, we fine tune our self-image and anticipate looking different in the mirror. When we assimilate knowledge of a new skill, we add it to our self-image and feel more skilful. But this updating procedure is very complex. It is essential for the brain’s frontal lobe to arrange systematically new information, develop a reviewed description and remember the latest updated self-image.

Brain imaging studies have shown that this pivotal region of the brain can be impaired by schizophrenia and bipolar disorder as well as by diseases like dementia. When the frontal lobe isn’t functioning fully, a person may lose—or partially lose—the capability to update his or her self-image.

Without an update, one is fixed with his/her old self-image from before the illness begun. Since our perceptions feel errorless, we wind up that our loved ones are untruthful or making a mistake. If family and friends hold on that they're right, the person with an illness may get frustrated or angry, or begin to stay away from them. Early studies of anosognosia indicated that approximately 30% of people with schizophrenia and 20% of people with bipolar disorder experienced "severe" lack of awareness of their diagnosis.

Descriptive Models Proposed for Anosognosia

Cognitive mechanisms of anosognosia are debatable, but descriptive models have been suggested. From the metacognitive model of Nelson and Narens, Agnew and Morris described three types of anosognosia:

1) Mnemonic anosognosia refers to a deficit in the consolidation of new information in the personal data base;

2) Executive anosognosia refers to an change of the comparator mechanism permitting the contrast between the real performance and the stored past information;

3) Primary anosognosia refers to a direct deficit within the metacognitive awareness system, usually implicated in carrying information to consciousness.

Treatment

There are two major approaches that can be embraced for the treatment of anosognosia. These are Antipsychotic Therapy and Motivational Enhancement Therapy.

Antipsychotic Therapy: If the underlying cause for anosognosia is schizophrenia, bipolar disorder, major depression or psychosis, then antipsychotic medications are likely to ameliorate the condition. In fact, there is evidence of betterment of insight in schizophrenia patients regularly undergoing antipsychotic therapy. Antipsychotics generally fall into two categories:

- Typical Antipsychotics: Some examples include haloperidol, thioridazine, chlorpromazine, and loxapine.
- Atypical Antipsychotics: Some examples include clozapine, risperidone, quetiapine, and aripiprazole.

Motivational Enhancement Therapy (MET)

This type of therapy involves a direct, one-on-one, patient-centric perspective. MET emphasises on inspiring the patient to modify his/her viewpoint on the disease condition and trying to persuade them that medical help is essential for them. Patients who involve themselves in self-destructive activities usually have no motivation to bring an alteration in their behavior, although they are conscious that such behaviors are harming their personal health, family life, and social interactions. An experienced therapist who is well-acquainted with the MET technique can make a huge change in the life of a patient. This technique is very productive for stimulating the patient to view behavior in a more objective manner. Importantly, MET can actually empower a patient to initiate modifying his/her behavior.
Anosognosia- its Role in Law and Medicine

For a symptom with such an obscure name, anosognosia plays a prominent role in both law and medicine. Treatment for most illnesses is taken at the discretion of the patient, who is free to seek, select, or decline treatment, as he considers appropriate. However, there are times when the individual's right to control his medical treatment conflicts with other important principles, namely, the sanctity of life, and the protection of others from harm. A person who is in the grip of a severe psychotic episode, who is judged likely to harm himself or someone else, may legally be committed to a psychiatric hospital for evaluation and treatment, on an involuntary basis. Such treatment usually consists of antipsychotic or mood-stabilizer medications, observation, and possibly restraint.

Most patients who are prone to psychosis (primarily, those with schizophrenia) do not have any particular desire to harm other people. The danger comes not from a desire to harm, but from hallucinations and delusions that can drive violent actions. (For example, a patient may sincerely believe he is fighting for his life against an evil force, when in reality he is attacking an innocent person.) So it is not surprising that patients, who are aware of the nature of their illness, and the risk of such harm, generally do prefer treatment to prevent violent incidents. Similarly, patients who have anosognosia about their psychotic symptoms, but whose behavior is harmless, may not have a need for medication that justifies removal of their right to make decisions about their treatment.

However, those psychotic patients who are at risk for committing violent acts, and also have anosognosia, are both dangerous, and unable to believe that anything is wrong with them. Because of this belief, they will refuse treatment, and remain dangerous. These are the patients whose right to control their own treatment conflicts with the right of others to safety.

In the end, each patient must be handled on its own merits, and someone must make the difficult calls--and be prepared to live with the consequences. It is because of anosognosia that such calls must be made.

References:


www.nami.org/Learn-More/Mental-Health-Conditions/Related-Conditions/Anosognosia

www.webmd.com/schizophrenia/what-is-anosognosia