Delusion(s)

Delusions typically occur in the context of neurological or mental illness, although they are not tied to any particular disease and have been found to occur in the context of many pathological states (both physical and mental). However, they are of particular diagnostic importance in psychotic disorders and particularly in schizophrenia, paraphrenia, manic episodes of bipolar disorder, and psychotic depression. Delusions can be "fixed" or "transient."

Psychiatric definition

Although non-specific concepts of madness have been around for several thousand years, the psychiatrist and philosopher Karl Jaspers was the first to define the three main criteria for a belief to be considered delusional in his 1917 book *General Psychopathology*. These criteria are:

- certainty (held with absolute conviction)
- incorrigibility (not changeable by compelling counterargument or proof to the contrary)
- impossibility or falsity of content (implausible, bizarre or patently untrue)

These criteria still continue in modern psychiatric diagnosis. The most recent Diagnostic and Statistical Manual of Mental Disorders defines a delusion as:

> A false belief based on incorrect inference about external reality that is firmly sustained despite what almost everybody else believes and despite what constitutes incontrovertible and obvious proof or evidence to the contrary. *The belief is not one ordinarily accepted by other members of the person's culture or subculture.*

There is controversy over this definition, as 'despite what almost everybody else believes' implies that a person who believes something most others do not is a candidate for delusional thought. Furthermore, it is ironic that, while the above three criteria are usually attributed to Jaspers, he himself described them as only 'vague' and merely 'external'.[1] He also wrote that, since the genuine or 'internal' 'criteria for delusion proper lie in the *primary experience of delusion* and in *the change of the personality* [and *not* in the above three loosely descriptive criteria], we can see that a delusion may be correct in content without ceasing to be a delusion, for instance - that there is a world-war.'.[2]

Types

Delusions are categorized as either bizarre or non-bizarre and as either mood-congruent or mood-neutral. A bizarre delusion is a delusion that is very strange and completely implausible; an example of a bizarre delusion would be that aliens have removed the affected person's brain. A non-bizarre delusion is one whose content is definitely mistaken, but is at least possible; an example may be that the affected person mistakenly believes he or she is under constant police surveillance. A mood-congruent delusion is any delusion whose content is consistent with either a depressive or manic state; for example, a depressed person may believe that news anchors on the television highly disapprove of him or her, or a person in a manic state might believe that he or she is a powerful deity. A mood-neutral delusion does not relate to the sufferer's emotional state; for example, a belief that an extra limb is growing out of the back of one's head is neutral to either depression or mania.[3]

In addition to these categories, delusions often manifest according to a consistent theme. Although delusions can have any theme, certain themes are more common. Some of the more common delusion themes are [3]:

- **Delusion of control**: This is a false belief that another person, group of people, or external force controls one's thoughts, feelings, impulses, or behavior. A person may describe, for instance, the experience that aliens actually make him or her move in certain ways and that the person affected has no control over the bodily movements. Thought broadcasting (the false belief that the affected person's thoughts are heard aloud), thought insertion, and thought withdrawal (the belief that an

outside force, person, or group of people is removing or extracting a person's thoughts) are also examples of delusions of control.

- **Nihilistic delusion**: A delusion whose theme centers on the nonexistence of self or parts of self, others, or the world. A person with this type of delusion may have the false belief that the world is ending. They may also believe that they are dead (figuratively or literally).
- **Delusional jealousy (or delusion of infidelity)**: A person with this delusion falsely believes their spouse or lover is having an affair. This delusion stems from pathological jealousy, and the person often gathers "evidence" and confronts the spouse about the nonexistent affair.
- **Delusion of guilt or sin (or delusion of self-accusation)**: This is a false feeling of remorse or guilt of delusional intensity. A person may, for example, believe he has committed some horrible crime and should be punished severely. Another example is a person who is convinced he is responsible for some disaster (such as fire, flood, or earthquake) with which there can be no possible connection.
- **Delusion of mind being read**: The false belief that other people can know one's thoughts. This is different from thought broadcasting in that the person does not believe their thoughts are heard aloud.
- **Delusion of reference**: The person falsely believes that insignificant remarks, events, or objects in one's environment have personal meaning or significance. For instance, a person may believe they are receiving special messages from newspaper headlines; they are being talked about on the radio/tv.
- **Erotomania** is a delusion in which one believes that another person is in love with him or her. They believe that this other person was the first to declare his or her affection, often by special glances, signals, telepathy, or messages through the media.
- **Grandiose delusion**: An individual is convinced they have special powers, talents, or abilities. Sometimes, the individual may actually believe they are a famous person or character (for example, a rock star). More commonly, a person with this delusion may believe they have accomplished some great achievement for which they have not received sufficient recognition (for example, the discovery of a new scientific theory).
- **Persecutory delusion**: These are the most common type of delusions and involve the theme of being followed, harassed, cheated, poisoned or drugged, conspired against, spied on, attacked, or obstructed in the pursuit of goals. Sometimes the delusion is isolated and fragmented (such as the false belief that co-workers are harassing), but sometimes are well-organized belief systems involving a complex set of delusions ("systematized delusions"). People with a set of persecutory delusions may believe, for example, they are being followed by government organizations because the "persecuted" person has been falsely identified as a spy. These systems of beliefs can be so broad and complex that they can explain everything that happens to the person.
- **Paranoid:** believing that people are "out to get" you, or the thought that people are doing things when there is no external evidence that such things are taking place.
- **Religious delusion**: Any delusion with a religious or spiritual content. These may be combined with other delusions, such as grandiose delusions (the belief that the affected person was chosen by God, for example), delusions of control, or delusions of guilt. Beliefs that would be considered normal for an individual's religious or cultural background are also often called delusions by some.
- **Somatic delusion**: A delusion whose content pertains to bodily functioning, bodily sensations, or physical appearance. Usually the false belief is that the body is somehow diseased, abnormal, or changed—for example, infested with parasites.
- **Mixed**: People with this type of delusion have two or more of the delusions listed above.

Diagnostic issues

John Haslam illustrated this picture of a machine described by James Tilly Matthews called an "air loom", which Matthews believed was being used to torture him and others for political purposes.

The modern definition and Jaspers' original criteria have been criticized, as counter-examples can be shown for every defining feature.

Studies on psychiatric patients have shown that delusions can be seen to vary in intensity and conviction over time which suggests that certainty and incorrigibility are not necessary components of a delusional belief.[4]

Delusions do not necessarily have to be false or 'incorrect inferences about external reality'.[5] Some religious or spiritual beliefs by their nature may not be falsifiable, and hence cannot be described as false or incorrect, no matter whether the person holding these beliefs was diagnosed as delusional or not. [6]

In other situations, the delusion may turn out to be true belief.[7] For example, delusional jealousy, where a person believes that their partner is being unfaithful (and may even follow them into the bathroom believing them to be seeing their lover even during the briefest of partings) may result in the faithful partner being driven to infidelity by the constant and unreasonable strain put on them by their delusional spouse. In this case, the delusion does not cease to be a delusion because the content later turns out to be true.

In other cases, the delusion may be assumed to be false by a doctor or psychiatrist assessing the belief, because it *seems* to be unlikely, bizarre or held with excessive conviction. Psychiatrists rarely have the time or resources to check the validity of a person's claims leading to some true beliefs to be erroneously classified as delusional.[8] This is known as the Martha Mitchell effect, after the wife of the attorney general who alleged that illegal activity was taking place in the White House. At the time her claims were thought to be signs of mental illness, and only after the Watergate scandal broke was she proved right (and hence sane).

Similar factors have led to criticisms of Jaspers' definition of true delusions as being ultimately 'un-understandable'. Critics (such as R. D. Laing) have argued that this leads to the diagnosis of delusions being based on the subjective understanding of a particular psychiatrist, who may not have access to all the information which might make a belief otherwise interpretable. R.D. Laing's hypothesis has been applied to some forms of projective therapy to "fix" a delusional system so that it cannot be altered by the patient. Psychiatric researchers at Yale University, Ohio State University and the Community Mental Health Center of Middle Georgia have used novels and motion picture films as the focus. Texts, plots and cinematography are discussed and the delusions approached tangentially.[9]. This use of fiction to decrease the malleability of a delusion was employed in a joint project by science-fiction author Philip Jose Farmer and Yale psychiatrist A. James Giannini. They wrote the novel *Red Orc's Rage* which, recursively, deals with delusional adolescents who are treated with a form of projective therapy. In this novel's fictional setting other novels written by Farmer are discussed and the characters are symbolically integrated into the delusions of fictional patients. This particular novel was then applied to real-life clinical settings. [10]

Another difficulty with the diagnosis of delusions is that almost all of these features can be found in "normal" beliefs. Many religious beliefs hold exactly the same features, yet are not universally considered delusional. These factors have led the psychiatrist Anthony David to note that "there is no acceptable (rather than accepted) definition of a delusion."[11] In practice psychiatrists tend to diagnose a belief as delusional if it is either patently bizarre, causing significant distress, or excessively pre-occupies the patient, especially if the person is subsequently unswayed in belief by counter-evidence or reasonable arguments.

Development of specific delusions

The top two 'Factors mainly concerned in the germination of delusions' are: 1.) Disorder of brain functioning and 2.) background influences of temperament and personality[12].

Higher levels of dopamine qualify as a symptom of 'disorders of brain function'. That they are needed to sustain certain delusions was examined by a preliminary study on delusional disorder (a psychotic syndrome) which was instigated to clarify if schizophrenia had a dopamine psychosis [13] There were positive results - delusions of jealousy and persecution had different levels of dopamine metabolite HVA (which may have been genetic). These can be only regarded as tentative results; the study called for future research with a larger population.

It is too simplistic to say that a certain measure of dopamine will bring about a specific delusion. Studies show age [14][15] and gender to be influential and it is most likely that HVA levels change during the life course of some syndromes [16]

On the influence personality, it has been said: "Jaspers considered there is a subtle change in personality due to the illness itself; and this creates the condition for the development of the delusional atmosphere in which the delusional intuition arises" [17]

Cultural factors have "a decisive influence in shaping delusions". [18] For example, delusions of guilt and punishment are frequent in a Western, Christian country like Austria, but not in Pakistan - where it is more likely persecution. It says cultural factors have a decisive influence in shaping delusions. [19] . In a series of case studies, delusions of guilt and punishment were shown in Austria as well and this is with Parkinson's patients treated with l-dopa - a dopamine agonist.[20]

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