Bipolar disorder

[Name of the Writer]

[Name of the Institution]

Bipolar disorder

**Response 1:** The article given is based on comparison between the approaches that are used to examine the functioning of cells in the patients who have bipolar disorder. Previously, non-nerve cells like red blood cells were used to examine the functionality of cells in patients with bipolar disorder. However, bipolar disorder is a psychiatric disorder, it is necessary to understand how nerve cells work. For this purpose, researchers are suggesting to use olfactory receptor neurons as these are nerve cells having receptors for thousands of odor molecules that are detected by a human. Additionally, in this article, another factor that may help in the detection of bipolar disorder is discussed which is calcium. Researchers used a technique known as a fluorescence imaging technique to measure basal and stimulated calcium levels in olfactory receptor neurons. The results show that the calcium response of nerves is significantly low in the patients having bipolar disorder than the other people (Olfactory Receptor Cells May Provide Clues to Psychiatric Disease, 2005).

**Response 2:** When brain cells are accessed easily, they can help a lot in better understanding of a psychiatric disease like bipolar disorder. Before, non-nerve cells like red blood cells were used to examine the functionality of cells in patients with bipolar disorder but as bipolar disorder is a psychiatric disorder, it is necessary to understand how nerve cells work.

Olfactory receptor neurons are nerve cells having receptors for thousands of odor molecules that are detectable by humans. They are located in a small patch of the epithelium in the nose. They can be used to detect bipolar disorder as they are easily accessed by just performing a biopsy procedure which requires five minutes. The other impact that brain cells have is that the medicines used to treat psychiatric disorders can also be tested on different nerve cells of a patient before prescribing them to the patient to avoid complications.

**Response 3:** If I was a policymaker, I would have given access to use the nerve cells rather than using non-nerve cells like red blood cells to diagnose different psychiatric diseases because nerve cells can give a better understanding of the current condition of a person’s brain that will in turn help in diagnosing the disorder as well as the stage of the disorder.

The other policy that I would make is to stop the testing of medicines directly on patients. While talking about the patients having and psychiatric disorder these testing of medicines can cause severe issues like if a medicine does not suit them their symptoms can get worse causing them a lot of distress. This also has severe effects on the functioning of the brain as well.

**Response 4:** According to the article the main issue in treating a psychiatric disorder is the method of diagnosis. As mostly non-nerve cells like red blood cells and fibroblasts are used to detect the bipolar disorder. Although for a psychiatric disease it is necessary to examine brain cells as they can give a better understanding of the disease. Also, they can tell the level or stage of the disease a person has.

The other issue that is discussed in the article is testing medicines on psychic patients. As every person is different the way their body respond to certain medication is also very different. There are a series of medicines given to the patients having psychiatric disorders just to test which one suits them which is dangerous as their condition can worsen even more. It is, therefore, necessary to use nerve cells to detect the disease and testing different medicines on them to avoid further complications in a patient’s condition.

**Response 5**: Medication responsiveness tests are the tests conducted to check whether the medicine given to the patient is responding or not. When a person is having a bipolar disorder, medication becomes a necessary part of his or her life as these medicines are used to stabilize the bipolar mood episodes. Every person is different and requires a different combination of medicines it is important to test the medicines before use. However, most of the time people with bipolar disorder or any mental disorder have to try a series of medications to finally reach one medicine which suits them. It is, therefore, important to test the medicine response before prescribing it to patients. There are certain ways medicine can be tested. The first thing is our genes. Our DNA determines which medicines will suit us and which will not (Harrison & Tunbridge 2018). When a physician has all the details regarding the DNA of a person, he can easily prescribe the medicine. This can be very helpful for the people having bipolar disorder as by using a series of different medications their symptoms may worsen and they have multiple mood episodes that are damaging for the brain. By prescribing the exact medicine that is required for the specific stage of the disease the chances of mood episodes can considerably reduce.

**Response 6:** The article was extremely informative as a new approach was discussed that is to use nerve cells in spite of non-nerve cells to ensure a better understanding of the brain. It also throws light on the method to access nerve cells by just performing a biopsy procedure to get olfactory receptor neurons that are present in a small patch of the epithelium in the nose.

In this article, another issue that was highlighted is the testing of medicines on patients which is extremely dangerous. Overall this article provides a complete knowledge of how the diagnosis of psychiatric disorders should be done while utilizing the latest technologies and how this new approach of using nerve cells will help in testing medicines that will be given to a patient.

**References**

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