Malfuctioning of Brain A Review
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Abstract:
The paper presented here tells about the most complicated organ of the body - BRAIN and its malfunctions. The different diseases of the brain have been discussed. The paper briefly hints about the cures of the diseases. Lastly, it tells about the future scope related to the brain malfunctions

I. INTRODUCTION
“The true sign of intelligence is not knowledge but imagination”
ALBERT EINSTEIN

The human brain is the center of the human central nervous system located within the head and consisting of the cerebrum, brainstem and cerebellum. When brain cells called neurons do not function well the situation is termed as BRAIN MALFUNCTION. Brain malfunctions have been broken up into two kinds: One has an obvious physiological, neurological, and medical explanation-things like strokes, memory loss, and Parkinson's disease. The other kind is the type of neural dysfunction that traditionally had no clear neurological explanation; this included things like depression, anxiety, and personality disorders.

THE HUMAN BRAIN

Figure.1. the human brain

II. LITERATURE SURVEY
Prominent psychiatrists have moved to rebrand psychiatry as clinical neuroscience and rechristen mental disorders as brain disorders. Recent shifts in research and funding priorities have followed suit, privileging neuroscience over psychological and behavioral research. With the possible exception of identifying general paresis with advanced syphilitic brain infection, however, no theorized identities between mental and brain disorders have been empirically corroborated. Consequently, we regard the thesis that mental disorders are brain disorders as [Semiautomatic Segmentation of Brain Subcortical Structures from High-Field MRI] First author et al presented an active surface model for segmentation using sub cortical structure such as basal Ganglia or thalamus. This paper uses ultrafield MRI. The edge indicator function exploits SNR and SNR of an ontological hypothesis. Any robust formulation of the hypothesis that mental disorders are brain disorders logically requires the minimal thesis that mental disorders supervene upon brain disorders. A mental disorder supervenes upon a brain disorder if there could be no change in the mental disorder without a change in the brain disorder. In this paper we analyze contemporary diagnostic criteria used to individuate certain mental disorders to argue that at least some mental disorders fail to supervene upon brain disorders. Hence, we conclude that at least some mental disorders are not and cannot be (merely) brain disorders. This conclusion highlights a basic heterogeneity in psychiatry's subject matter: some mental disorders constitutively involve psychological experiences or sociocultural relationships to the external environment that cannot be identified with or reduced to brain states or functioning. We propose that establishing cases of supereminence failure represents a method for discriminating between more robustly mental (as opposed to brain) disorders. Maintaining the Integrity of the Specifications,[1] SWI at high field MRI. This generates features for combining two edge maps. These maps are obtained from Laplacian of Single MR modal images. Algorithm should be extended to segment structures on clinical MRI (1.5 or 3T) based on statistical shape and pose relationships between multiple adjacent structures ultra-high fields. [2] [Survey of MRI-Based Brain Tumor Segmentation Methods] First author et al provided an overview on state of art MRI-based brain tumour segmentation methods. Most of the existing system are noninvasive and uses classification and clustering methods by using different features. Also consider spatial information in local neighborhood. These methods provide preliminary judgment on diagnosis, tumor monitoring and therapy planning for a physician. [3]
The use of medicines in the treatment of mental illness is known to everyone but the technological advancements can also prove to be a boon for the medical patients. The medicines can help the patients in the initial level of illness but when illness upgrades itself then comes the role of technology, which proves it to be a better player in the field of medical science. Here are some technological cures:

**Brain implants**

If you want an example of how devices are offering better Targeting than drugs you need only look at Deep Brain Stimulation (DBS). Currently used to treat Parkinson’s disease, severe depression and Obsessive Compulsive Disease (OCD), DBS involves implanting electrodes into one of three specific target sites in the brain.

**Light-controlled neurons**

Another experimental area of therapy is optogenetics. Currently being tested on mice, the technique allows researchers to control brain activity through the use of light. More specifically, it enables researchers to control neurons using genetically altered viruses and fibre-optic cables inserted into the brain.

**Brain-machine interfaces**

If implants aren’t your thing, there are non-invasive brain-machine therapies. A brain–computer interface (BCI), sometimes called a mind-machine interface (MMI), direct neural interface (DNI), or brain–machine interface (BMI), is a direct communication pathway between an enhanced or wired brain and an external device. BCIs are often directed at researching, mapping, assisting, augmenting, or repairing human cognitive or sensory-motor functions.[4]

Along with the technological advancements, there are also some other ways to reduce the mental illness. Behavioral science is one of such ways which involves the systematic analysis and investigation of human and animal behavior through the study of the past, controlled and naturalistic observation of the present, and disciplined scientific experimentation. An illustration of behavioral science was observed by our group members in whom we had gone to a school named “PRAVAS SCHOOL FOR CHILDREN WITH SPECIAL NEEDS” Near Bhole Petrol Pump, Amravati Road, Dharampeth Nagpur, and MAHARASHTRA, INDIA. We closely observed some of the kids and we came to a conclusion that those children too have emotions and when they are treated with care, they give positive results.

## III. Future Scope

The future scope of the treatment of mental patients can be credited to the combined effect of use of technology like e-therapies and proper medication given to the patients. As for...
In a feature that uses phone GPS technology, men can program the app to send warnings when they’re heading toward a location that isn’t good for their mental health. So if a father who is trying to quit drinking goes near his local bar, a photo of his daughter could appear as motivation to stay away.

IV. REFERENCES

[1]. this article was published online First July 27, 2015. Charles M. Olbert, Department of Psychology, Fordham University; Gary J. Gala, Department of Psychiatry, University of North Carolina School of Medicine Number footnotes separately in superscripts. Place the actual footnote at the bottom of the column in which it was cited. Do not put footnotes in the reference list. Use letters for table footnotes.


[3]. Jin Liu, Min Li, Jianxin Wang, Fangxiang Wu, Tianming Liu, and Yi Pan, A Survey of MRI-Based Brain Tumor Segmentation Methods, TSINGHUA SCIENCE AND TECHNOLOGY ISSNII1007-0214II04/ 10Ilpp578-595, Volume 19, Number 6, December2014