

Can We Eradicate Brain Disorders or Is It Just Part of Our Society?

N'Famory Camara^{1*} and Emmanuel Binyet²

¹Department of Economics/Management Science and Engineering, University of Geosciences, Wuhan, Hubei

²Department of Power Mechanical Engineering, National Tsing Hua University, Taiwan

*Corresponding author: N'Famory Camara, Department of Economics/Management Science and Engineering, China University of Geosciences, Wuhan, Hubei. Tel: 008415072444291; E-mail: nfamoryc@yahoo.fr

Rec date: July 01, 2017; Acc date: July 11, 2017; Pub date: July 15, 2017

Copyright: © 2017 Camara NF, et al. This is an open-access article distributed under the terms of the creative commons attribution license, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Abstract

Anyone can be affected by brain disorders, but your risk factors are dissimilar for different types of brain disorders. Any of the diverse disorders linked with the human brain, including trauma, stroke, and tumors can be distinguished as brain disorder.

Keywords: Brain disorder; Physical therapy; Ebola; Schizophrenia

Introduction

There exist many kinds of brain disorders that affect humans, including epilepsy, Parkinson's disease, Alzheimer's disease, and additional disorders that are more often identified as "behavioral" rather than biological. These kinds of disorders that could be referred as disorders of the brain in an extensive sense include schizophrenia, depression, and bipolar disorder [1]. Besides these, however, are many other kinds of disorders of the brain, including acute drama, acute injuries to the head, trauma, stroke, headache, brain tumors, sleep disorders, anxiety disorders, somatoform disorders, mood disorders and developmental disorders such as cerebral palsy and muscular dystrophy. Now the question remains: Can we eradicate brain disorders? To answer this question we need to have a panoramic view of these problems in the population but also know the epidemiological characteristics of brain disorders served in the physical therapy. To control brain disorders, means of prevention and treatment with efficacy, efficiency need to be established. However, there is testimony that no cluster of chronic diseases perturbs the globe more than mental illnesses [2]. In addition, the costs related to brain disorders in the coming 20 years will not only stem from a major increase in the disease burden associated with an ageing population, but also from inflation [3]. This demonstrates that disorders related to brain are constantly evolving. For example, the widespread dementia in the UK is predicted to considerably increase over the next 30 years [4].

Why is this so? Although, brain disorder is not an infectious epidemic such as Ebola, cholera, or malaria but it kept increasing while the most lethal diseases are being cured. For instance, it is very likely to find several countries with no infectious disease such as Ebola but it is almost impossible to find a single country on this earth with no individual victim of brain disorder. This simply means that there are some hidden factors that support this phenomenon. These factors include the process of ageing population, the development of information communication and technology (ICT) and others (e.g., developmental disorders, corruption and malicious activities). For instance, there is evidence that the widespread and cost of UK brain disorders is likely to augment because of the ageing population [5]. Moreover, there is also testimony that ICT or e-government for that

matter has the faculty to lower human interaction, especially between citizens [6]. Although reducing people interaction might have a good effect such as the reduction of corruption in the society but it also has a side-effect which is isolation.

Discussion

Most isolated people likely feel lonely and stressed. It has been shown that after exposure to extreme stress people sometimes develop maladaptive symptoms [7]. This tendency contributes to an increase in drugs uptake. In addition, with the development of ICT, most people spend much time in front of television, computer or mobile phone. This means that they are receiving large amount of information and images. Since everyone does not have the same strength and ability to adapt to this kind of reception; therefore, there is a high probability that ICT could contribute to large amount of brain disorder. Consequently, it would be interesting to compare the statistics of brain disorder in a given country before and after the implementation of ICT.

Consistent to this is the fact that, it is very likely that the amount of brain disorder in developed countries is higher than the amount of brain disorder in developing countries. Since ICT is more advanced in developed countries than in developing countries thus, the assumption that ICT could contribute to an increase of brain disorder should not be neglected. For instance, a comparative study on alcohol abuse between 10 developed and 11 developing countries revealed that [8], 29.3% of the population sample met the hazardous use criterion alone in developed countries, while only 16.2% met the hazardous use criterion in developing countries. The study also revealed that the psychiatric pathology intrinsic to alcohol abuse is not inherent in the specific nature of the consequences; but rather in the person's repeated failure or inability to control the recurrent behavior that is the self-ascribed cause. Another interesting comparative study on Social anxiety disorder (SAD) between 9 developed and 11 developing countries has shown that [9] lifetime social fears are quite common in both developed (15.9%) and developing (14.3%) countries; but lifetime SAD is much more common in the former (6.1%) than latter (2.1%) countries. However, a conceptual data synthesis where the most important points about brain disorders in both developed and developing countries is beyond the scope of this paper. Nonetheless, these are limitations of this research; and, these limitations can help as

an occasion for further studies on the development of a conceptual data synthesis of the universal brain disorders. This type of study could give to great insights into the hidden factors in different countries which could then be used to establish better policy. Furthermore, it has been shown that technology advancement enables people to live longer life [10]. This means that disease related with ageing population would also increase. This in turn demonstrates that disease related to brain would increase. Consequently, investigating whether the ageing populations are being victim of the amount of information and stress that they received during their lifetime and/or their age and environment and/or their childhood and youth history would yield great insights. Serious investigations need to be done to determine the real extent of this problem. In this type of comparative study between developed and developing countries, it would be also crucial to distinguish different types of developing countries. For instance, although China is in the range of developing countries but ICT is quite expanded while some developing countries such as in sub-Saharan Africa where ICT implementation is still scarce. These are some important factors that should not be neglected in a comparative study for instance. However, taking into account that the ageing population and developmental disorders can also be classified as hidden factors and it is not possible to get rid of that population; therefore brain disorder is somehow part of our society. Consequently, the only convenient thing is to considerably decrease the amount of people affected. To do so, we need to protect the young generation from it and simultaneously cure those already affected. This can be done by increasing awareness about the hidden factors and seriously cure those affected. Unfortunately, there is evidence that the amount of scholars in neurology is increasing while the amount of patients being treated is somehow decreasing [11,12]. This shows that there is a need to adjust. As stated above, people receiving large amount of information and image via ICT face a high risk factor for brain disorder or malicious activities. Confined absorptive capability of knowledge receivers has been recognized as an obstruction to knowledge sharing [13], thus extended knowledge sharing can also be an obstruction to knowledge sharing. Nonetheless, these malicious activities are likely to start via ICT to then be pursued in the real world. For instance, there is evidence that some young Westerners (mostly European) and African have been brainwashed to join armed forces [14,15]. This is also a type of brain disorder since it contributes to the decrease of human cognitive capacities. And this type might concern both the brainwasher and the brainwashed. However, ICT itself is not harmful to human being. Human being makes it harmful for themselves. While the outcomes of ICT can be seen, the real extent of the side effects is difficult to be seen because malicious activities are secretive by nature thus shadowy. This abnormal logic already presents a disorder which starts from creativity to self-destruction thus close to suicide. This kind of situation can only increase a person maladaptive behavior thus increasing your risk factors for brain disorder. For instance, a study provided compatible results in a population sample of 347 Canadian women aged 15 years to 64 years with greater depressive disorder: Suicidal thought among them was most intensively linked with a self-reported childhood abuse [16]. This fact vividly demonstrates that malicious activities could lead to brain disorder. Furthermore, there is evidence that the leading burden of posttraumatic stress disorder (PTSD) in the United States, emanates not from terrorism or war but from far more universal events such as motor vehicle accidents, criminal victimization, and childhood maltreatment (physical, sexual, and emotional) [17-19]. Therefore, it would be crucial to increase road and society security; increase families' awareness about the side-effects of childhood maltreatment (malicious activity) and simultaneously take drastic measures to end it;

and finally, maintaining peace of mind should be among priorities. Without peace none of this can be achieved. Especially, if the event is traumatically massive, several individuals may be remotely affected outside the particular community, in the same magnitude as the American population was affected after September 11, 2001. However, regarding corruption, although ICT contributes to its reduction but what if there exist one or several new ways to do corruption via ICT? The point here is that, we should not overlook the ability of people to adapt to a given situation or to overcome a given barrier. Therefore, a strong audit team would be needed to determine those new ways of corruption that could sustain brain disorder. This is important because prompt behavior can increase prompt cost [20] and corruption (prompt cost) could diminish people welfare [6]. To summarize, in objectives to address the challenges posed by brain disorders and major economic threats, an alteration in knowledge and policy is required: that is to first protect young generation from it; second, to considerably decrease the amount of people already affected by this disease (that is to heartily cure these people); third to determine and seriously address those hidden factors sustaining these diseases. Fourth, government funds to support 50% to 82% of all related costs to brain disorder would be crucial because citizens are the engine of a nation [21] and their health is of paramount importance; fifth, government should implement cost-of-illness studies which can define research priorities about the direct and indirect costs [22,23] and the economic burden of particular health problems [24,25]. Sixth, efforts to remove hurdles to research must be supported at governmental level and finally, a way to prevent or even predict this disease at early stage needs to be found.

Conclusion

Several studies have shown the existence of certain forms of therapy or ways to lead to more efficient treatment for brain disorder [26-32]. They include: Hippo therapy; Horseback Riding Therapy (HBRT); gene therapy; nicotine as a therapeutic drug; neuroimaging such as magnetic resonance imaging and spectroscopy; molecular hydrogen; cognitive therapy; interpersonal psychotherapy, Aquaporin 4 (AQP4) modulators and so forth. In addition, an asset of elements that contain resilience has been suggested in the literature—including responsibility, active problem-solving, independence, self-esteem, well-being, initiative, insight, creativity, humor, and many others. Evaluating these concepts and perceiving their respective or separate roles would yield great benefits. Finally, an emphasis on community cohesiveness may also be crucial to encourage people to draw together their individual resilience for the good of the greater community.

Acknowledgement

The authors would like to thank China University of Geosciences for their financial support (NSFC 41272362; NSFC 41572315).

References

1. Brain Disorders Gale Encyclopedia of Psychology
2. WHO World Health Organization (2008) The Global burden of disease 2004 Update.
3. Gustavsson A, Svensson M, Jacobi F, Allgulander C, Alonso J, et al. (2011) Cost of disorders of the brain in Europe 2010. *Eur Neuropsychopharmacol* 21: 718-779.
4. Alzheimer's Society (2007) A report to the Alzheimer's Society on the prevalence and economic cost of dementia in the UK produced by King's

- College London and London School of Economics. London: Dementia UK.
5. Fineberg NA, Haddad PM, Carpenter L, Gannon B, Sharpe R, et al. (2013) The size burden and cost of disorders of the brain in the UK. *J Psychopharmacol* 27: 761-770.
 6. Asorwae E (2014) Can E-Government mitigate administrative corruption? An empirical study into the potential role of E-Government in eradicating administrative corruption in Sub-Saharan Africa. *Global J Interdisciplinary Social Sci* 3: 41-47
 7. Bonanno GA (2004) Loss, trauma and human resilience: Have we underestimated the human capacity to thrive after extremely aversive events? *Am Psychol* 59: 20-28
 8. Glantz MD, Medina ME, Petukhova M, Andrade LH, Anthony JC, et al. (2014) Alcohol abuse in developed and developing countries in the world mental health surveys: Socially defined consequences or psychiatric disorder? *Am J Addict* 23: 145-155.
 9. Stein D, Ruscio A, Lee S, Petukhova M, Alonso J, et al. (2010) Subtyping social anxiety disorder in developed and developing countries. *Depress Anxiety* 27: 390-403.
 10. Serrate O (1997) Chapter 7 Science for sustainable human development, Technologies for vital rights. Idrac.
 11. Kessler RC, Gaxiola AS, Alonso J, Chatterji S, Lee S, et al. (2009) The WHO World Mental Health (WMH) Surveys. *Psychiatrie (Stuttg)* 6: 5-9.
 12. Wittchen HU, Jacobi F, Rehm J, Gustavsson A, Svensson M, et al. (2011) The size and burden of mental disorders and other disorders of the brain in Europe 2010. *Eur Neuropsychopharmacol* 21: 655-679.
 13. Szulanski G (1996) Exploring internal stickiness: Impediments to the transfer of best practice within the firm. *Strategic Manage J* 17: 27-43.
 14. Haque OS (2015) Why are young westerners drawn to terrorist organizations like ISIS? pp. 13-14.
 15. McIntyre A (2005) Invisible stakeholders: Children and war in Africa. Institute for Security Studies. ISBN 1919913637, 9781919913636.
 16. McHolm AE, MacMillan HL, Jamieson E (2003) The relationship between childhood physical abuse and suicidality among depressed women: Results from a community sample. *Am J Psychiatry* 160: 933-938.
 17. Kessler RC, Sonnega A, Bromet E, Hughes M, Christopher B, et al. (1995) Posttraumatic stress disorder in the National Comorbidity Survey. *Arch Gen Psychiatry* 52: 1048-1060.
 18. Stein MB (2002) A 46-year-old man with anxiety and nightmares after a motor vehicle collision. *JAMA* 288: 1513-1522.
 19. Kessler RC (2000) Posttraumatic stress disorder: The burden to the individual and to society. *J Clin Psychiatry* 4-12
 20. Camara, Deyxixu, Emmunuel Binyet (2017) Understanding household energy use, decision making and behavior in Guinea-Conakry by applying behavioural economics. *Renew Sustainable Energy Rev* 79: 1380-1391.
 21. Diallo TA (2015) Beyond the resource curse: Mineral resources and development in Guinea-Conakry.
 22. Sobocki AP, Jonsson B, Wittchen HU, Olesen J (2005) Cost of disorders of the brain in Europe. *Eur J Neurol* 12: 1-27.
 23. Wittchen HU, Jacobi F (2005) Size and burden of mental disorders in Europe- A critical review and appraisal of 27 studies. *Eur Neuropsychopharmacol* 15: 357-376.
 24. Fernandez RL, Leal J, Gray AM (2012) UK research expenditure on dementia, heart disease, stroke and cancer: Are levels of spending related to disease burden? *Eur J Neurol* 19: 149-154.
 25. Cooksey D (2006) A review of UK health research funding. The Stationery Office, Norwich, England.
 26. Sunwoo H, Chang WH, Kwon JY, Kim TW, Lee JY, et al. (2012) Hippotherapy in adult patients with chronic brain disorders: A pilot study. *Ann Rehabil Med* 36: 756-761.
 27. Chiocca EA, Breakefield XO (1997) Gene therapy for neurological disorders and brain tumors. Springer Science & Business Media (SSBM)
 28. Goveia EN (2008) Just Say "Nootropic": The effects of nicotine on memory and learning.
 29. Wang YX, Lam WW (2008) Characterisation of brain disorders and evaluation of therapy by functional and molecular magnetic resonance techniques. *Hong Kong Med J* 14: 469-478.
 30. Xie F, Ma X (2014) Molecular hydrogen and its potential application in therapy of brain disorders. *Brain Disord Ther* 4: 1
 31. Nemeroff CB, Bremner JD, Foa EB, Mayberg HS, North CS, et al. (2006) Posttraumatic stress disorder: A state-of-the-science review. *J Psychiatr Res* 40: 1-21.
 32. Papadopoulos MC, Verkman AS (2008) Potential utility of aquaporin modulators for therapy of brain disorders. *Prog Brain Res* 170: 589-601.