Current Research in Microbiology

Chapter 2

Psychopaths Cause Carcinogenesis By Distress in Their Humans Environment

Robert Skopec*

Researcher-analyst, Dubnik, Slovakia

Email: zxcbnvm7@gmail.com

Abstract

The famed Swiss psychiatrist Adolf Guggenbühl-Craig, Jungian author of The Emptied Soul, believes that many psychopats (sociopathhs) who walk among us are often those who hold upstanding positions in society. He calls them "compensated psychopaths". Psychopathy showing up in places other than a prison or mental hospital is an extremely serious and all too common social problem, partly because also just one compensated psychopath can so adversely affect the lieves of so many unsuspecting, trusting people.

Keywords: Psychopath, upstanding positions; sociopaths; distress, carcinogenesis; lack of empathy; outward appearence of being normal; nonexistent conscience; absence of guilt; remorse, superficial charm; manipulativeness; inconsistency; deceitfulness; grandiose sense of self-worth

1. Introduction

These psychopaths can be economically and emotionally (or physically) socially dangerous – capable of unbelievably appaling acts. In 1941 Dr. Hervey Cleckley discussed the ,partial psychopath when he talked about incomplete manifestations or suggestions of the disorder in psychiatrists, physicians, businessmen, etc. Compensated psychopaths were described as the subclinical psychopaths or subcriminal psychopath by the famous Dr. Robert Hare. These doctors are all talking about the same problem – psychopathy. Pure psychopaths really do exist, but even so, they are very, very rare. It is the vastly more common so-called compensated, or partial psychpaths (Adolf Hitler is an extreme example) who are the far more insidious, and pervasive social problem.

Hervey Ckleckley (author of The Three Faces of Eve), a pionier in the field who provided the first coherent, thorough description of what he called psychopath wrote: Although they occasionally appear on causal inspection as successful members of the community, as able lawyers, executives, or physicians, the true differences between them and the psychopaths who continually go to jails or to psychiatric hospitsla is that they keep up a far better and more consisted outward appearence of being normal.

2. Materials and Methods

A baseline or control state is fundamental to the understanding of most complex systems. Defining a baseline state in the human brain, arguably our most complex system, poses a particular challenge. Many suspect that left unconstrained, its activity will vary unpredictably. Despite this prediction we identify a baseline state of the normal human brain in terms of the brain oxygen extraction fraction (OEF). The OEF is defined as the ratio of oxygen used by the brain to oxygen delivered by flowing blood and is remarkably uniform in the awake but resting state. Local deviations in the OEF represent the physiological basis of signals of changes in neuronal activity obtained with functional MRI during a wide variety of human behaviors. We can use quantitative metabolic and circulatory measurements from positronemission tomography to obtain the OEF regionally throughout the brain. Areas of activation were conspicuous by their absence. Significant deviations from the mean hemisphere OEF can be increases, signifying deactivations. Defining the baseline state of an area in this manner attaches meaning to a group of areas that consistently exhibit decreases from this baseline, during a wide variety of goal-directed behaviors. These decreases suggest the existence of an organized, pre-programmed baseline default mode of brain function that during specific goaldirected behaviors.

For example, a midline area of the cortex exhibiting prominent decreases in activity during focused attention is the medial prefrontal cortex (MPFC). Because of the large body of data implicating, in particular, that the ventral aspects of this area of the brain and its connections in emotional processing within the brain. It has been posited that decreases during focused attention reflect a dynamic interplay between ongoing cognitive processes and the emotional state of the subject. It has been proposed that in humans the MPFC play a role in the integration of emotional and cognitive processes by incorating emotional biasing signals or markers into decision-making processes.

Anatomically, the ventral MPFC is composed of a number of cytoarchitectonically discrete areas that receive a wide range of sensory information from the body and external environment and are heavily interconnected with limbic structures, such as the amygdale, ventral striatum, hypothalamus, midbrain, periacquaductal region, and brainstem autonomic nuclei. Electrophysiological studies in monkeys indicate that orbital and medial prefrontal

neurons respond to stimuli based on their reward and nonreward associations. We posit that when an individual is awake and alert and yet not actively engaged in an attention-demanding task, a default state of brain activity exists. It can include the reward-signalling ventral striatum and the behavior-controlling dosromedial prefrontal cortex. The MRI study examined 49 prison inmates and discovered a weak connection between the ventral striatum and the ventral medial prefrontal cortex in those inmates with high psychopathic tendencies.

It is showing that how often an individual inmate had been convicted of crimes relative to strength of the connection between the striatum and prefrontal cortex. So the stronger the connection, the more reward signals were dominating all aspects of a decision. We can see this default-mode system as a particular kind of pre-programmed brain dysfunction.

Brains of psychopats as a default-mode networks Regardless of whether they are characterized as compensated psychopaths, partial psychopaths, subclinical or subcriminal psychopaths, these psychopaths cause others to suffer until carcinogenesis caused by distress. Psychopaths have nonexistent conscience. Dr. Robert Hare, the world's foremost expert on the psychopaths, described psychopathy as a socially devastating disorder defined by a constellation of affective, interpersonal and behavioral characteristics.

Particularly characteristic of the psychopath are shallow emotions, the utter absence of empathy, guilt, remorse, superficial charm, manipulativeness, inconsistency, deceitfulness and grandiose sense of self-worth. Lacking any genuine remorse, psychopaths also lack the motivation to change. It's generally thought that not only do psychopaths not get better with treatment, but they actually get worse because they learn how to better manipulate the system, as well as the cinicians who try to treat them.

A System Run By and For Psychopats The term Antisocial Personality Disorder (ASPD) was originally meant to replace the charged and not clearly distinguishable terms psychopath and sociopath to describe psychopathy. Dr. Hare argues convincingly that ASPD and psychopathe are in reality describing different disorders. The incidence of ASPD has been estimated at 3% inmales and 1% in females, while the psychopathy is about 20% to 50% of the rate of ASPD. With 300 million people of the United States therefore has a range of 1.2 to 3 million psychopaths. There are fewer than 100 clearly dangerous serial killers, this suggests that about 1.2 to 3 million other socially dangerous psychopaths.

The Psychopaths Are Winning Psychiatrist H. Cleckley, in his seminal work The Mask of Sanity, which first put together the characteristics of psychopaths, noted that psychopaths are apparently sane, often dynamic, almost always seductive, impress others with their sincere motives and positive intentions and wind up causing great institutional and personal harm! These psychopaths are one of the more harming cause of the carcinogenesis caused by the distress emitted by psychopaths into their recent environment.

Charm, a quick sensitivity to the unspoken needs of others, and certain flexibility with the truth are woven into a personal charisma of psychopaths that entrances. Psychologist Robert Hare, in his classic book Without Conscience: The Disturbing World of the Psychopaths Amon Us (1993), states: Psychopaths are social predators who charm, manipulate, and ruthlessley plow their way though life, leaving a broad trail of broken hearts, shattered expectations, and empty wallets. Completely lacking in conscience and in feeling for others, they selfishly take what they want and do as they pleas, violating social norms and expectations without the slightest sense of guilt or regret. If you catch him lying, he'll just shift gears and go on as though nothing had happened. Good people are rarely suspicious: they cannot imagine others doing the things they themselves are incapable of doing. Psychopaths are the monsters of real life.

Robert Hare said, The majority of people and therefore workplaces are easy prey, because we still want to believe that people are inherently good. We don't really want to believe that such people exist. So i tis that Robert Hare, the world's best-known expert on the psychopath, concludes that the ultimate problem is — Us! Whenever you find Money, prestige and power you will find them. The fundamental characteristic of all psychopaths is having no conscience, consequently lacking any empathy. They are in business, law, politics, and the media. They're winning!

3. Brains of Psychopaths

A new Harvard study offers another clue into the neurological foundation of psychopathic behavior.) A team of scientists recently packed a mobile MRI scanner on the back of a tractor trailer and hauled it into a medium security prison with the goal of scanning a high volume of criminals that have been classified as psychopaths. It's estimated that while psychopaths only make up one percent of the general population, their prevalence in committing crimes mean they make up between 15 and 25 percent of the male North American prison population. So what is going on inside the brains of psychopaths?

This wasn't the first time researchers have trucked MRIs into prison to study the brains of psychopaths. We seem to be endlessly fascinated with understanding how psychopaths think and our growing insight into the neuroscience behind psychopathy is fundamentally altering ideas of personal responsibility and metal illness.

3.1. The psychopath who studies psychopaths

An infamous moment in the history of psychopath neuroscience came in 2006, when scientist James Fallon was poring through a pile of PET scans. Fallon had been studying the neuroanatomical basis of psychopathy for some time and he was starting to get a good handle on what kind of brain activity would signal those tendencies. On his desk, among the brain

scans of murderers, depressives and schizophrenics, were scans of him and his family, part of a separate study being done on Alzheimer's disease.

"I got to the bottom of the stack, and saw this scan that was obviously pathological," Fallon said in an interview with Smithsonian.

Looking up the code behind the scan he discovered that he was in fact viewing his own brain. Fallon's research then turned on himself and he went on to investigate several neurological and genetic markers that correlated with psychopathic tendencies. Fallon's personal relationship with psychopathy also led him to investigate the strange combination of nature and nurture that ultimately leads a psychopathic person to express themselves through violent antisocial behavior.

After all, if his brain looked like that of a psychopath, then what separated him from a violent psychopathic criminal?

A psychopath is classically defined as a person with an extreme inability to empathize with other human beings. They also lack remorse for their actions, will comfortably exploit others for their own personal gain, and have a high level of self-confidence. Sound like anyone you know? Yes, exploit others until they get carcinogenesis.

It's not unexpected that psychopaths have become objects of fascination for many of us. Depictions of these characters fill our television and film screens from Gordon Gekko and Patrick Bateman to *Breaking Bad*, *House of Cards* or *Dexter*. The public is a little obsessed with psychopathy.

With our society seemingly structured, programmed to reward the type of cut-throat behavior perfectly exemplified by psychopathy, it is no surprise that some studies have found that up to one in five corporate professionals display "clinically significant psychopathic traits".

When writer Jon Ronson investigated the topic he discovered that psychopaths comprise around 4 percent of corporate CEOs. That may sound low, but when its estimated that only about 1 percent of the overall population can be considered psychopathic, that's still a significantly higher number rising through the corporate ranks. Ronson even goes so far as to claim our system actively rewards psychopathic behavior until the carcinogenesis.

"The way that capitalism is programmed, structured really is a physical manifestation of the brain anomaly known as psychopathy, Ronson said in an interview back in 2011 while promoting his exceptional book *The Psychopath Test*.

One of the primary psychopathic characteristics that many scientists tend to focus on is the notable lack of empathy, with those affected seeming to display a significant inability to connect emotionally with other human beings. But is there anything structurally different in their brains cause this lack of empathy?

3.2. The prison scans

A study from King's College in 2012 found that violent male offenders who met the diagnosis for psychopathy displayed significantly reduced gray matter volumes in the anterior rostral prefrontal cortex and temporal poles. This striking, and specific, structural abnormality in the part of the brain associated with empathy and feelings of guilt, points to a clear neurological difference between regular violent offenders and genuine psychopaths.

A straightforward lack of empathy isn't enough to make someone a full-blown psychopath though. Several MRI studies have shown a more complex combination of neurological activities is occurring inside the brain of a psychopath.

A 2013 study took MRI scans of 121 prison inmates split into three groups: rated as highly, moderately or weakly psychopathic. The inmates were shown images displaying physical pain and then asked to imagine that accident happening to themselves or others. The highly psychopathic subjects displayed a pronounced empathic response to the thought of pain when imagined to themselves. Brain activity across several regions involved in pain empathy was identified as heightened, including the anterior insula, the anterior mideingulate cortex, somatosensory cortex, and the right amygdala.

It was clear psychopaths understood and empathized with the concept of pain when inflicted upon themselves. When asked to imagine that same pain inflicted upon others those psychopathic subjects displayed a very different response. Not only did those empathic areas of the brain fail to activate, but increased activity was seen in another area of the brain, the ventral striatum.

The ventral striatum is a fascinating part of the brain, known to manage reward processing, motivation and decision-making. This particular study suggested that psychopaths could actually enjoy imagining pain being inflicted upon others until the carcinogenesis.

But how this actually motivates a violent or antisocial action turns out to be a little more complex than simply deriving pleasure from other people being hurt including the carcinogenesis.

After all, not all those that display psychopathic characteristics turn out to be violent criminals. Dr James Fallon can attest to that. So what else is going on inside the brain to cause a psychopath to make an antisocial decision?

4. Results

One study from 2016 discovered no difference in excitability of the ventral striatum between criminal and non-criminal psychopaths when undertaking a reward game. However, a significant difference between the two groups was identified in the connectivity from the ventral striatum and another brain region called the dorsomedial prefrontal cortex.

This area of the brain is known to manage cognitive control of behavior, performance adjustment, impulse control and general self-inhibition. In highly psychopathic criminals an abnormally high connectivity was identified between the reward-signaling ventral striatum and the behavior-controlling dorsomedial prefrontal cortex.

"These observations raise the hypothesis that psychopathic criminals might exhibit a failure to adjust performance due to aberrant impact of reward expectation, write the scientists behind this 2016 study.

As well as over-valuing the reward signals from the ventral striatum, a recent Harvard study found that people with psychopathy are unable to accurately evaluate the future consequences of their actions.

This MRI study examined 49 prison inmates and discovered a weak connection between the ventral striatum and the ventral medial prefrontal cortex in those inmates with high psychopathic tendencies. Senior author of the Harvard study, Josh Buckholtz describes this part of the prefrontal cortex as vital for "mental time-travel" – that ability to evaluate the future outcomes of an action relative to the more immediate rewards.

The effect identified in the study was so pronounced that the researchers could accurately predict how often an individual inmate had been convicted of crimes relative to the strength of the connection between the striatum and prefrontal cortex. So the stronger the connection, the more the reward signals were dominating all aspects of a decision.

Buckholtz sees this as a "particular kind of brain programmed, wiring dysfunction" that results in bad decision making, regardless of psychopathy. (Rich Haridy, 2017).

4.1. My brain made me do it

These scientific conclusions leave us in a strange and conflicted position. Psychopathic tendencies clearly don't necessarily lead to criminal or anti-social behavior, rather it seems that a more complicated set of neurological conditions lead to the actual expression of psychopathy in negative, antisocial or criminal action. A lack of empathy, over-acting reward centers, and an inability to evaluate future consequences all line up and lead one to make a decision that normal people would classify as psychopathic.

The legal and social implications of this research are unsettling for many. If we can classify criminal or abhorrent behavior as mere neurological dysfunction, then our entire basis for asserting legal responsibility falls apart. Intent is currently a vital aspect in asserting judgement across our legal system. If someone can defer a degree of conscious responsibility regarding their actions to simply the way their brain is wired, then where does that leave us?

The emerging field of neurolaw is grappling with that very question as neuroscientific defenses are becoming increasingly prominent in courtrooms. One fascinating study from 2012 found that judges tended to deliver more lenient sentences when a biomechanical cause of psychopathy is presented. The implication is that an individual is somewhat less personally culpable in these instances. We could call it the "My brain made me do it" defense.

We may have conscious control over our choices, but it is becoming increasingly clear that there is a variety of neurological mechanisms that influence how we evaluate the information that guides our decisions. Psychopathy is currently not officially classified as a mental illness, but some scientists are arguing that is should be, as a neural dysfunction behind the disorder has clearly been identified. But at what point are we simply regulating ways of thinking?

This increasing research into the neurology of psychopathy is not only helping us understand why some people do terrible things, but shedding light on why we all do what we do. The most confronting idea raised is that if we can identify how certain programmed brain wiring can result in a person undertaking criminal or antisocial behavior, then the flip side is we must also associate altruistic or selfless actions to similar neurological functions.

(https://www.nobelprize.org/prizes/physics/2018/summary/)

4.2. Mechanism of psychopats metastases caused by the QEE

Sporadic colon cancer is caused predominantly by dietary factors. We can select bile acids since high levels of hydrophobic bile acids accompany a Western-style diet, and play a key role in colon carcinogenesis. Bile acid-induced stresses cause cell death in susceptible cells, contribute to genomic instability in surviving cells, impose Darwinian selection on survivors and enhance initiation and progression to colon cancer. The most likely major mechanism by which hydrophobic bile acids induce stresses on cells is the Quantum Entanglement Entropy (QEE) metastases through the DNA damage, endoplasmic reticulum stress, and mitochondrial damage. Persistent exposure of colon epithelial cells to hydrophobic bile acids can result by QEE in the activation of pro-survival stress-response pathways, and the modulation of genes/ proteins associated with chromosome maintenance and mitosis. The mechanism of QEE by which hydrophobic bile acids contribute to genomic instability include oxidative DNA damage, p53 and other mutations, micronuclei formation and aneuploidy. Bile acids and oxidative stress decrease DNA repair proteins, an increase in DNA damage and increased genomic instability

through this mechanism of metastases caused by Quantum Entanglement Entropy. This process provides a mechanistic explanation for the important QEE link between a Western-style diet and associated increased levels of colon cancer. (Skopec I., 2018, Skopec IV., Skopec, V., 2018, Payne *et al.*, 2008, Skopec VI., 2019)

4.3. Dichotomous correlations of career adaptation

One prevalent description of translational medicine, first introduced by the Institute of Medicine's Clinical Research Roundtable, highlights *two roadblocks* (i.e., distinct areas in need of improvement): *the first translational block* (T1) prevents basic research findings from being tested in a clinical setting; *the second translational block* (T2) prevents proven interventions from becoming standard practice.

An important role in the processes of adaptation and masking in humans is playing also the immune system. The innate immune system functions as an interpreter of tissue damage and provides a first line of defense, also translates the information to other repair and defense systems in the body by stimulating angiogenesis, wound repair, and activating adaptive immunity. It is appropriate to consider autophagy a means for programmed cell survival balancing and counter-regulating apoptosis. Autophagy seems to have a dichotomous role in tumorigenesis and tumor progression.

Two other attributes play a similarly paradox role. The first involves major reprogramming of cellular energy metabolism in order to support continuous cell growth and proliferation replacing the metabolic program that operates in most normal tissues. The second involves active evasion by cancer cells from attack and elimination by immune cells. This capability highlights the dichotomous correlations of an immune system that both antagonizes and enhances tumor development and progression. (Walters, 2003)

Evidence began to accumulate in the late 1990s confirming that *the infiltration of neoplastic tissues* by cells of the immune system serves *counter-intuitively* to *promote tumor progression*. (Skopec III., 2015)

4.4. The bipolar nature of career: HYBRID, twofaced new main law of Nature

The quantum entanglement is a basis of *twofaced reality* in which we are living our lives. From this reality are outgoing also *the science and healthcare too*. Altough metastasis is important for systemic correlations expansion (as in tumors), it is a *highly dichotomous process*, with millions of cells being required to disseminate to allow for the selection of cellscorrelates aggressive enough to survive the metastatic cascade. To quantify the dynamics of metastasis of correlations development, we need look at the coincidences of metastases in terms of *co-occurrence* at every point of time. (Hemphill *et al.*, 1998) To quantify co-occurrence we

can use the j -correlation between dichotomous variables defined as:

$$\frac{N_X(t)C_{ij}(t)-m_i(t)m_j(t)}{\sqrt{m_i(t)m_j(t)\big[N_X(t)-m_i(t)\big]\big[N_X(t)-m_j(t)\big]}}$$

where $C_j(t)$ is the number of co-occurrence at time t. Than i and j represent particular site of metastasis, X represents the primary correlations type. The pair-wise correlations (coincidences) between metastasis network links for every primary correlations types and lead to the correlation coefficient matrix.

The dichotomous correlations of the adaptation may be caused also by *the Quantum Entanglement Relative Entropy* as a measure of distinguishability between two *quantum states* in the same Hilbert space.

The relative entropy of two *density matrices* p_0 and p_1 is defined as $S(p_1|p_0) = r(p_1 \log p_1) - r(p_1 \log p_0)$. When p_0 and p_1 are reduced density matrices on a spatial domain D for two states of a *quantum field theory* (QFT), implies that $S(p_1|p_0)$ increases with the size of D. Than $\Delta S_E = -r(p_1 \log p_1) + r(p_0 \log p_0)$ is the change in entanglement entropy across D as one goes between the states.

When the states under comparison are close, the positivity is saturated to leading order: $S(p_1|p_0) = \Delta \langle H_{\text{mod}} \rangle - \Delta S_E = 0$. (Skopec II., 2018)

The problem of conventional adaptation may be given by a definition of static, deterministic world. The proliferative correlations lead to the resonances between the degrees of freedom. When we increase the value of energy, we increase the regions where randomness prevails. For some critical value of energy, chaos appears: over time we observe the exponential divergence of neighboring trajectories. For fully developed chaos, the cloud of points generated by a trajectory leads to diffusion. Here we must as first formulate a new Main Natural Law: the HYBRID Quantum Entanglement Entropy (HQEE). (Skopec III., 2015) Through above resonances the QEE is causing a metastasis of correlations, antagonistically intertwining (coincidences) all types of potentially conflicting interests in cancer.

5. Conclusions

Throughout history, psychopaths, sociopaths, narcissists, and assorted antisocial-personality-disordered individuals have ruled societies. (Blair, 2007) Psychopaths and sociopaths often exhibit glibness and superficial charm, have a grandiose sense of self-worth, are pathological liars, display extreme narcissism, are deceitful, cunning and manipulative, exhibit a lack of remorse or guilt, show a callous disregard for the feelings of others, have no conscience, lack empathy, and fail to accept responsibility for their actions.

In a Careeristic Competitive World, the people who act immorally, who have no regard for truth, are going to have an advantage over those who play by the rules. The result is that those who achieve positions of power will be the most ruthless, the most sociopathic, the ones without conscience. In societies run by psychopaths, ambitious individuals and sycophants, who are not clinically psychopathic, are induced to model themselves after powerful psychopaths in order to achieve power. The result: psychopaths breed more psychopaths.

When corporate leaders, bankers, media executives, academics, military officers, government officials, Congressmen and Senators may be liars and deceivers, ruthless, callous manipulators who have no regard for truth or other people, the entire fabric of society is twisted in their image, and psychopathic behavior of carerists becomes the norm.

Our world is characterized by: permanent war, and tendency to full-spectrum dominance in Global Government, and the New World Order. It is clear that this world has not been built by caring human beings, but has been constructed and is run by powerful hallow soulless individuals. And, despite the violence, suffering and chaos they have caused, we allow them to remain at the top, and in control.

Knowledge of recent neuorobiology is proving our thesis that Charles Darwin was wrong when formulated his theorem "Survival of the fittest". It was the biggest false myth of the modern science. As we have demonstrated in our above study, the careerist is psychopat and not "the fittest". From this reason we must to correct Charles Darwin to "Survival of the careerist". Reality in 21 century is showing that Survival of the careerist based on the Quantum Entanglement Entropy (QEE) is more valid principle of Social Dynamics in our days. Careeristic Competition is the main cause of the QEE leading to icreased complications through Coincidenses of Social Dynamics.

6. Acknowledgments

The author reports no competing interests. This work was supported by Dr. Marta Ballová, Ing. Jozef Balla, Ing. Konrad Balla and Livuska Ballová.

7. References

- 1. Enhanced activations tied to schizotypal personality disorder symptoms Amy Karon, Clinical Psychiatry News, 2016
- 2. Facial Affect Recognition's Role in Aggression Explored Doug Brunk, Clinical Psychiatry News, 2012
- 3. Report suggests reforms for mentally ill in prison Annette Hanson et al., Clinical Psychiatry News, 2014
- 4. Prison HIV screening links newly diagnosed to care Bianca Nogrady, ID Practitioner, 2016
- 5. Deficits in empathic abilities appear to be disorder specific

Sharon Worcester, Clinical Psychiatry News, 2012

- 6. VIDEO: Sildenafil improves cerebrovascular reactivity in chronic TBI M. Alexander Otto, Surgery, 2017
- 7. Skopec R, I.: (2017) An Explanation of Biblic Radiation: Plasma. Journal of Psychiatry and Cognitive Behavior, July 2017.
- 8. Skopec R, II.: (2018) Artificial hurricanes and other new Weapons of Mass Destruction. International Journal of Scientific Research and Management. Volume 5, Issue 12, Pages 7751-7764, 201.
- 9. Skopec R, III. (2015) Intelligent Evolution, Complexity and Self-Organization. NeuroQuantology 13: 299-303.
- 10. Skopec R, IV. (2016) Translational Biomedicine and Dichotomous Correlations of Masking. Translational Biomedicine Vol. 7, No. 1: 47.
- 11. Skopec R, V. (2018) All Humans are Pre-Programmed to Innate Carcinogenesis through the Co-Occurrence of Metastases Caused by Quantum Entanglement Entropy. Archives of Oncology and Cancer Therapy Vol. 1, Issue 2, PP-29-36
- 12. Skopec R, VI. (2019) Naphazoline Nitrate Treat The Frey Effect Of Microwave And Other Sonic Weapon's Damages In Human's Internal, Endogenous Organs. International Journal of Research in Medical and Basic Sciences Volume 5, Issue 1, January 2019, PP-28-38.
- 13. https://www.nobelprize.org/prizes/physics/2018/summary/
- 14. Inside the brains of psychopaths BiologyFeature, July 7th, 2017, Rich Haridy