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Review Article

Recognizing Limitations: Overcoming Challenges in Enhancing Health and Preventing Disease

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ABSTRACT

The advancement of human progress hinges on the ability to identify limitations and develop innovative solutions, particularly in the field of healthcare. While modern medicine has made significant strides in treating various illnesses, it often fails to address the root causes of diseases, impeding the recovery process for many patients. To overcome this challenge, healthcare professionals require a more comprehensive and integrative approach to healthcare that combines rational and logical thinking. Rationality offers a systematic and evidence-based method for understanding and treating diseases, providing healthcare professionals with a strong foundation for developing treatment plans. However, rational thinking has limitations in terms of our observational abilities, which can lead to misdiagnosis and ineffective treatments. On the other hand, logical thinking provides a more creative and flexible approach to problem-solving, which is particularly useful in addressing complex and multifaceted health issues. This approach enables healthcare professionals to think outside the box, consider alternative solutions, and tailor treatment plans to individual needs. By combining rational and logical viewpoints, healthcare providers can enhance their comprehension of a patient's condition, resulting in more favourable treatment results. Halalopathy, which employs a merged thought process, has been introduced to tackle the challenges and limitations of modern medicine. Halalopathy is a holistic healthcare approach that integrates rational and logical thinking, providing a more comprehensive understanding of illness prevention and disease at a psychopsychological level.

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Introduction

Humans have the ability to recognize limitations and enrich the potential to innovate solutions to overcome them. This is a key aspect of human progress and advancement. Thus, we have the potential to identify problems and create new ideas, technologies, and methods to solve them. The ability to recognize and overcome limitations is important for both personal and societal growth [1-4]. This has led to many advancements in various fields including medicine, science, technology, and many other subjects. Despite the advancements in modern medicine, true healing still remains a challenge. Current treatments, such as therapeutic drugs, surgery, radiation therapy, and other interventions, often fail to address the underlying causes of disease. This results in managing the symptoms rather than addressing the root cause of the disease, which hinders true recovery. In addition, the conventional medical approach often views the human body as a mechanical system with individual

organs performing distinct functions, rather than acknowledging it as a social entity capable of experiencing a complex mix of emotions and sensations. This limited perspective may result in fragmented treatment that only addresses individual symptoms instead of treating the patient as a whole entity [5, 6].

In order to truly overcome diseases, a synergistic approach is needed. This means bringing together multiple perspectives, methods and values to address the complex and multifaceted nature of the disease. Some have attempted to create this synergy through combined therapy or integrating traditional and alternative medicine. Although traditional methods and strategies in healthcare do not always produce the desired outcomes, it is necessary to adopt new perspectives and explore alternative approaches [7-10]. A potential solution is to incorporate a rational and logical perspective, which involves approaching health problems with an objective and unbiased mindset, utilizing cognitive and

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logical skills to identify the underlying causes of diseases. This approach can lead to a more thorough and comprehensive understanding of the challenges. The use of rationality in healthcare offers a systematic and evidence-based method for comprehending and treating ailments. It aids in the identification of causal relationships and the development and testing of hypotheses. Rationality also facilitates the evaluation of the efficacy and safety of various treatments. On the other hand, the use of rationality in healthcare, while beneficial, is constrained by the limitations of our observational abilities. Because we are unable to observe every aspect of a patient's condition, a purely rational approach is often unable to fully diagnose and address the root causes of a disease. As a result, treatments that focus solely on the observable symptoms of an illness may only provide temporary relief, rather than achieving complete recovery. In this sense, relying solely on rationality in healthcare may lead to an incomplete understanding of the patient's condition and hinder the ability to achieve optimal outcomes [11-14].

A logical way of thinking involves utilizing analogies to extrapolate and apply information from one situation to another in order to solve unobservable issues. By analysing and identifying similarities between seemingly unrelated scenarios, a logical thinker can draw meaningful connections and apply insights to solve complex problems that may not have obvious solutions. This approach allows for a more creative and flexible problem-solving process, which can be particularly useful in healthcare, where patients may present with unique and multifaceted conditions that require a holistic and individualized approach. By incorporating logical thinking into healthcare, medical professionals can consider a wider range of perspectives and possibilities, which may lead to more innovative and effective treatments [15-19].

Integrating both rationality and logic can result in a more thorough and efficient approach to treating illnesses. Such an approach would not only focus on the physical symptoms of the disease but also consider the psychological, emotional, and social factors that contribute to its development and persistence. By considering the patient as a whole, we can move beyond just managing symptoms and work towards achieving true healing and recovery. This comprehensive approach enables healthcare professionals to tailor treatment plans to each individual patient's needs, including their unique outlook and understanding of their illness, resulting in more effective outcomes [20-24].

This manuscript explores the challenges that come with achieving complete recovery from illness, even with modern medical treatments and interventions. It explores the idea that an overemphasis on rationality and logic in the medical field can sometimes result in overlooking alternative viewpoints and knowledge sources. As such, the manuscript proposes that a combination of rational and logical thinking is necessary to effectively address and overcome diseases. By considering all aspects of the patient's health, including psychological, emotional, and social factors, as well as the physical symptoms, we can move beyond just managing symptoms and towards genuine healing and recovery.

Challenges and Limitations that Science Faces

Science has made remarkable progress in understanding the human body and developing medical treatments, but its progress is hindered by numerous limitations such as complexity, variability, ethics, technology

and funding constraints [25, 26]. The human sciences have also made progress in understanding human personality and its connection to health, but still encounter hurdles such as subjectivity, complexity and the lack of a unified theory [27-29]. Physics faces limitations at the microstate level due to the uncertainty principle, differences between quantum mechanics and classical mechanics, incomplete knowledge, experimental techniques and complexity, which makes understanding and predicting the behaviour of particles difficult and leaves many questions unanswered [30-34]. Similarly, cancer research and treatment have made impressive progress, but the limitations of our current scientific knowledge make it difficult to achieve a complete recovery from cancer. These limitations include the heterogeneity of cancer, late detection, treatment resistance, side effects of treatment, lack of effective treatments for certain cancers and the risk of recurrence. Therefore, complete recovery from cancer remains a challenging and complicated goal for healthcare providers and patients. The COVID-19 pandemic has highlighted the limits of science and our understanding of the human body. Individuals have had to rethink the fundamental principles on which their lives are built, as the emphasis on the essential and the use of the senses to acquire knowledge and apply scientific methods, especially in the 20th century, has been challenged. The coronavirus outbreak has exposed the inadequacies of global health systems in combating a rapidly spreading virus. Despite taking prescribed medication, people are plagued by the constant anxiety of death [35-38].

Advancements in medical research and practice are key to making significant progress in the field of human disease. However, progress can be hindered by the complexity of the human body and the obstacles that impede our understanding of health issues. Therefore, it is crucial to recognize the need for innovative approaches that take into account both the mental and physical aspects of human nature.

A comprehensive understanding of human personality and the homeostatic processes within the human body is also necessary for the development of personalized medicine and the activation of the immune system. This can lead to better prevention and treatment strategies for various diseases, improving health outcomes for individuals and communities. To achieve these goals, addressing the challenges that hinder medical research and practice is essential. This includes the need for improved collaboration and communication among healthcare professionals, researchers, and patients. Additionally, the use of technology and data-driven approaches can enhance our understanding of human disease and support the development of effective treatments [39-42].

Halalopathy is a medical approach that acknowledges these limitations and proposed potential solutions to overcome them. By embracing innovative approaches and promoting medical research and practice, we can continue to make significant strides towards improving human health and well-being.

Halalopathy

Halalopathy is a medical approach that integrates the principles of physics, chemistry, and medicine to comprehend the human body at both molecular and quantum levels [43, 44]. Its main objective is to enhance overall health and prevent illness by boosting the body's immune system

and fostering a balanced relationship between lifestyle, potential, and entropy. Homeostasis enrichment is a key component of preventive measures, whereas curative measures emphasize the establishment of a synergistic connection between medication and lifestyle alongside the activation of the immune system. Halalopathy considers entropy and

potential energy to be fundamental, opposing forces present in all objects, and utilizes them as a foundation for its medicinal practices. These forces are crucial to comprehending the physical world and its natural phenomena, as they are interdependent and cannot exist without each other (Figure 1).

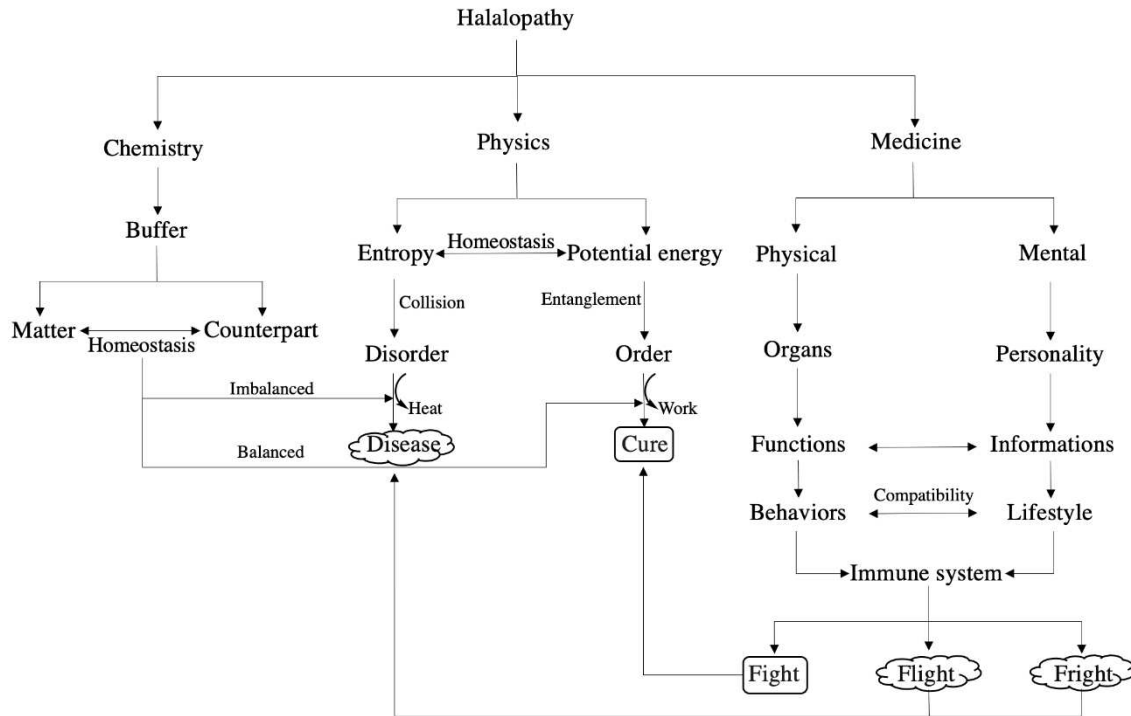


Figure 1: Flowchart for Halalopathy.

The concept of entropy refers to the negative and passive aspect of matter, resulting in the accumulation of heat. This force is associated with spontaneous or involuntarily acquired energy and leads to disorder and chaos within a system. In contrast, potential energy represents the positive and active aspect of matter, expressed through work. This force is connected to non-spontaneous or voluntarily acquired energy and plays a key role in maintaining order and structure within a system [45, 46].

In chemical reactions, entropy is linked to a reduction in the order and organization of molecular structure, including its constitution, configuration, and conformation, and an increase in vibrational, rotational, and translational motions. Within the body, entropy causes the temperature to increase by producing heat, while potential energy can be utilized to perform work. Anabolic products generally have greater potential energy compared to their reactants and are typically stored within bonds, spatial orientation, and self-organization, which ultimately translate into information and functions. Structural disorder arises from changes in the molecular constitution, configuration, and conformation, whereas functional disorder results from disordered orientation and electronic distribution of molecules. Informational disorder, on the other hand, can be attributed to either a genomic or a psychological trait disorder [47].

Homeostasis plays a crucial role in halalopathy by maintaining equilibrium and coordination of multiple factors, such as chemical

concentrations, biochemical reaction rates, body temperature, and pressure. It refers to the process of balance and regulation within the body. These variables are regulated by the brain, which functions as the central unit. In order to achieve homeostasis, a variety of energy sources must be supplied and a harmonious equilibrium between anabolic and catabolic processes must be achieved. This balance can be sustained through a diverse diet, sufficient sleep, appropriate exercise, and intermittent fasting. Material and non-material values also play a role in maintaining homeostasis, and a buffering relationship between the two is necessary to overcome challenges and obstacles. The enrichment of buffering capacity can be achieved through the integration of human, moral, and spiritual values, which can help to create a balance with materialistic values. Just like the acid-base buffer solutions in the body, each component has the potential to exist alongside its counterpart, thereby effectively buffering one another. To enrich the buffering capacity of lifestyle, it is helpful to combine medicine and lifestyle, which can reduce entropic overload and maintain equilibrium between potential energy and entropy. This equilibrium is essential for maintaining homeostasis and activating the immune system [48].

Understanding the human personality is crucial in effectively addressing mental and physical health through halalopathy. The personality is a complex and constantly changing aspect of our being, and it plays a significant role in our ability to live a purposeful existence. The formation of personality is influenced by three essential components: mentality, psyche, and values. The mentality aspect of our personality

encompasses our capacity to make well-informed decisions and form precise judgments regarding the surrounding environment. To achieve an effective assessment of reality, having a dependable frame of reference or a personal philosophy can prove beneficial. The psyche refers to our inner motivations that drive us to take action, and it is important to regulate the fundamental and essential forces to ensure overall health and well-being. Personal values have a decisive influence on our relationships and interactions with others. Attaining equilibrium between materialistic and non-materialistic values is pivotal in upholding stability and averting collapse. Building personality involves adopting a lifestyle and establishing reference points that serve as motivators and drivers to maximize our physical and personal potential. In this regard, committing to a reference point, such as a higher power or deity, is crucial for making sound decisions and realizing our full potential for personal growth and development [49].

In halalopathy, the immune system is recognized as a critical component for preventing and recovering from illnesses. The intricate physiological and biochemical processes of the body necessitate a delicate balance between anabolic and catabolic activities. During growth, the anabolic process predominates, while in later life, the catabolic process dominates, leading to a decline in the efficiency of the immune system and an increase in entropy. When the immune system is activated in fight mode, biochemical reactions occur at an ideal rate, stress is low, and communication between the brain and body is at a maximum. In contrast, in the fright mode, stress dominates, potential energy is dispersed, and entropy accumulates, leading to a less effective and non-coordinated immune response. Similarly, in the flight mode, potential energy is suppressed, and the immune system is less effective. To keep the immune system active, it is essential to explore all possible energy resources and added values to generate enough potential energy. Eating compatible and biodegradable foods, anabolic thinking, selecting appropriate sources of information, breathing deeply, exercising regularly, and resisting fear and grief are some of the ways to enrich potential energy and maintain fight mode active [50-52].

In the context of cancer treatment, the mind's role cannot be underestimated. Research has shown that the mind can significantly impact the body's response to treatment, and this underscores the importance of establishing a system that connects the mind, behaviour, and health. Therapeutic drugs can be used to target cancer cells, while the mind can guide the body's response to the drugs. This cooperation between the mind and drugs has the potential to create a more effective treatment plan that improves patient outcomes.

One of the significant challenges in drug treatment is the limited duration of drug effectiveness due to incompatibility with the human body. To overcome this obstacle, a personalized therapy approach is necessary to adapt drugs to the patient's lifestyle preferences. This approach involves establishing a compatible system that addresses the patient's lifestyle requirements, religious beliefs, and any sensitivities to specific drug ingredients. The compatibility between therapy and the mind can create a tolerance system, reducing rejection mechanisms and prolonging the duration of action of the drug, ultimately leading to more effective treatments. Compatibility creates potential, and the way to establish a compatible system is through drug labeling. For instance, drugs can be labeled vegan, kosher, halal, gluten-free, lactose-free or glucose-free to

ensure compatibility with certain lifestyle choices. This approach enables patients to select drugs that align with their lifestyle preferences and religious beliefs, which can significantly improve treatment adherence and outcomes.

By establishing a personalized therapy approach that considers a patient's lifestyle preferences, a compatible system can be developed that enhances drug compatibility and duration of effectiveness. This approach requires collaboration between healthcare providers, pharmacists, and patients to ensure that the right medications are selected for each patient's unique needs. To enhance the potential for recovery, a harmonized treatment system can be integrated with multiple effects. One of these effects is the placebo effect, which can be triggered by establishing a compatible system that increases trust in the drug. The placebo effect can contribute to the overall treatment effect, leading to a higher total effect in the body resulting from the drug effect, placebo effect, and harmonized effect. When all of these effects are coordinated, they activate a synergistic effect, which acts as an outsourcing effect. Moreover, the harmonized effect can potentially lead to favourable circumstances for a "miraculous" cure that promotes the healing process towards complete recovery. By addressing all aspects of the patient's health, including physical, mental, and emotional well-being, a comprehensive and holistic approach can maximize the body's natural healing potential and lead to improved treatment outcomes [53-55].

During the Corona period, halalopathy has contributed to global health by providing possible prevention and recovery from Corona infections. Normally, COVID-19 is primarily spread through respiratory droplets released by infected individuals during coughing, sneezing, talking, or breathing. These droplets can contain the virus and travel through the air before landing on surfaces where they can remain infectious for an extended period of time. As the intensity of the virus increases, its potential energy increases as well, causing a coordinated action of particles that can transform it into more aggressive particles capable of infecting and spreading the infection to others [56].

The Halalopathy hypothesis proposes that the intensity of the virus inside the body and in the surrounding environment is proportional. Therefore, if the intensity of the virus inside a person increases, the intensity around them also increases, and vice versa. This hypothesis is based on the Le Chatelier principle, which explains that systems in equilibrium will respond to changes in conditions by shifting in a direction that counteracts the change. As a result, reducing the virus's intensity outside the body could lead to a corresponding decrease in the virus's intensity inside the body, ultimately lowering the risk of infection. Accordingly, the hypothesis suggests that decreasing the virus's intensity in the environment could be an effective strategy for controlling the virus's spread.

Measures such as ventilation, air filtration, and disinfection could help reduce the virus's intensity in the environment. By disrupting the equilibrium between the virus inside the body and the environment, it may be possible to tip the balance in favour of decreasing the virus's intensity both inside and outside the body (Figure 2).

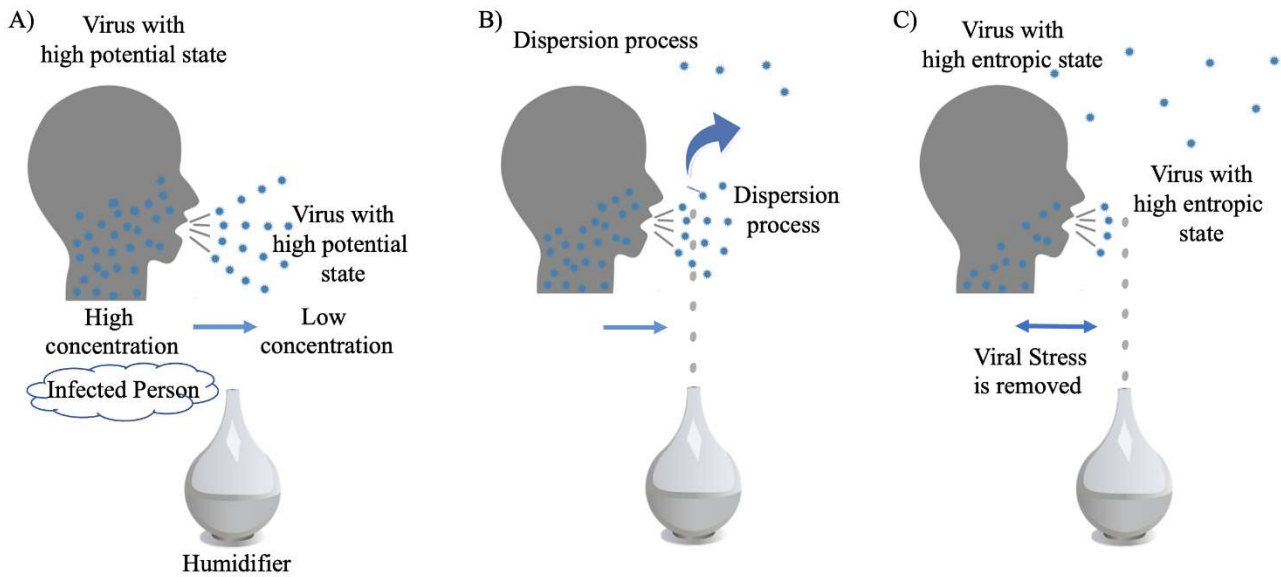


Figure 2: Le Chatelier's Principle in Action: Controlling Corona Spread through Dispersion Processes.

The Halalopathy hypothesis is rooted in the principle of self-organization in nature, which describes how complex systems can adapt and respond to changing conditions to maintain stability and equilibrium. Therefore, by applying this hypothesis to COVID-19 control measures, it may be possible to effectively disrupt the virus's spread and reduce its impact on public health.

Disinfection is commonly used to reduce disease transmission and propagation by targeting the channel used by the virus to enter, settle, integrate, grow, and contaminate the surrounding environment. However, selecting a disinfectant that can inactivate the virus without harming patients when administered by inhalation is crucial. Most antiseptics/disinfectants available are toxic when inhaled, so alternatives are necessary. A literature search suggests a bicarbonate and sodium chloride mixture as a potential disinfectant, which is compatible with the patient's body, has a buffering capacity, and can be inhaled without harmful effects.

According to the information provided, an effective buffer solution for disinfection should have a pH close to the body's pH of 7.4 and contain 5% sodium ions. To achieve this, a mixture of 3% sodium bicarbonate, 2% sodium chloride, and 0.15% acetic acid is proposed. The addition of acetic acid helps adjust the pH and increase the buffering capacity of the solution. The proposed treatment can be administered by inhalation using an electric humidifier. The humidifier disperses the treatment mixture in the surrounding atmosphere, increasing the entropic state of virus particles and reducing their potential for infection and transmission. The high concentration of ionized particles in the mixture attracts viruses electrostatically, potentially leading to their inactivation. The ion concentration also creates a high osmotic effect, increasing the density of the surrounding liquid and potentially removing water from the virus. The buffer solution's compatibility with the human body and maintenance of a homeostatic pH make it an ideal disinfectant for inhalation delivery.

Conclusion

Humans have the ability to overcome limitations and achieve advancements in various fields, including medicine. However, current treatments often fail to address the root cause of diseases, and a comprehensive approach that considers all aspects of the patient's health is necessary for more effective outcomes. Science faces numerous challenges and limitations in its pursuit of understanding the human body and developing effective treatments for diseases, but progress and innovation are possible through improved collaboration, communication, and data-driven approaches. Halalopathy integrates physics, chemistry, and medicine to understand the human body at the molecular and quantum levels, with a focus on enhancing overall health and preventing illness by fostering a balanced relationship between lifestyle, potential, and entropy. Homeostasis enrichment and a harmonious equilibrium between anabolic and catabolic processes are critical components of Halalopathy, and the immune system plays a vital role in both preventive and curative measures. Building personality and connecting the mind, behaviour, and health are also crucial for maximizing physical and personal potential, particularly in the context of cancer treatment. By addressing these challenges and limitations, we can work towards improving human health and well-being and achieving better outcomes for patients and communities.

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Ethical Statement

The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Conflicts of Interest

None.

REFERENCES

1. Shalley CE, Hitt MA, Zhou J (2015) *The Oxford Handbook of Creativity, Innovation, and Entrepreneurship*. Oxford Library of Psychology.
2. Sawyer RK (2006) *Explaining creativity: The science of human innovation*. Oxford University Press.
3. Sternberg RJ (2003) *Wisdom, intelligence, and creativity synthesized*. Cambridge University Press.
4. Zollo M, Winter SG (2002) Deliberate Learning and the Evolution of Dynamic Capabilities. *Organization Science* 13: 339-351.
5. Kaptchuk TJ, Miller FG (2015) Placebo effects in medicine. *N Engl J Med* 373: 8-9. [Crossref]
6. Le Fanu J (2016) *The rise and fall of modern medicine*. Basic Books.
7. Boon H, Verhoef M, O'Hara D, Findlay B (2004) From parallel practice to integrative health care: A conceptual framework. *BMC Health Serv Res* 4: 15. [Crossref]
8. Horneber M, Bueschel G, Dennert G, Less D, Ritter E et al. (2012) How many cancer patients use complementary and alternative medicine: A systematic review and metaanalysis. *Integr Cancer Ther* 11: 187-203. [Crossref]
9. Maizes V, Rakel D, Niemiec C (2009) Integrative medicine and patient-centered care. *Explore: medicine and patient-centered care*. *Explore (NY)* 5: 277-289. [Crossref]
10. World Health Organization (2013) *WHO Traditional medicine strategy 2014-2023*. WHO Press.
11. Kelly MP, Barker M (2016) Why is changing health-related behaviour so difficult? *Public Health* 136: 109-116. [Crossref]
12. Kuhn TS (1970) *The Structure of Scientific Revolutions* (2nd ed.). University of Chicago Press.
13. Richards T, Montori VM, Godlee F, Lapsley P, Paul D (2013) Let the patient revolution begin. *BMJ* 346: f2614. [Crossref]
14. Sackett DL, Rosenberg WM, Gray JA, Haynes RB, Richardson WS (1996) Evidence based medicine: what it is and what it isn't. *BMJ* 312: 71-72. [Crossref]
15. Johnson Laird PN (2010) Mental models and human reasoning. *Proc Natl Acad Sci* 107: 18243-18250. [Crossref]
16. Kahneman D (2011) *Thinking, fast and slow*. Macmillan.
17. Pomerantz J.R, Kubovy M (2010) Theoretical approaches to perceptual organization: simplicity and likelihood principles. In the *Oxford handbook of perceptual organization*. Oxford University Press 35-50.
18. Stanovich KE, West RF (2008) On the relative independence of thinking biases and cognitive ability. *J Pers Soc Psychol* 94: 672-695. [Crossref]
19. Tversky A, Kahneman D (1974) Judgment under Uncertainty: Heuristics and Biases. *Science* 185: 1124-1131. [Crossref]
20. Slade M (2009) *Personal Recovery and Mental Illness: A Guide for Mental Health Professionals*. Cambridge University Press.
21. Davidson L (2005) Recovery, self-management and the expert patient - changing the culture of mental health from a UK perspective. *Journal of Mental Health* 14: 25-35.
22. Charmaz K (1991) *Good days, bad days: the self in chronic illness and time*. Rutgers University Press.
23. Ziebland S (2004) The importance of being expert: the quest for cancer information on the Internet. *Soc Sci Med* 59: 1783-1793. [Crossref]
24. Groopman J (2008) *How Doctors Think*. Mariner Books.
25. Horgan J (1997) *The End of Science: Facing the Limits of Knowledge in the Twilight of the Scientific Age* (Broadway Books).
26. Mohajerzad H, Martin A, Christ J and Widany S (2021) Bridging the Gap Between Science and Practice: Research Collaboration and the Perception of Research Findings. *Front Psychol* 12:790451 [Crossref]
27. Camic PM, Rhodes JE, Yardley L (2003) *Qualitative research in psychology: Expanding perspectives in methodology and design*. American Psychological Association.
28. McAdams DP (2009) *The person: An introduction to the science of personality psychology*. John Wiley & Sons.
29. Cloninger CR, Svrakic DM, Przybeck TR (1993) A psychobiological model of temperament and character. *Arch Gen Psychiatry* 50: 975-990. [Crossref]
30. Griffiths DJ (2005) *Introduction to quantum mechanics*. Pearson Prentice Hall.
31. Feynman RP, Leighton RB, Sands M (2018) *The Feynman lectures on physics*. Basic Books.
32. Kuhn TS (1962) *The structure of scientific revolutions*. University of Chicago Press.
33. Greene B (2011) *The hidden reality: Parallel universes and the deep laws of the cosmos*. Alfred A. Knopf.
34. Susskind L (2015) *The black hole war: My battle with Stephen Hawking to make the world safe for quantum mechanics*. Back Bay Books.
35. Braveman P (2020) What are health disparities and health equity? We need to be clear. *Public Health Rep* 135: 147-150.
36. Krouse HJ (2020) COVID-19 and the Widening Gap in Health Inequity. *Otolaryngol Head Neck Surg* 163: 65-66. [Crossref]
37. Phelan JC, Link BG, Tehranifar P (2010) Social conditions as fundamental causes of health inequalities: Theory, evidence, and policy implications. *J Health Soc Behav* 51: S28-S40. [Crossref]
38. The Lancet (2020) The plight of essential workers during the COVID-19 pandemic. *Lancet* 395: 1587. [Crossref]
39. Lashuel HA, Overk CR, Oueslati A, Masliah, E (2013) The many faces of α -synuclein: from structure and toxicity to therapeutic target. *Nat Rev Neurosci* 14: 38-48. [Crossref]
40. Zyoud SH, Smale S, Waring WS, Sweileh WM, Al Jabi SW (2019) Global research trends in microbiome-gut-brain axis during 2009-2018: a bibliometric and visualized study. *BMC Gastroenterol* 19: 158 [Crossref]
41. Targher G, Day CP, Bonora E (2010) Risk of cardiovascular disease in patients with nonalcoholic fatty liver disease. *N Engl J Med* 363: 1341-1350.
42. Vanhaesebroeck B, Stephens L, Hawkins P (2012) PI3K signalling: the path to discovery and understanding. *Nat Rev Mol Cell Biol* 13: 195-203. [Crossref]
43. Alzeer J (2018) Halalopathic: a new concept in medicine. *J Mol Genet Med* 12: 353.
44. Alzeer J (2019) Halalopathy: A science of trust in medicine. *J Integr Med* 17: 150-154. [Crossref]
45. Alzeer J (2020) Entropy and potential energy as a key role of Halalopathy in disease prevention and cure. *Longhua Chin Me* 3: 20.

46. Alzeer J (2022) Halalopathy: Improving Potential Energy and Minimising Entropy offer an Integrative approach for more Effective Treatment. *Medicon Med Sci* 2: 21-24.
47. Alzeer J (2022) Directionality of Chemical Reaction and Spontaneity of Biological Process in the Context of Entropy. *Int J Regenr Med* 5(2): 1-7.
48. Alzeer, J (2023) The Role of Buffers in Establishing a Balance of Homeostasis and Maintaining Health. *Am J Med Chem* 4: 1-6.
49. Alzeer J, Benmerabet H (2023) The Development of Human Personality: A Comprehensive Overview. *Psychol Dis Res* 6(1): 1-8.
50. Alzeer J (2022) Halalopathy: Stimulation of the Immune System Through Enrichment of Potential Energy. *Int J Regenr Med* 5: 1-5.
51. Alzeer J (2022) Halalopathy: Anxiety and depression from logic and energetic perspectives. *Am J Biomed Sci & Res* 16: 378-384.
52. Alzeer J (2022) Halalopathy: Role of Entropy in the Aging Process. *Am J Biomed Sci & Res* 16: 147-154.
53. Alzeer J (2022) Halalopathy: Revival of Miraculous Cure and Creation of Favourable Circumstances for Cancer Therapy. *Medicon Med Sci* 2: 21-28.
54. Alzeer J, Hadeed, KA (2020) Halal Certification of Food, Nutraceuticals, and Pharmaceuticals in the Arab World. In: Laher I. (eds) *Handbook of Healthcare in the Arab World*. Springer Cham.
55. Alzeer J (2021) Permissible Medicine and Rationalization of Halal Pharma. *Halalsphere* 1: 43-52.
56. Alzeer J, Al Razem F (2021) Hypotheses: implementation of Le Chatelier's principle as a potential integrative method to prevent and or cure coronavirus. *J Public Health Emerg* 5: 1-7.