

# **GG:** Guesswork or Genomics? (A retrospective study)

Dhruv Subramanian, Massa N Mitterand

Dentistry and Biochemistry & Molecular Biology, India Biochemistry and Molecular Biology, USA

Date of Submission: 10-06-2024

Date of Acceptance: 20-06-2024

### **ABSTRACT**:

Genomics has the potential to revolutionize psychiatry by transitioning from hypothesis-driven approaches and opinions to data-driven insights. This paper explores the implications of integrating genomic data into psychiatric practices, particularly in diagnosing and treating conditions like temporomandibular joint (TMJ) disorders and stress via saliva tests. We argue that current practices, which often rely on outdated methods and guesswork, can be significantly improved through genomic insights.

-----

# I. INTRODUCTION:

Genomics in psychiatry remains underutilized, as evidenced by its absence in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition Text Revision (DSM-5 TR). This paper presents a case study highlighting the consequences of this gap, showing how guesswork can lead to harmful treatments. With advancements in AI, such as ChatGPT, and access to extensive genomic data, there is an urgent need to incorporate these tools into psychiatric practice. Current practices often depend on rigid protocols and outdated medications like lithium, prescribed without understanding their mechanisms or the patient's specific needs. This paper advocates for pre-treatment evaluations of biological markers to inform and improve psychiatric care.

#### Scientific Data Study:

This study delves into the molecular mechanisms underlying key signaling molecules such as Sphingosine-1-phosphate (S1P) and GABA (gamma-aminobutyric acid), examining their roles in both mental and cardiovascular health.

Sphingosine-1-phosphate (S1P) Transport:

1. Synthesis and Export from Cells:

- Synthesized from sphingosine by SPHK1 and SPHK2 enzymes.

- Exported from cells via ABC transporters like ABCC1 and ABCG2.

2. Circulation in Blood and Lymph:

- Binds to HDL and albumin in the extracellular environment.

3. Receptor-Mediated Signaling:

- Activates S1P receptors (S1PR1-5), influencing immune cells, endothelial cells, and smooth muscle cells.

4. Degradation and Recycling:

- Degraded by S1P lyase into hexadecenal and phosphoethanolamine.

- Recycled by S1P phosphatases.

GABA Transport and Function:

- Transport:

- Transported by GABA transporters (GAT-1 and GAT-3).

- Receptors:

- GABA\_A receptors (ionotropic) and GABA\_B receptors (metabotropic).

Effects on Heart and Emotions:

- Reduces heart rate and blood pressure through CNS calming effects.

- Emotions:

- Reduces anxiety and stress by enhancing inhibitory signals in the brain.

#### Clinical Relevance:

Understanding these molecular mechanisms is crucial for developing targeted therapies for diseases like cancer, autoimmune disorders, and cardiovascular conditions. S1P modulators and GABA enhancers offer promising therapeutic avenues.

**Case Study: Right vs. Wrong Diagnosis** (**Risperidone (Serotonin) vs. Sodium Valproate** (**GABA**)):The mixed **background** of the North Indian diet and proximity to the Indian Ocean has led to fish deficiency, which in turn affected GABA receptors (as referenced in source 2). This deficiency may cause aggression and an emotional regulation mismatch, potentially leading to mood disorders. A private practitioner in Goa, India,

<sup>-</sup> Heart:



lacking information, intervened with the antipsychotic Haloperidol. The patient. experiencing heartache due to personal and professional reasons, was injected with Haloperidol while sleeping, without consent, counseling, or information. Despite the patient posing no harm to self or others, as examined in the emergency room in the USA, they were transferred to a government asylum days, causing actual traumatic experiences.

The "feel good" hormone, influenced by relationships, personal religion, and professional racial factors, led to a lack of dopamine receptors. The body was rejecting other medications due to a lack of scientific diagnosis and nonsensical guesswork. The government environment, doctor overcrowding, and lack of listening over ten years led to the continued prescription of incorrect medication, despite being informed about side effects. This affected work, mind, finances, and increased stress, leading to further mental and relational deterioration.

Monitoring GABA via sodium valproate and dopamine via aripiprazole supplements is essential. Additionally, considering parents' advice on including cod liver oil or fish in the diet, along with gut regulation, heart health, managing aggression, relaxation through Surya Namaskar postures, exercises, and meditation, like dentistry meditative practices, could help regenerate health. The importance of family and friends is highlighted, and they are invited to socially understand their role in healing, leveraging a social mind network, which includes tools like immediate-release propranolol (Inderal) for managing tremors. Trial and error methods of hypothesis-based treatment leave patients suffering from errors instead of benefiting from data-driven treatment protocols, such as the one outlined below: Body action and thought automatically led to this practice, possibly due to a deficiency that researchers were working on: lipids in the myelin sheath. The National Institute of Mental Health and Neurosciences (NIMHANS) and other doctors mainly were prescribing serotonin, carbamazepine, lithium, quetiapine, Zonalta, and risperidone-medications affecting neurotransmitters-based on a trial-anderror hypothesis, without fully understanding the mechanisms of action. This approach often aligns them more with scientists engaged in hypothesisbased research rather than with medical doctors adhering strictly to the principle of doing no harm in human trials. The doctor from the Central Institute of Psychiatry said that serotonin comes from the gut. There is a pressing need for progress towards humane, goal-oriented research in the

medical and dental fields, driven by visionary ideas and a compassionate, loving commitment to the greater good, aimed at benefiting all humankind. Unlike in Biochemistry and Molecular Biology, now genetics with epigenetics understand loving, caring, and healing environments. Omega-3 with an artificial plastic sustainable coating might be toxic, similar to Happy formula type tablets that aim to create a feel-good effect. Alprax might be more effective in promoting calming and panic-free states. Anxiety or aggression can be understood as an adjustment disorder, which isn't merely adjusting to chicken over fish. Seeing that GABA is now given by new generational evidence and behavioral science guesswork-like minority report-genetics provides information like Doctors with genetic data insight treatment. Understanding molecular diagnostics may be missing from old psychiatrists still working with diagnostic manuals from 2014, while organized data information like that from 2018's massive genetic code explosion and more with AI ChatGPT on the scene from 2022-23 is invaluable.

Therefore, my conclusion is to take sodium valproate, until twenty years of deficiency in GABA receptors reach optimum levels to heal. REGENERATION: Incorporating Surya Namaskar (sun salutations) for light photons, combined with sodium channel regulation from bone resorption and absorption, along with gut health through dahi (yogurt), is crucial. Thank you, consent is important: No means no, and yes means yes until further understanding to make the best decision. The steps are: Mind, brain, heart, body, gut regulation.

- 1. Sodium valproate
- 2. Catfish
- 3. Surya Namaskar with breathing
- 4. Water from dahi, milk-like lassi

5. "Healthy smiles: dopamine, aripiprazole. The case study involves a patient misdiagnosed and treated with antipsychotics like Risperidone instead of appropriate mood stabilizers such as Sodium Valproate." The misdiagnosis stemmed from a lack of genomic insight, leading to severe side effects and long-term harm.

# **II. FINDINGS:**

1. Misdiagnosis due to Guesswork:

- Fish deficiency affected GABA receptors, causing mood disorders.

- Incorrect administration of antipsychotic Haloperidol without patient consent.



2. Impact on Emotional and Physical Health:

- Incorrect medication led to deteriorating mental and relational health.

- Overcrowded government healthcare facilities contributed to the continued misdiagnosis.

3. Recommended Interventions:

- Regular monitoring of GABA and dopamine levels.

- Dietary adjustments (e.g., inclusion of fish) and lifestyle modifications (e.g., Surva Namaskar, meditation). "Dopamine release refers to the process by which dopamine, a neurotransmitter in the brain, is released from nerve cells (neurons) into the synapse, where it can bind to dopamine receptors on neighboring neurons. This release is crucial for various functions in the brain, including regulating mood, motivation, reward systems, movement, and overall well-being through activities like exercise and sleep."

Incorporating genomic diagnostics in psychiatric evaluations.

Test Report			
Test Name	Results	Units	Bio. Ref. Interval
VALPROIC ACID, SERUM (PETINIA)	43.00	µg/mL	50.00 - 100.00
nterpretation			
RESULT IN µg/mL	REMARKS		
50	Minimum effective concentration		
50-100	Therapeutic range		
> 100	Toxic range		

#### **CONCLUSION:** III.

To advance psychiatric care, it is imperative to integrate genomic data into diagnostic and treatment protocols. This includes adopting pre-treatment evaluations of biological markers and using AI tools to interpret genomic data. The case study demonstrates the potential benefits of such an approach, suggesting a shift from guesswork to informed, personalized care.

**Protocol** for Genomic Integration in Psychiatry:

1. Emergency Room Evaluation :

- Ensure there is no immediate harm to self or others.

2. Saliva Test by Dental Practitioner or Diagnostic Center :

- Conduct an annual preventive care check-up if needed.

3. Police Verification for Consent :

- Ensure no property disputes influence consent.

4. Hospital Visit :

- Conduct a final assessment at specialized facilities.

5. Cross Referral :

- If treatment cannot be provided in a timely manner without a conflict of interest, refer to another specialist.

6. Counseling :

- Provide counseling for patient insight and acceptance after mental stability is achieved.

7. Long-Term Stability :

- Aim for long-term stability to ensure the patient can function optimally in society.

#### **REFERENCES:**

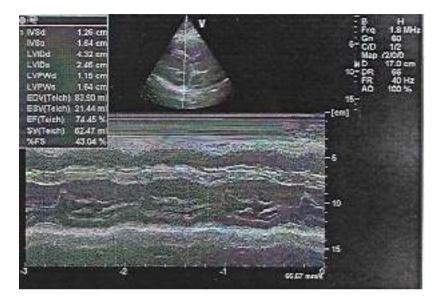
1. Choi, Y.K. Effects of repeated risperidone exposure on serotonin receptor subtypes in developing rats.

2. Mathis, C.A. The gamma-aminobutyric acid receptor in catfish brain.

3. Additional references to support claims and data discussed in the study. We acknowledge Dmitry Familtsev and KSS Bhat for their contributions to cardiology, particularly in understanding how aggression, as a side effect, can trigger left ventricle hypertrophy of the heart. Identify: might also affect GABA emotion regulation in both heart and mind with gut. Possibly due to racial discrimination and anger from examination failures, repeated attempts, and finally resigning, the hypothesis, later proved true, has still not been



investigated by HR (human resources) due to policy timelines and criticism by professors. Communication and understanding are crucial among scientists, researchers, students, patients, and doctors. Acknowledge the Sukoon team and contact the first author if a prospective study is needed.



#### Afterthought

By incorporating these practices, psychiatry can evolve into a more precise and compassionate field, leveraging genomic insights improve patient outcomes significantly. to Environment can lead to epigenetic changes. This is seen nowadays with dust pollution directly affecting the eyes, which can be mitigated with antihistamines and the use of glasses. Alternatively, a person's thoughts and feelings, shaped by beliefs imbibed from epigenetic signatures and love (not hate), can lead to self-respect therapy. Sharing and caring in this context promotes a supportive and safe environment that fosters growth and healing. It encourages individuals to feel valued and understood, contributing to their overall well-being and personal development. This approach focuses on short-term interventions for long-term confidence, fully converging to foster independence that evolves into interdependence. It allows individuals to work effectively in a team while maintaining their own thinking, collaboratively and peacefully working together. This suggests different levels of consciousness: conscious, unconscious, higher conscious, beta, theta, spatial, and spiritual (God levels). Such behaviors, encoded in our genome, might lead to behavioral science possibilities that allow us to progress from our solar system to the galaxy, to the universe, and to other universes with exoplanets for life like Earth.

Realizing that what makes you happy is your encoded life purpose or destiny gives you the possible energy of positive emotions, a cosmic pranic healing-like force, rather than relying on a unipolar or racing grandiose bipolar diagnosis or eccentric outliers' guesswork. Open-minded, nonspecific books like DSM-6 should quickly include genomics. This would integrate the latest scientific advancements and ensure a more comprehensive approach to mental health diagnosis and treatment. In my clinic environment, the publication of such information affects the patient, practitioner, and team.