TIBB AND THE CONCEPT OF TEMPERAMENT

Author: Dr.Rashid Bhikha
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How we differ

As individuals, we are all unique. But what defines this uniqueness? The basis of the human temperament, and why it fluctuates so much, has been a source of fascination for thousands of years. Every age has a preferred explanation of the obvious differences amongst people, and many attribute the differences to physiology; in ancient times to bodily fluids, and more recently, to genes. This subject is now going through a revival, not only because of interest in our behaviour during personal development and response to medical intervention, but because of recent advances in our understanding of the neurochemistry of the brain[1].

Temperament as a concept

The story of temperament goes way back to ancient Greece, when Hippocrates, the father of medicine, suggested that differences in the proportion of the four humours in the body were responsible for the differences observed between individuals[1,2]. Each of the humours; blood, phlegm, yellow and black bile, was associated with a pair of qualities: respectively hot and moist, cold and moist, hot and dry, and cold and dry. The concentrations of the four humours and the relative dominance of the derived qualities were inherent in each person's physiology, but they were susceptible to outside events? weather and diet especially. Furthermore, he assumed, without a detailed appreciation of genetics or physiology, that the balance amongst these qualities produced an invisible inner state that was responsible for the variations in thinking, feeling and behaviour which distinguishes us as personalities[2].

> *'It is more important to know what sort of a person has a disease, than to know what sort of disease a person has.'* Hippocrates

This idea was developed further by the perceptive Galen of Pergamon, 1700 years ago. He introduced the concept of temperament (from the Latin: *temperare*, to mix), which combined inherited constitution, diet and climate[1]. In the ideal personality, the complementary characteristics of hot and cold, and wet and dry, were exquisitely balanced. For lesser mortals, however, one pair of qualities out of the four possibilities was dominant, leading to the temperamental categories that Galen called sanguine, phlegmatic, melancholic and choleric. These meaningful terms have endured as useful adjectives up to the present time.

The Arab philosophers took up the concept with enthusiasm, in particular Ibn Sina (Avicenna) who incorporated it into his medical system as *mizaj*[4]. In fact, Galen's ideas remained popular until the end of the 19th century, although some adjustments were made in the light of scientific discoveries. For example, the phlegmatic quality was changed to lymphatic, the melancholic to nervous, and choleric changed to bilious. Blood and the liver remained the organs of influence for the sanguine and bilious, but the brain replaced black bile as the basis for the nervous type, and the lymph replaced phlegm. Although tissues changed, the fundamental concepts were conserved.

The 18th century German philosopher Immanuel Kant provisionally accepted Galen's four types, with only minor changes[1]. For him blood was the dominant humour, and he assumed that individual variation in energy was critical in the appearance of other temperaments. He added

that the sanguine and melancholic were emotional types, and that the phlegmatic and bilious types were action types.

The concept of temperament also surfaced in psychoanalysis. In Jung's philosophy, the sanguine and melancholic types described first by Hippocrates and later by Galen became the excitable extrovert and the restrained introvert, and the phlegmatic and bilious types became the restrained extrovert and the excitable introvert[1,6]. Even more simplistic form of temperament categories came briefly into vogue with the Type A (sanguinous) and Type B (melancholic) division of people, which were associated with the onset of certain disorders, such as ulcers, hypertension and heart diseases.

Early last century Eysenck returned to Galen's ideas of temperament, and rejected the distinction between temperament and character[1]. He identified two dimensions in temperament, represented by the axes extrovert / introvert (sanguinous / melancholic) and emotional : excitable / subdued : restrained (bilious / phlegmatic). He considered that both extroverts and introverts could be either excitable or restrained. In children he identified the aggressive (sanguinous), the fearful (melancholic), apathetic (phlegmatic) and the impulsive (bilious) temperaments, and concluded that they were influenced partly by heredity and partly by experience.

In more recent times many systems which claim to measure how a person thinks, feels and behaves have been devised, but frankly, some consider that ideas have barely moved beyond those of Galen[6]. Indeed, a number of personality theorists have found much merit in the approach adopted by Hippocrates in studying the relationship between types of temperament and health or sickness (and in success in life, organisational effectiveness, divorce and suicide).

The evolution of the concept of temperament has been long and tumultuous. In the late 19th century the role of heredity and other biological forces became dominant in explaining variations in skill, motivation, habit and mood, whereupon this was subsequently overthrown in favour of the environment, especially social forces, which rendered biological factors virtually redundant. This schism between internal (biological) and external (environmental) influences reflects the age-old split in Western philosophy between material and mental processes, in body versus soul.

Temperament: the modern perspective

The concept of temperament, although originating in the mists of time, remains a useful idea for differentiating people[5] and accordingly adopting specific therapy for their ailments[2]. Indeed, Galen's bold inferences in a way were not radically different from contemporary pharmacological speculations that, for example, schizophrenics typically have an excess of the neurotransmitter dopamine in certain parts of the brain, or that clinical depression results from an imbalance in other neurotransmitters, nor-adrenaline and serotonin[1]. The idea that bodily substances influence thought, mood and behaviour is not difficult to accept. Moreover, the possibility of a genetic basis, as expressed as particular blood groups, for example, the difference between different temperaments has been examined. The results, although equivocal, do suggest that some of the genetic differences among particular human groups might involve aspects mood and behaviour.

Recent studies which have attempted to locate the neurochemical or physiological source of temperament bring this concept once again to the forefront of medical research[1]. The concept of temperament includes, as part of the theoretical definition, an inherited neurochemical and physiological profile that is linked to emotion and behaviour. But the relationships between physiology and behaviour or emotion are complex, and not yet fully understood. There is a poor correlation between how tense, anxious, fearful a person feels and the increase in heart rate, blood pressure, or cortisol level in response to a stressful event. As Kagan comments[1], 'physiology and psychology [are] not closely yoked'. In other words, it is unwise to predict a certain psychological response from a specific physiological stimulus.

In the realm of neuroscience more than 150 distinct chemicals (amines, amino acids, hormones and peptides) have been identified. Along with their specific receptors these chemicals are known to influence the excitability of specific sites within the brain. As different people inherit different levels and distributions of most of these chemicals and receptors, it is conceivable that people become vulnerable to differing degrees to particular physical and emotional disorders.

Nowadays, temperament is regarded as any moderately stable, differentiating emotional or behavioural quality whose appearance in childhood is influenced by an inherited biology, including qualitative and quantitative differences in brain neurochemistry[1].

Temperament and Tibb

Central to the practice of Tibb is the concept of temperament, and its importance as part of the total diagnosis procedure[2]. As such, Tibb attaches considerable importance to assessing a patient's authentic temperament as a precursor to a therapeutic approach based on his or her uniqueness, and how to restore health by supporting inner healing. In this, Tibb contrasts markedly with the orthodox system, which focuses almost exclusively on diagnosing, describing and quantifying features of the patient's presenting disorder, with scant attention paid to the patient's individual nature.

Tibb (also known as Unani-Tibb, or as the Unani system of medicine) is a system of complementary medicine, recently introduced to South Africa, based on traditional medical practice originating with Hippocrates, Galen and Avicenna. It has been practiced for centuries on the Indian sub-continent and in neighbouring regions[2]. In Tibb, temperament is regarded as a measure of equilibrium or homeostasis which exists at different levels of complexity in the body, starting at the simple cell, and passing through tissue and organs and complex organ systems, to the whole person, and how he or she interacts with the external environment.

Although the number of possible temperaments is virtually infinite, for practical reasons, Tibb has narrowed them down to the four temperamental types as hypothesized by Galen: *sanguinous, phlegmatic, melancholic* and *bilious*, with each person having a dominant plus a sub-dominant temperament. In clinical practice, a patient's dominant and subdominant temperament is identified by the response to a battery of empirically-derived questions, encompassing the biological, psychological, emotional and social dimensions. These assess a number of the patient's persona, constitutional and lifestyle factors:
Personality characteristics, including emotional features
Personal habits regarding regular diet, sleeping patterns, physical exercise and rest
Physiological characteristics, including age and gender, and the efficiency of excretion mechanisms
Physical demeanour, appearance and bodily physique
The taking of the personal history as part of the temperamental evaluation is much more detailed and painstaking in Tibb therapy, and casts a wider net than that usually practiced in orthodox medicine. As such it combines psychological and biological features, with perhaps more information available on the former. At the end of this in-depth assessment a person's dominant and subdominant temperament is determined. This provides guidelines for both the subsequent treatment of the clinical disorder, and the prevention of the disorder's recurrence.

Temperament and predisposition to illness
The four dominant temperaments are regarded as our uniquely human way of expressing the balance of four forces that govern all things according to the ancient way of understanding character, health and disease. Tibb focuses on the ideal state for a specific person[2]. This cannot be compared to a general or average ideal. For example, some people function better under stress, others need to be stress-free for optimal functioning. Again, some people cope adequately with little sleep, whereas others need significantly more sleep.
Maintenance of the person's temperament is necessary to preserve health. Clinical disorders are diagnosed against a backdrop of temperamental imbalance, and treatment seeks to restore the equilibrium of health by invoking the body's capacity for inner healing. Regarding infectious diseases, Tibb claims that it is the original imbalance of temperament that provides a distorted biotic environment in which pathogenic microbes can thrive.

Clinical studies linking temperament to clinical disorders
The relationship between temperament and clinical disorders was investigated in a pilot research project by students in the postgraduate Diploma in Unani-Tibb programme (Dip UTM) for doctors and primary healthcare nurses at the University of the Western Cape (UWC). The results in the table below revealed a number of strong associations between specific disorders and the temperament of the patient:

Clinical disorder	Number and percentage of patients having the same dominant and subdominant temperament with a specific clinical disorder
Asthma	of the 12 asthmatic patients, 10 (83%) had a dominant/subdominant phlegmatic temperament
Hypertension	of the 18 patients, 15 (83%) patients had a dominant/subdominant sanguinous temperament
Drug addiction	all 6 (100%) patients had a dominant and a subdominant melancholic temperament
Diabetes	all 23 (100%)patients had a dominant and a subdominant sanguinous temperament
HIV/Aids	all 7 (100%) patients had a dominant and a subdominant phlegmatic temperament
Psoriasis	all 6 (100%) patients had a dominant and a subdominant melancholic temperament
Stress	all 6 (100%) patients had a dominant and a subdominant bilious temperament
Eczema	of the 6 patients, 4 (66%) had a dominant and a subdominant sanguinous temperament
Menstrual disorders	of the 6 patients, 5 (83%) patients had a dominant and a subdominant sanguinous temperament
Menopause	all 6 (100%) patients had a dominant and a subdominant sanguinous temperament
Arthritis - rheumatoid	all 8 (100%) patients had a dominant and a subdominant sanguinous temperament
Arthritis-osteo	of the 4 patients, 3 (75%) had a dominant and a subdominant bilious temperament

From the above table it is evident that in virtually all the illnesses examined there was a significant percentage (ranging from 66% to 100%) of patients who possess the same dominant or subdominant temperament, suggesting a definite linkage between the patient's temperament and the clinical disorder.

In another open pilot study conducted by 2nd year medical students at the Nelson Mandela School of Medicine at the University of Natal, the association between temperament and Type II diabetes mellitus showed positive results. In this study, involving 77 confirmed diabetics, the results indicated that 89% of the patients had a dominant or subdominant sanguinous temperament.

Admittedly, there are a number of deficiencies associated with these studies. For instance, doubt can be cast on the plausibility of questionnaires as part of the temperamental assessment. Also, standardisation of temperamental evaluation was not performed to the required extent. Acknowledging that these studies were exploratory in nature with a limited sample size, the results do however justify further, more carefully controlled, studies. One in particular would explore the relationship between the patient's biochemical (especially neurochemical) parameters and his or her particular temperament.

The uniqueness of the patient is a well accepted axiom in Tibb. Although this medical system is a recent arrival on the South African healthcare scene, further studies should reveal whether the role of temperament has clinically important ramifications. Early studies suggest that it does.

References:

1. Kagan J. (1995) *Galen's Prophecy: temperament in human nature*. Westview Press, USA.
2. Bhikha R. (2000) *Tibb: traditional roots of medicine in modern routes to health*.. Mountain of Light, South Africa
3. Boussel P, Bonnemann H, and Bove F.(1982). *The History of Pharmacy*. Asklepios, Paris, France.
4. Bakhtiar, l. (1999) *The Canon Of Medicine. Avicenna*. Adapted by Laleh. Great Books of the Islamic World, Inc.
5. Rolfe R. (2002). *The Four Temperaments.* Marlow & Co. New York. USA.
6. Lawton G. Let's get personal. New Scientist 2003; 179:30