

## High Quality Treatments for Human Suicidal Events and Mortality

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### ABSTRACT

Human suicide study currently is unable to show close associations between pathogenic stages and therapeutic outcomes. A wide variety of factors coming from both insiders (human genetic predispositions, plasma levels of hormones and concentrations of neural transmitters) and outsiders (social, culture, environmental, cognitive, habitual and physical handicaps and so on) may equally determine suicide ideation and human mortality. This Editorial emphasizes these items of environmental and biological factors in suicide prediction, preventions and therapeutics.

**Keywords:** Psychiatric disorders, Suicide risk, Environmental factors, Economic conditions, Human cognitive, Neural science, Mood disorder, Suicide mortality.

### BACKGROUND

Unlike other diseases, a great variety of environmental and biological factors may affect suicide rates, medical intervention outcomes and human mortality [1-4]. Human suicide events and episodes are commonly affected by outsider insults—including social, economic, culture, legal, cognitive, past trauma, substance-dependent, bad living habits, physical handicaps and so on. As a result, building the relationship between insider (genetics/chemical) and outsiders (different ranges of environmental factors) is an indispensable path of future scientific and medical investigations [3].

### METHODS

Currently, clinical medications and therapeutics for suicide attempts need to be established into a higher level and therapeutic paradigms [5-7]. Since mental illnesses are commonly diagnosed by general clinicians or psychiatrists [8], they analyze patient's psychiatric conditions (different types of psychiatric symptoms, such as depressive, mania or neuro-degeneration. Few psychiatrists go into details of patient's environmental or economic conditions. Unveiling the interplay between insider (human genetics and chemical structures of drugs) and outsider (multi-factorial economic, social, past bad habits, trauma and so on) is in-depth diagnostic promotion [3]. New insights must be used for knowledge and therapeutic updating and human suicide reductions.

### RESULTS

Large proportion of human beings suffers depressive or manic symptoms from this highly competitive world [9,10]. Every environmental pressure and persistence will induce sequence of suicide ideations, self-harm, further suicide events or mortality. Better understanding about these pathological cascades in ongoing and progressed. The different environmental factors for the induction of human suicide are enlisted in Table 1 and Table 2. It is somewhat diversity between males and females in causative factors.

Since the suicide ideation and events might be through multi-factorial processes, scientific investigations of each factor and different interaction are indispensable. Apart from this, patient's insider factors, such as vitamin, hormone or neural transmitter levels also play roles in suicide formations and mortalities [11].

Suicide ideations, self-injures and self-harms are frequently met [10-12]. Great bodies of clinical suicide events are coming from past bad experience, such as war-time trauma [12], child-abuse, rape or attacks [10,11]. As a result, probing and determining these types of outside insults can help us predict suicide origin, symptoms, syndromes and mental illnesses.

Generally speaking, it is widely known that treatment of mood disorders is not easy. In many cases, mental disorder origins and progresses are complex and last life-long. A relationship between insider (genetic/molecular/visual/chemicals) and outsider insults (social, culture, environmental, cognitive, habitual and physical

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**Table 1:** Major environmental factors associated with suicide in UK.

Male	Female
Depression	Divorced
Alcohol- or drug-related problems	Under 25 years old
Separated, widowed, or divorced	Social class (i.e. unskilled workers)
Social isolation	Unsuitable, overcrowded accommodation
Recent discharge from psychiatric care	Unemployment
Serious physical illness	Debt
Impending or recent job loss	At present address for less than 1 year
Current involvement with police	
Prison	
Certain occupations (e.g. farmer, doctor or lawyer)	

**Table 2:** Different aspects of the suicide causations.

Different category	Individual causations
Disease histories	Types of onset
	Precipitance episode and cycle length
	Suicide and mortality
	Comorbidity
Bad human habits	Habitual alcoholism
	Drug abuse
	Tobacco utility
	Substance-dependent
	Social phobia
Past bad experiences	Obsessive-to-something (such as gambling or computer)
	Past trauma
	Child-abuse
	Sexual attack (rape)
	War-veterans
	And many others

handicaps and so on) are future trends [3]. Theoretically, can it be possibly solved by mathematical/computer network in future? However it requires many updating evaluations and analyses models for all statistically valuable factors. Thus, we need to seek medications into multi-disciplinary or hire more mathematic- or physics-majored talents in the field of suicide environmental condition studies [13,14].

**THERAPEUTIC IMPROVEMENTS**

The final stages of suicide preventions and therapeutics is commonly the drug therapy utilities [15,16]. The risks and beneficial outcomes of drug therapies are also affected by outside insults and human genetic predispositions [14,15-20]. Integration system for overall degrees of environmental insults is the first step for suicide prevention and managements.

Since a lot of environmental factors can affect patient’s mental conditions, one possibility of complete environmental information integrations for suicide predictions is through mathematic or computational network. These kinds of mathematic or computational network (in silico) are out of our biomedical majored researcher’s curricula now [21-27]. Joining hands with mathematics or physic-majored talents is an inevitable pathway for updating suicide predictions and prevention systems [26,27]. These types of medical researchers are rarely in psychiatric studies nowadays.

This is a very preliminary study, expanding cooperation between psychiatrists, mathematicians, pharmacologists, neurologists, technicians, pathologists, biochemists and scientists of other multidisciplinary must welcome to create new generations of medical decision-makings [7]. Interaction between insiders and outsider is quite necessary because they play unique role in suicide predictions and preventions.

Human personalities are greatly diversified. For examples, many people are optimistic, yet some other human beings are pessimistic. To these different personality types of human populations, same environmental insults will have different suicide risks and therapeutic outcomes among a variety of human beings personality and populations.

To improve healthcare of suicide risk patients, high quality nursery work is also important [28-30]. Only optimized nursery services and assists, patients may be improved completely.

Testing and comparisons of different algorithm or calculation systems and customizing several workable systems for clinical applications and medical interventions (commonly used in genetics, bioinformatics and a lot of outsider factors and so on) must be established [31-41].

**CONCLUSION**

The clinical suicidal episodes of patients may not only determined by chemical structures and genetic predisposition in humans. Environmental factors (such as fantastic failure, divorce or

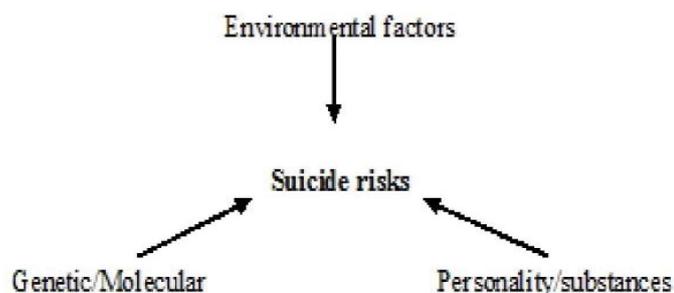


Figure 1: The Mathematic Models of Suicide Knowledge and formation.

loss of work or family members) may also be important. More sophisticated techniques, statistical analysis systems for growing number of patients are needed. In the future, more attentions should be focused on different possibilities between chemical, genetic, molecular, environmental, neuropathy and therapeutics.

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