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Review Article

Human Suicide, Biomedical Knowledge Advances

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Abstract

Suicide has a high rate of human mortality (approximately ranking six places for morbid categories of human fatality). External and internal stresses are responsible for these human fatalities. Clinical suicide prevention and treatments are ever-growing for its therapeutic progress. Psychiatric intervene is a recent hotspot in this field. Molecular targeting and diagnostic transition in the clinic will be the suitable pathway for therapeutic management promotion against suicide-induced human mortality.

Keywords: human suicide; neurobiology; modern technology; suicide prediction

1.Introduction

Suicide has a huge human mortality (approximately ranking six place for morbid categories of human fatality). Global suicide death is outnumber the death of war and homicide [1]. Approximately 2% of human mortality is accounted among all episodes of suicide behaviors [2]. However, the incidence of suicide-induced death (SID) is not average distributed. General picture of biomedical study of suicide pathogenesis and intervention is depicted in early reports [3-8]. It contains different strategies and methods. Guideline for new diagnosis, technology and therapeutic selection can be updated [9].

2. Medical Landscape

External and internal stresses are responsible for these human fatalities. Clinical suicide prevention and treatments are ever-growing for its therapeutic progress. Psychiatric intervene is a recent hotspot in this field.

Early clinical evidence suggests that external and internal risk factors or stresses may drive human neuropsychiatric consequences and suicide behavior [10-11]. After two decades of hard work, association began to emerge to different types of human health, diseases and wellbeing [12-16]. To attain a goal of high-quality suicide management, external stresses, pathogenesis cascade and therapeutic targets should be focused and totally analyzed. It poses a great medical challenge or opportunity for a lot of disease pathological study and potential clinical paradigms.

3. Pathologic and Therapeutic Relation

Currently suicide ideation is a common feature of all human population [9]. The public health burden needs to be overcome. Since human mental health problems show many identical signs in suicide patients, molecular mechanisms between different psychiatric diseases and suicide ideations should be promoted [17-21]. (Figure 1)

DIFFERENT RISK FACTORS

Outside & inside stresses



INTERACTION BETWEEN OUTSIDE & INSIDE

Genetic & molecular involvement



DISCOVERY OF MECHANISMS

Diagnostic, intervention, therapeutics & drug develop

Figure 1. Potential link for suicide onset and progress

Clinical Reviews and Case Reports Page 2 of 5

New Diagostics

Major psychiatric diseases are associated with suicide, such as autism, schizophrenia, mood disorders and possibly neurodegenerative diseases. Diagnostic categories have various drug selection systems. Techniques for

Advanced
Diagnosis

these diagnoses are divided (Figure 2). With the diagnostic merge and integration, more suitable therapeutics will be popularized.

Psychiatric scores

Neural images Molecular biology

Figure 2. Different categories and advances for human suicide-related diagnosis

4. Treatment studies

Different types of clinical management strategies and applications in the clinic are outlined

- Mood healthcare [9]
- Anti-psychiatric agents [20]
- Education for students, teachers or clinicians [21]
- Traditional medicine (herbs) [22]
- Treatment of co-morbid [23]
- High-quality nursery [24-25]

Since most psychiatric diseases are chronic diseases, curable therapeutics against mental disorders is still a medical dream. It also affects the high-quality of suicide prediction and prevention [26-31].

6. Alterative Selection

According to law of traditional Chine medicine (TCM), human illness is caused by emotional instability or angry. The hidden molecular aberrant in human is not enough to create a disease or suicide behaviors. In context of Chinese medical book, there are recorded of "disease is caused by psychiatric health problems", "angry will be a major risk factor for different disease emerge", "angry" is the main source of most diseases. Comedy, music or sports may alleviate selection for suicide behaviors in the clinic.

7. Conclusion Remarks

Human suicide has a high mortality and economic burden issue to the society. As an emerging therapeutic frontier and fastest evolving field, we wish new investigation can change this situation and save the life of million worldwide.

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Page 3 of 5

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