

# Thoughts about "work style reform"

## Foreword

On Golden Week Holiday in 2011, I was in Soma City, Fukushima Prefecture with Psychological First Aid. People shared their stories just a little, then I figured out their sufferings and how hard their situations are...

Although it has been six years since that time, I'm deeply concerned about people who are still living in an evacuation place and furthermore some of them have little hope of returning home because of radioactive contamination.

Reconstruction and compensation for damage caused by meltdown has been progressing, however there is another serious concern reported that excessive work leads to depression or suicide and decommissioning cost is expected to be equivalent to an annual national tax revenue.

Now I would like to raise a question about "work style reform" proposed by Abe cabinet and JFEO, that would be "unreformed Work style" or "negative work style reform".



10 years ago, I wrote an essay "Suicide, Depression and Sleep". I found that the company "RUDDER" altered it and posted it on their website. That well edited text is easy to understand and suited to talk about this subject.

(I don't have any relations with this company. They are a medical device company established in January this year.)

At the writing of the article below in 2007, the number of suicides is at a high 33,093, 25.9 per hundred thousand people. In 2015, it is down to 24,025, 18.9 per hundred thousand people. The suicide rate is on the decrease to below 20%. However, OECD recommends much-needed attention to the situation, because of a higher number than an average of 12.4 suicides.

## Suicide, Depression and Sleep

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### 1. Introduction

Suicide is a social issue in Japan. There are so many factors for suicide. Recently, relationship between suicide and mental illness, especially depression is focused on. Moreover, depressed patients have a sleep problem with high probability.

Firstly, I will explain a causal relationship between suicide, depression and sleep disorders and then consider suicide issues in Japan in terms of sleeping hours and working environment.

### 2. Social Issue "Suicide" in Japan

#### 1) Changes in The Number of Suicides

One million people out of 65 billion world population died from suicide. Although the population of Japan is one-fiftieth of the world population, the number of suicides in Japan is one-thirtieth of that in the world. In 1999, 33,048 people, which is 26.1 per one hundred thousand, chose to kill themselves. It is the worst record ever.

According to statistics from the National Police Agency, the number of suicides was around low 20 thousand from 1978 to 1997. However, after the bursting of the bubble economy, the number rose rapidly and jumped straight to 32,863, which is 1.35 times as many as the previous year. By age bracket, the growth rate of the 19 or under and 50s is higher than that of other age groups. By factors, financial matters, personal reasons and working conditions have the highest growth rate.

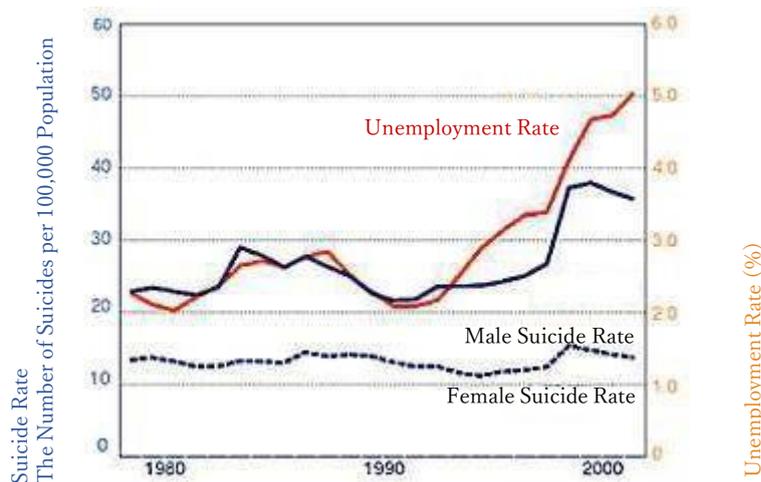
#### 2) Causal Relationship with Economic Recession

An economic recession has been a key factor of the increased suicides in Japan since the end of the war. We can see a clear correlation between overall unemployment rate and suicide rate among men by the yearly transition. (Figure1) The number of people who lose their job to bankruptcy or corporate restructuring is no small. An unemployed man is at a more than 5 times higher risk of committing suicide than a man with a job. A study in unemployment-psychology says that people who have been unemployed for more than 3 years, lose their purpose in life steadily and that increases a risk of suicide.

However, by global standards, the unemployment rate is not necessarily proportionate to the

suicide rate. Some countries are successful at decreasing suicide rate by unemployment compensation serving as a safety net. We have limitations to prevent suicide only in the fields of medical treatment or healthcare.

**Figure 1 Unemployment Rate and Suicide in Japan**



### 3) Preventable Issue "Suicide"

The suicide rate in 99 countries, compiled by WHO in 2002, shows that former republics of the Soviet Union were highly ranked and Japan was ranked first among G7 with a huge lead. In terms of suicide prevention by country, Finland aimed to reduce suicide rate by 20% and take precautionary measures like medical experts training and awareness activities for citizens from 1992 to 1996. It follows that they succeeded in decreasing 9 % compared to before the activities. (It is 20% reduction compared to the worst time.) Sweden established national A center for public awareness activities on suicide and mental healthcare established in 1993. Accordingly, the number of suicides among men per 10,000 population fell to 20 from 25 during the period from 1990 to 2000. Against these experiences, Japan started working on suicide prevention, but it's still insufficient. That's because Japan has its own social background.

### 3. Relation between Suicide and Depression

World Bank has reported incidence of depression since 1990. They paid early particular attention to the fact that social and economic losses from depression would overwhelmingly surpass those from high blood pressure, diabetes or chronic diseases. Obviously, depression contributes to feelings of profound despair with significant low self-esteem and often

accompanies suicidal ideation

In this chapter, I will consider about relation between depression and suicide and its characteristics.

### 1) Consequence of Depression

Among psychiatric disorders, schizophrenia, alcoholism and depression have a high risk of suicide. Suicide completion rate of all these three disorders is more than 10%. It's an undeniable aspect that psychiatric disorder itself has an affinity for suicide. Furthermore, it should be focused that a social handicap, such as disemployment, an erratic life, economic insecurity due to a long suffering with psychiatric disorder, make people distressed about living and increase the affinity.

Depression, whose lifetime incidence rate is one out of every five, the highest rate among the psychiatric disorders, deserves particular consideration of an association with suicide. In addition, it should be noted that depression bring difficulty to organize normal daily activities and loss of self-confidence in the end. Leading countries faced significant social losses such as low productivity, compensation for loss of earnings and increased suicide caused by high incidence of depression.

There are two points to keep in mind here. One is that depression is a curable disease. The other is that proper medical care and preventive measures for depression are directly linked to suicide prevention.

### 2) Diagnostic of Depression

Depression is a kind of mood disorder characterized by both psychological and physical symptoms, such as depressed mood, anxiousness, restless, impaired mental activity, loss of appetite and insomnia. It used to be recognized as mental disorder, but today there is promoted idea to regard depression as "systemic disease of brain, mind and body".

Similar to other illnesses, interaction between individual and circumstances is a cause of depression. But it's considered to be due primarily to an environmental factor, especially level of stress, rather than diathesis. Leading stressors are triggered by business operations, such as intellectual labor with a strict deadline or prolonged brain work, and a life events, such as a romantic breakup, a divorce, a bereavement, disemployment, and retirement.

The criteria for diagnosis are "feeling gloom and unwell", "a lack of enjoyment of life due to waning fascination and interests" and "fatigability". A definite diagnosis is associated with two out of those three symptoms that persist for more than two weeks

Depending on the severity, psychological symptoms are mainly depressed mood, diurnal mood fluctuations, sorrow, a feeling of despair, anxiousness, irritation, anguish, suicidal idea,

suicide attempt, hypochondriacal concern, and delusion of guilt. Sometimes depression cause "change in behavior" called impulse control disorder.

Physical symptoms appear as autonomic or endocrine symptoms, such as sleep disorders, especially in many cases early-morning waking but sleepless, hypersomnia, anorexia, excessive eating, general sick feeling, a feeling of fatigue, nausea or abdominal pains, hyperventilation syndrome, tachycardia, palpitation, urinary frequency, dry mouth, hydropoiesis, dizziness, constipation, impotence, inability to experience a sense of climax, irregular menses.

Depressed clients who notice physical symptoms, but no psychological symptoms like depression have little self-awareness of suffering from depression. In those cases, they are hardly diagnosed with depression, because they don't firstly visit to a psychiatrist but to an internist or other departments. In fact, it is reported that 90 % of people who complete suicide visited to a physician for poor physical condition within a month.

### 3) Medical Treatment for Depression and Rehabilitation

The cornerstone in the treatment of depression is to keep carrying a message not to commit suicide in a feeling of being unrecoverable state and despair. It is important to inform first that recovery period takes at least 3 months or an average 1 year.

A principal for the treatment is to ensure enough rest. A patient should be released from all operations or roles at work and at home. Although many workers hope treatment without absent from work, because they feel responsibility for their work, they need to recognize that they can expect high efficacy in treatment with rest. It is the fact that medication without rest doesn't reverse this disease.

In case of severe depression, it is necessary for a patient to take days off to keep away from stress and get plenty of rest. Depending on conditions, some patients need hospitalization.

A respite hospitalization in a stress care ward and a cognitive and a group therapy are highly effective treatments. If a patient is at increased risk of suicide, hospitalization for medical protection which is involuntary hospitalization without his/her consent, but with consent from his/her family or parent, may be needed. However, that does not completely prevent suicide.

Depression is a treatable patho-phasic disease. Indicators of full recovery from depressive phase are a good sleep, appetite and morning wake, increased curiosity about newspaper or TV and enough condition to go out for walks, shopping or recreational sports.

It is premature to think that because a patient has remained stable for about 2 weeks, he/she completely recovered from depression. Some psychiatrists not even know these indicators and then write a medical certificate saying "complete rehabilitation" at the request of a patient. It is still a major issue that untimely rehabilitation causes a relapse.

After receiving physician's note to permit return-to-work, an advisory opinion meeting will be

held between a person concerned, his/her supervisor, a human resources staffer, an industrial physician and a psychiatrist. If he/she is judged adequate to return to work, he/she needs a rehabilitation work system, which is 4, 6 or 8-hour shift from 3 to 6 months. Depending on each case, it could be extended even further. To the contrary, if he/she is judged inadequate to get back to work, he/she will talk with his/her doctor about a continuous rest. Introducing of this system drastically lessen the chance of relapse at the early stage after returning to work. Patients are often concerned about relapse up to 2 years. While some patients complete follow-up visit or medication in a year, it is preferable to continue aftercare at the workplace in 2 years. Before establishing this rehabilitation framework, an "Informal" and "Risky" approach was applied at some offices. In the name of "break-in-work" or "trial work", managers put an employee, who is under treatment with rest, to work for 1 or 2 months and make a judgment as to whether they can return to work or not. "Risky" means that employee is not eligible for compensation for accidents including commuting injuries. "Informal" means that there is a possibility of violating Industrial Safety and Health Act. An obligation for safety consideration is to prevent recurrent depression. It plays a role of a guarantee of the rights to get treatment and an attention to working hours and business content after returning to work. "Trial work" should be abandoned immediately at any offices and rehabilitation work system should be adopted.

#### 4. Relation between Depression and Sleep

In recent years, sleeping disorders attract attention as a risk factor for onset or recurrence of depression. I will explore a connection between depression and sleep from a point of reduction in time of sleeping caused by working long hours.

##### 1) Sleep Disorder Associated with Depression

WHO says that depression, which is the second disabling disease behind ischemic cardiac disease in the developed world, will be predicted to reverse a stand in 2020. A mood disorder including depression result not only in long-term leave, but in serious social loss from suicide. The most common depression-associated sleep disorder is insomnia. That is reported in 80% to 85% of depressed patients. Typical symptoms are repetitive or prolonged wake after sleep onset or early-morning waking. Some patients suffer from sleep-onset insomnia. On the other hand, about 15% to 20% of depression cause hypersomnia, which worsens daytime sleepiness or tiredness. Furthermore, in the case of the patient who is prone to mood disorder, these abnormal sleeps persist after the symptoms of depression disappear or develop preclinically.

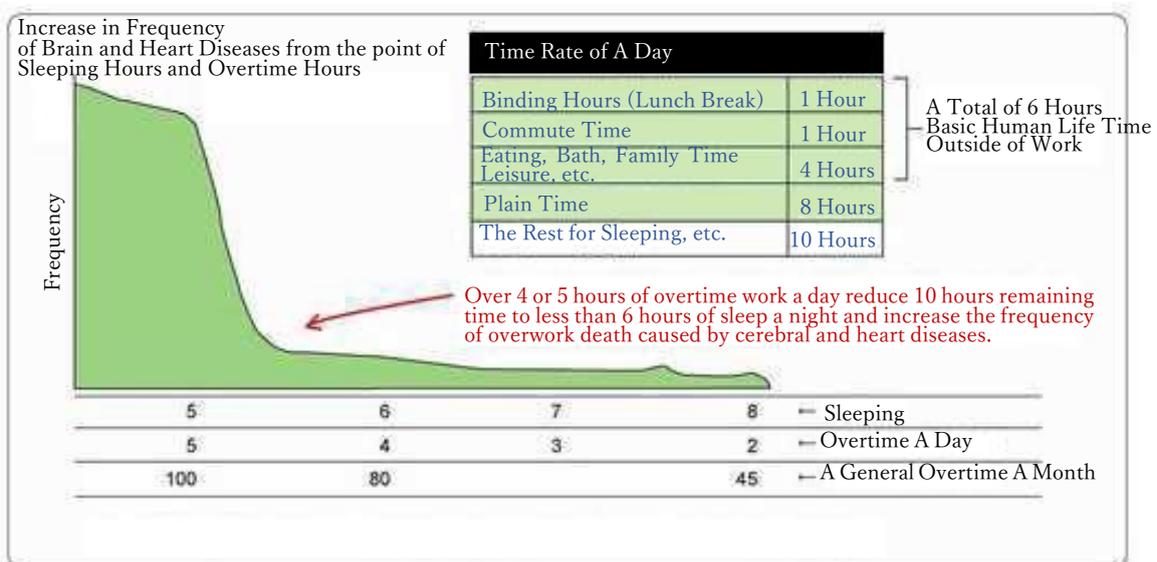
## 2) Round-the-clock Work Style Society and Health Problem

“No sleep” or “nightwork” is considered a virtue in Japan, as I say “sleep neglect country”. In the previous 4 decades, nocturnal society surely progress and people are deprived of sleep. In the name of “24-hour society” and “global society”, shiftwork or night shift become more common. According to a quinquennial survey about the working environment conducted by MHLW, Ministry of Health, Labour and Welfare, 20.7% of total workers engage in late-night work and of which 36% complain a medical problem. Concretely, the more periods of night work extend, the more people are in bad health condition. And it also says that 17% of people are diagnosed with illness; the detailed breakdown is 51% gastrointestinal trouble, 23% hypertension, 19% sleep disorders and 13% liver disease.

MHLW provide guidance for workers over “100 hours per month, an average 80 hours per 2 months, or an average 45 hours per 6 months” to follow health instruction of industrial physician. The guidance shows that long working hours causes a wide range of health problems due to sleep reduction, furthermore death from exhaustion.

A lack of sleep also leads to depression and then invites a high risk of suicide.

**Figure 2 Risk of Cerebral and Heart Diseases associated with Sleeping and Overtime Work Hours.**



## 3) Factor of Insomnia

Sleep is affected not only by individual, sexual and seasonal factors, but also by physical and mental disorder, drinking or medication. There are over 60% of people under stress in their daily life in Japan. They complain about insomnia and other physical or mental problems. The following 3 lists are characteristics of modern sleeping disorders.

- ① less time sleeping as if sleep is wasteful
- ② increased number of people who complain insomnia with age, especially true in developed countries
- ③ a definite impact of daytime favorable exercise, moderate stress, diet, or alcohol on sleep

There are various stress levels which people can have: intense stress causing PTSD like war, terrorism, financial crisis, or catastrophe, severe job-related stress of overwork under deadline, overtime work, insidious bullying or power harassment forcing a quota, moderate life's stress of bereavement, divorce, corporate downsizing, unemployment or marriage, and minor life stressor of marital quarrel or parking violation. Capacity to deal with stress is absolutely different with each person, but these internal and external stressors contribute to sleep disorders.

#### 4) "Insomnia and Sleep Deprivation" as Risk Factors of Depression

As previously mentioned, sleep disorders, a risk factor for onset and recurrence of depression, received attention in recent years. A cross-section data shows that, when compared to a group without sleep disorders, a group complaining insomnia is 5 times likely to develop depression and a group complaining hypersomnia is 2 times likely to do so. After following up a person suffering from sleep disorder for years to decades, it is reported that he/she has 2 to 5 times the risk for incidence of depression; that means sleep disorders are clearly identified as a risk factor for developing depression on their own. It also became evident that, after recovering from depression, a person with sleep disorder has a high rate of recurrence. These insights lead to the suggestion that psychological intervention potentially contributes to prevention of depression.

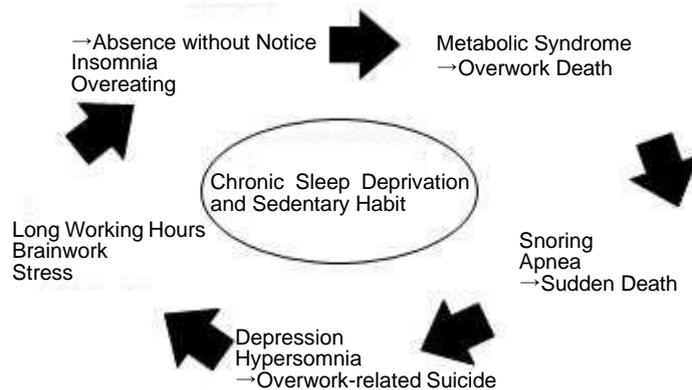
Though sleep is a prominent part of everyday life, connection between a cause of workplace stress and cerebral/heart diseases is taken only as an indicator of a stress response or fatigue in Japanese society.

#### 5. Sleep Issues in Japan in the 21st century

If weekdays sleeping is over 2 hours less than natural sleeping time requirement and it sustains over long periods, sleep in on the weekends does not get rid of fatigue, but cause disorders like daytime sleepiness, difficulty in concentrating, a decrease in operating efficiency or digestive trouble. Although 2 % of the population is regarded as an insufficient sleep syndrome, one out of every 5 is estimated to be a chronic sleep deprivation. How do people manage 24 hours a day? Modern healthcare management is based on lack of perspective of adequate night sleep. People, who sacrifice their sleep to work every day under a looming norm and deadline without any time to rest, have mental and physical health problems: metabolic

syndrome and sleep apnea syndrome. In recent years, there are some reports which indicate a vicious circle that obesity, caused by undersleeping-induced or insomnia-induced overeating, lead to SAS. In a comprehensive summary of this present situation, devastating the physical and mental health, the following Figure 3 shows a causal linkage between sleep and health problems in Japan today.

**Figure 3 Recent Sleep Issues in Japan**



## 6. for Preventing Suicides

After industrial revolution, style of working made a drastic transformation. Incandescent light of Thomas Edison's invention gave spurs to it. And computer introduction into industry dramatically decreased physical labor with more than 10kg weight and shifted to brainwork-based labor form. How far is the limit to use frequency of our brain? Can we control it scientifically like lung and heart capacity or muscular wasting of a marathoner? Do brainworkers accept spiritualism, symbolized by the phrase "If someone tries hard enough, he/she can do it.", as common sense? Now, let me summarize some issues to consider and recommendations on Japanese suicide prevention policy.

### 1) Enormous Economic losses

Assuming that suicide and depression hide behind efficiency or productivity, a corporate management team should face up to reality that suicide and depression cause economic loss of estimated 2 trillion yen on Japanese society.

### 2) Healthcare in Occupational Field

While mental healthcare is increasingly important, we have insufficient approach to prevent suicide with careful attention paid to early sign of depression for early detection and treatment. There is a need for preventive intervention to watch out for insomnia, including sleep

deprivation, as a risk factor for depression and reduce the incidence of depression at that stage.

### 3) Introduction of Sabbatical System

Because of high-performance brain under double stresses, a cooling-off period, i.e. introduction of at least 2 months holiday system, is required after accomplishing a task like completion of a project. It is deemed desirable for the early introduction to prevent burgeoning depression in system engineer. We should adopt healthcare system capable of recovery from brain fatigue by natural life rhythm in the style of planet's wildlife: wake-up in brilliant natural light and sleep at sunset in an unplugged place without computer or smartphone.

### 4) Highly Effective Promotion of Suicide Prevention Measures

Because of the Christian message, westerner's view of life and death is that suicide is the same as a crime of murder. On the contrary, Japanese has a distinctive cultural background: tolerate suicide as one of life choices, glorify it as an ultimate act of self-sacrifice or look down the deceased on disgrace of the family. It linked to attitude to task and work. People risk their life to spend more than half their life at work. We need to learn from Western values of work that there is no worth risking life for it. With considerable suicides of unemployed adolescence and elderly, conference on suicide prevention is only the beginning of effort. Practical and effective activities should be more promoted than any Western countries; some local and occupational models are already created,

## 7. Conclusion

Japanese society enters the age of a declining birthrate and aging population. In that context, government and business recognize that working environment capable of marriage and child-raising is imperative for sustainable economic progress with handing world-class manufacturing technology on to the next generation. From the perspective that expanded reproduction of humankind is foundation on social development, a human being is irreplaceable in itself and the time of being treated as a material, like "throw a broken object away", should be negative legacy of the last century. Japanese government and Japan Federation of Economic Organizations recently pursue a proposal, "Working no limit", as it is, it's inconsistent with policy on the declining birthrate. Brainwork hub, "Brain", gives up the ghost by discharge completely with excessive use like car battery. Discretionary work system expanded without aware of the foregoing. It is unscientific and anti-human historical. It should be taken special note that adequate sleep and enough spare time have been keeping brain charging.

As the highest priority issues on mental healthcare of 21 century, which is prevention of explosive increase in depression and following suicides, scientific elucidation and drastic measures are much-needed. In 2000, "Health Japan 21" was designed to reduce suicide rate by 20% by 2010. There has been no progress so far and therefore the target year was rescheduled until 2015. A huge paradigm shift has never been strongly demanded in Japan. Political and business leaders should identify it as one of top priorities.

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## Postscript

How often do political and economic leaders experience 8-hour work and 40-hour workweek? Do you know that working hours described above spread throughout the world after the Russian Revolution a hundred years ago? Are you aware that International Labour Organization, ILO, has issued strict recommendation on Japanese working situation over and over? Although MHLW proposed working hours up to 45 hours a month, the chairman of the

Federation of Economic Organization and Prime Minister Abe settled a working policy for “100 monthly working hours or an average of 80 working hours per 2 months” at the summit meeting between. That does not overcome the current situation in the least. I wonder if he is a top political leader to protect the people’s labor and health and such political sense is inferior to Iyasu Tokunaga, the first Shogun of the Edo period 4 centuries ago. What kind of judgement do this country and its’ people make and how do they act with disappointment, despair, discouragement and resignation. Even today, 10 years after the earthquake, things have not changed at all.