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Special Feature Article

Understanding Depression in Workplace and Collaboration between Psychiatrists and Occupational Physicians

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Abstract

Depression in workplace has become an important issue with prolonged recession, employment diversification, a declining birthrate, and an aging population. The suicide rate in Japan remains relatively high, and the number of patients with mood disorders is increasing along with the sales of antidepressants. The aging and shrinking population may be behind the burden of working generation. Clinical practice around depression in workplace is complicated as depression has a variety of types depending on balance between "bio-psycho-social" factors. In particular, non-endogenous depression is more common in younger generation, mild in general, and difficult to identify compared with endogenous depression. Its symptoms are affected by the environmental factors such as overload or problems of human relationships in the workplace, and thus disappear during out of duty or in the leisure time. It is pre-morbid with case's personality that is immature, self-centered, and that tend to blame others. Finally, it may recover rapidly due to environmental changes, which is uncommon in endogenous depression. Nonendogenous depression is difficult to understand and treat with in the workplace. It is puzzling for occupational physicians to deal with, since it may raise a conflict between cases and the company. This article tries to explore a better solution for attending physicians and occupational physicians to deal with the complicated depression problems in the workplace with the keywords of "bio-psycho-social" approach.

Keywords: depression, workplace, non-endogenous, bio-psycho-social factors, occupational physician

Introduction

In recent years, mental health problems have been observed in Japan various in settings, including workplaces, schools, and homes, due to a sense of national stagnation caused by the prolonged recession. The number of suicides in Japan exceeded 30,000 for 14 consecutive years since 1998, then has declined since 2010, reaching less than 22,000 in 2016. However, the suicide rate due to work-related problems is higher than in the past (Figure 1)³⁾.

According to the Ministry of Health, Labor and Welfare (MHLW) Japan, the number of patients with mood disorders, including depression, increased 2.4-fold (reaching up to a million cases yearly) in 2008 from the previous 12 years²⁾, as the sales of antidepressants have increased five-fold (up to 100 billion yen). The situation may continue in the future along with a more severe declining birthrate and aging population.

Depression and other mental illnesses often occur in the working-age population, resulting in extreme social costs. The cause of depression is substantially unknown, and the symptoms and treatment of depression for both outpatient and inpatient are often prolonged. In addition to medical costs (direct costs), lost time from work (indirect costs) is also incurred, and a MHLW, Japan survey estimates that the indirect costs for depression is 14 times more costly than the direct costs for depression, suggesting that depression would make an impact in terms of social costs (Table 1)¹).

I. The rights and wrongs of Manipulative Diagnosis of Depression

Up to 90% of patients who present with depression first visit a nonpsychiatric clinics or hospitals⁴⁾. Most patients present with physical problems and visit medical departments such as internal medicine. Therefore, nonpsychiatrists often take a place in the primary care for the treatment of depression. According to the Diagnostic and statistical manual of mental disorders 5 by the American Psychiatric Association (DSM5). depression is defined as five or more of the following nine symptoms (including at least one of (1) and (2)) that persist for at least two weeks and interfere with one's daily activities such as work or school activities. The symptoms are as follows: (1) depressed mood, (2) loss of interest or pleasure, (3) decreased appetite and weight loss, (4) insomnia, (5) agitation, (6) fatigue, (7) sense of worthlessness,

(8) difficulty thinking and concentrating, and (9) suicide ideation. In other words, the number of symptoms, severity, and duration are the only factors defined to make an diagnosis. On the other hand, environmental factors and personality tendencies, that have traditionally been taken into account, are omitted from the diagnostic procesure.

While the DSM's operational diagnostic criteria is of clear-cut and easy to understand for everyone, it also limitations. Depression is has ิล condition that should be understood in the context of a life story. It includes not only biological factors but also psychological and social factors, which should be understood as a whole. The former DSM-IV proposed the concept of multiaxial diagnostic а system (consisting of five items: (1) primary illness, (2) personality and intelligence, (3) physical illness, (4) psychological and (5) social and social stress. adjustment level). (Not adopted in DSM-5.)

However, it is difficult to objectively standardize the assessment of psychological and social factors. It is challenging to categorize stressors in one's life and their degree of severity. They are difficult to standardize and evaluate because they are influenced by various circumstances including one's life history. personality, nurturing environment, familial economic status, school or workplace-related factors and so on (almost impossible to name everything). Obiously, to establish an international standard criteria with these various factors is challenging because of the differences in the social and cultural background among countries or regions.

Because the objectivity and reproducibility is required in research and statistics to enable international comparisons, diagnostic criteria should according be made to the symptomatology of the present illness. This may lead to exclude the causative psychological and social background (usually not applicable to standardized) from the diagnostic basis. Although it may make the diagnostic criteria world standerd. \mathbf{it} also losts sence of narratives. that is essential to understand psychiatric conditions comprehensively.

II. Comprehensive understanding of depression in the workplace

Depression is caused by the complex interaction of biological factors (functional impairments of the brain), psychological factors (personality, one's values or cognition), and social (environmental) factors (e.g., work environment, human relationship or stress). These three factors should take into account to make a diagnosis, so that the diagnosis and treatment of

depression in workplace would became more realistic and productive for both employees and the company. Analysing the proportions of these three factors in cases with depression may lead to a better understanding and efficient treatment strategies (Figure 2). For depressibe cases having a biological factor as a major part of the three (biopsycho-social) factors, giving them a rest and medication (i.e., antidepressants such as SSRIs or SNRIs) would be a main theraputic strategy. For cases with a psychological factor as a major part of the three factors, psychotherapy (i.e., cognitive behavioral therapy: CBT) would be a main strategy, making them have a chance to change their way of thinking perception, which may lead to a or better coping with their stress from human relationship in the workplace. For those with social (environmental) factor as a major, Environmental adjustment (e.g., work restrictions such as reducing woking hours or overloads).

III. Correspondence to Depression Based on the Three Factors: Biological, Psychological, and Social

For many cases with psychological factors (personality or cognitive tendencies) as a dominant constituent factors of depression, the standard treatment of depression (having a rest and taking an antidepressant) could not be successful. As Tarumi (2005) pointed out in his paper as "disthymia-type depression" (non-academically called "new-type depression" or "modern-type depression"), younger generation tends to manifest "psychological moratorium" become (avoiding to independent psychologically as a member of the society) in the workplace. The main focus of treatment for such cases is the way their way to think or perceive things or matters. CBT provides the patient opportunities to review their cognition and lead to release from their psychological negative pattern by themselves. Counselors is thus metaphorically called "a psychological mirror of the patient". It is also necessary for patients to follow the minimum workplace rules and encourage their selfesteem as а company member.

(i.e., Endogenous melancholic) depression would be largely caused by factors. The biological primary theraputic strategy for such cases would be having а \mathbf{rest} and taking antidepressants. When the treatment response is no good for lon tme, the constituent balance evaluation between the three elements of depression should be looked again.

Tarumi (2005) summarize the two different types of depression from various aspects (Table 2)⁵⁾.

Mood disorders include manic

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depressive illness (bipolar disorder) besides depression. In bipolar II disorder, manic state remains maild (hypomania), and more than 90% of the disease period is occupied by depressive state whereas hypomanic state appears only in a short time. Clinically, bipolar II disorder is often hard to distinguish from unipolar depression, maiking it difficult to treat with in both theraputic setttings and workplace.

Usually, patients with depressive state (with no history of mania or hypomania) istreated with antidepressants as having depression (not bipolar disorders). Some of them may develop manic episodes later on (antidepressant-induced mania). considered having bipolar II disorder rather than unipolar depression. The diagnostic change and perscription change to mood stabilizers may happen only after observed hypomanic episode(s) during antidepressant treatment. In such case, switching from antidepressants to mood stabilizers (and/or some antipsychotics) is needed. Suitable choice of drug may help patients to return to work sooner.

IV. An Old and New Problem: The Difficulty of Comprehensive Understanding of Depression in Workplace

In workplace, the boss and colleagues face difficulties to deal or to treat with

with "non-endogenous" those depression (e.g., dysthymic type of depression). There are no biological markers. is difficult and it to distinguish what type of depression, even for specialists in psychiatry. Often it takes time to make a differential The "non-endogenous" diagnosis. component has a variety of factors, disorder-like including adjustment components, developmental disorderlike components, and personality components.

If a worker depressed with evident "non-endogenous" component, the workplace may struggle with how to deal with the case. In other words, the debate arises whether the workplace should deal with the case as a medical matter or as personnel affairs. Actually a similar problem would happen for the attending physician (psychiatrist) as it is difficult to distinguish between endogenous and nonendogenous factors. The attending physician (psychiatrist) wouldn't (chouldn't) give a definitive diagnosis becase there is no biological markers. As a result, labor relations may have a delicate relationship, and the company side has difficulty to deal with.

V. How Long the "Protective Policy" Continues?

In large companies or government offices in Japan, employees are

generally well protected in terms of employment. When depression cases occur in the workplace, reducing the workload or reffering to mental health services including mental clinics should be taken place primarily. If the depression recovers with these arrangements, the worker could return to the normal job. In refractory such normal depression cases to therapeutic strategy with prolonged sick leave, better start to take cases' "non-endogenous" factors into account. The normal "protective" strategy (the rest and drug treatment) may not be the essential solution. Sometimes it may be necessary to make them confront their own psychological issues (personality or way of cognition) at some point, switching from the "protective" strategy. This may include telling the worker that there is a limitation in treating with a medical model, and at some point it would be deal with as a matter of human resources. Although, there is no evidence for us to know when is the appropriate timing of switching the theraputic policy.

In any case, the collaboration between the attending physician (psychiatrist) and the occupational physician may be important particularly in such "nonendogenous" cases of depression. Discussing the background factor of depression, including the case's personality or way of cognition, may lead to a better understanding and finding a point of compromise in terms of conditions for returning to work..

Conclusion

After all, depression in the workplace is somewhat challenging to deal with, especially in atypical "non-endogenous" cases. It should not be too protective for the cases. Although, it could not easily determine that the problem comes fully from the case's personnel issues, since it is relatively common for depression cases to have a mixed factors in behind. Until the balance of background factors is revealed, it can not be helped to take a "wait-and-see policy". However this policy must be ended at some point, at least before the expiration of sick leave period of the belonging company.

The attending physician (psychiatrist) and occutional physician should cooperate for better understanding and solution for the recovery from depression and help workers back to work with better resilient coping capacity.

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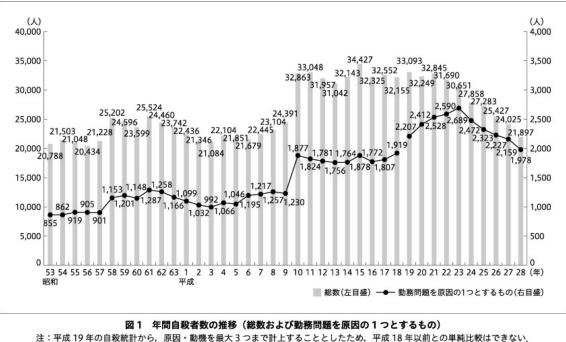
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(文献3より引用)

Figure 1. Annual number of suicides in Japan since 1978 (Showa 53th) to 2016(Heisei 28th).

The gray bar indicates total number in left scale. The line graph indicates the number of suicides with labor-related problems in right scale.

Note: This statistic counts only one cause related to suicide until 2006 (Heisei 18th), whereas since 2007(Heisei 19th), it counts up to three causes. Thus, simple comparisons cannot make before and after 2007. (Quoted from Reference #3)

	Psychosis	Mood disorders	Anxiety disorders
Direct costs	770 billion yen	209 billion yen	49.7 billion yen
(e.g., medical expenses)	(5.83 billion USD)	(1.58 billion USD)	(376 million USD)
Indirect costs	2,004.3 billion yen	2,881.0 billion yen	2,343.4 billion yen
(e.g., loss of absence from work)	(15 billion USD)	(21.8 billion USD)	(17.7 billion USD)
Total costs	2,774.3 billion yen	3,090.0 billion yen	2,393.1 billion yen
	(21 billion USD)	(23 billion USD)	(18 billion USD)

 Table 1. The social annual costs of mental health problems are enormous. (Japan, 2008) (Quoted from Reference #1)

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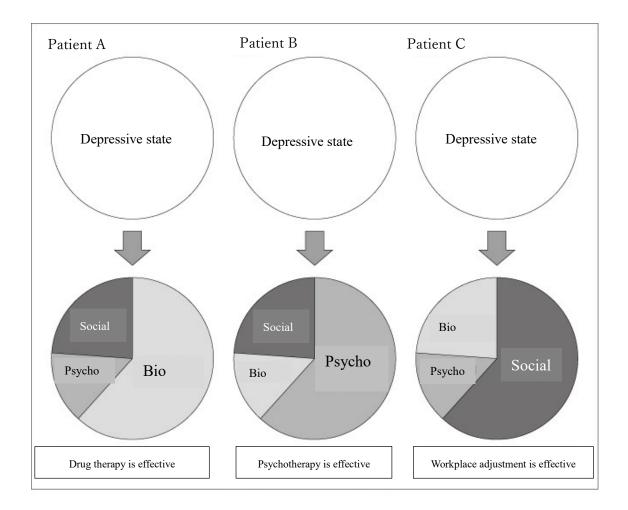


Figure 2. Heterogeneity of depression and its backgrounds.

Drug therapy may be effective for those depressive state with biological factors (i.e., endgenious depression) as a main role (patient A). Psychoterapy may be effective for those with psychological factors (one's way of cognition or personality) as a main role (patient B). Workplace (environmental) adjustments may be effective for those with social (environmental) factors as a main (patient C).

	Melancholic depression	Dysthimia type depression	
Age group	Middle-aged (born before 1970?)	Adolescents (born after 1970?)	
Related	Immobilithymie	Student apathy	
temperament	Melancholic type	Retreat neurosis-like	
Premorbid	Attachment to social roles and norms	Attachment to self (without functions)	
Personality	Favoritism and identification with norms	Resists norms as "stressful"	
	Order-loving, considerate, meticulous	Resistance to order and baseless versatility	
	Workaholic	Essentially unenthusiastic about work	
Symptomatology	Agitation and suppression	Feeling of inadequacy and malaise	
	Exhaustion and guilt feeling (expressing	Avoidance and other-punitive feelings (blaming	
	apologies)	others)	
	Deliberate suicide attempts that may be	Impulsive self-harm, thoughtless "mild" suicide	
	completed	attempts	
Cognitive and	Behavioral changes due to illness are evident	Indistinguishable the way cases are from symptoms	
behavioral patterns			
Response to	Mostly well-respond (recover from sickness)	Partial sesponse only (never ending	
medications		phathophysiology)	
Prognosis and	Getting well by medications and the rest in	Often getting chronic	
environmental	general	Rapid improvement with environmental changes on	
changes		the other hand	

Table 2. Conparision between the Conventional Melancholic Depression and the Dysthymia Type Depression (Partially modifiedand quoted from Tarumi (2005)⁵⁾