Brief Report

Early Intervention in Psychiatry

Suicidal ideation and burnout among psychiatric trainees in Japan

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Abstract

Aim: Burnout is a psychological condition that may occur in all workers after being exposed to excessive work-related stresses. We investigated suicidal ideation and burnout among Japanese psychiatric trainees as a part of the Burnout Syndrome Study (BoSS) International. Methods: In the Japanese branch, 91 trainees fully completed Suicide ideation and behavior questionnaire (SIBQ) and Maslach Burnout Inventory (MBI-GS). Results: Passive suicidal ideation was reported by 38.5% of Japanese trainees and 22.0% of them had experienced active suicidal ideation. The burnout rate among Japanese subjects was 40.0%. These results were worse compared to the all 1,980 trainees who fully completed the main outcome measure in BoSS International, 25.9%, 20.4% and 36.7%, respectively. Conclusions: Our results suggest a higher risk of suicide among Japanese residents. Japan has a higher suicide rate than other countries. Early detection of, and appropriate intervention for, suicidal ideation is important in preventing suicide in psychiatry residents.

Background

Psychological wellbeing is an important factor for residents to complete a specialty training program. Mental health problems in the medical workforce can have negative effects on clinical performance and patient care.[1]

Burnout is a psychological condition that may occur in all workers after being exposed to excessive and prolonged work-related stresses; and is characterized by three dimensions; emotional exhaustion (EE), cynicism (CY), and reduced personal efficacy (PE).[2] Although burnout is closely related to depression, these two conditions can be differentiated from each other because burnout is limited to work related situations while depression is more general.

Suicidal ideation is a significant symptom of depression that may result in a catastrophic outcome such as completed suicide. Previous studies have demonstrated that burnout is independently associated with suicidal ideation in medical professionals.[3] Early detection of, and appropriate intervention for, suicidal ideation is important in preventing suicide in medical workers.

In this paper, we report the results of our survey which investigated burnout and suicidal ideation among psychiatric trainees in Japan.

Methods

This survey on suicidal ideation and burnout among psychiatric trainees in Japan was conducted as a part of the Burnout Syndrome Study (BoSS) International.[4] BoSS was initiated by members of the European Federation of Psychiatric Trainees (EFPT) and the European Psychiatric Association–European Early Career Psychiatrists (EPA–EECP). The aim was to assess burnout rates among psychiatric trainees and explore factors that are associated with burnout. The subjects were psychiatric trainees in 22 countries/regions and they were requested to answer on-line questionnaires. A national coordinator in each country was recruited using the EFPT, EPA-EECP and World Psychiatric Association (WPA) fellowship program networks. For the Japanese branch of the study, a national coordinator (the first author of this paper) recruited study collaborators all over Japan using the Japan Young Psychiatric Organization (JYPO) mailing list; and psychiatric trainees working at their medical institutes were invited to participate in BoSS International by e-mail. In Japan, all trainees from 15 university hospitals and their affiliated teaching institutions were enrolled. Out of 7,468 psychiatric trainees internationally who received an e-mail invitation, 1,980 trainees (26.0%) fully completed the main outcome measure. Of them, 95 were from Japan (response rate: 41.5%). In the Japanese branch, 91 out of 95 trainees fully answered

questionnaires to assess suicidal ideation and burnout.

Suicidal ideation and burnout were assessed by using the Suicide ideation and behavior questionnaire (SIBQ)[5] and the Maslach Burnout Inventory - General Survey (MBI-GS),[6] respectively. SIBQ is a short instrument to assess suicidality as a trait that arises from passive and active suicidal ideation through to suicidal behaviour and suicide attempts.[7] The criteria for severe burnout in this survey were defined as EE scores of 2.20 and higher, and CY of 2.00 and higher. Statistical analysis was performed by using IBM SPSS Statistics 22.

The study protocol was approved by the ethics committee of Sapporo Medical University, and this study was conducted in compliance with the Helsinki Declaration. The aim of this study was clearly stated on the online survey's first page. Answering the questionnaire was deemed to constitute consent, with an initial question asking for the subject's agreement to participate. All respondents participated in this study without any incentive provided by the study investigators.

Results

The mean age of the 91 Japanese psychiatric trainees (67.0% male) enrolled in BoSS International was 31.8±4.8. Their mean clinical experience was 3.6±2.4 years. The mean weekly working hours in the workplace were 67.7±22.4.

Regarding experienced suicidal ideation measured by SIBQ, passive suicidal ideation (*Have you ever thought it would be better if you die?*) was reported by 38.5% of Japanese trainees and 22.0% of them had experienced active suicide ideation (*Have you ever thought about committing suicide?*). These rates were higher than the means of the whole study, 25.9% and 20.4%, respectively. Statistical analysis demonstrated a significant difference between the Japanese sample and the whole dataset with regard to passive suicidal ideation ($p=0.0089$, chi-squared test) while the difference was not significant on active suicide ideation ($p=0.7964$). With regard to the period of suicidal ideation, 77.1% of psychiatric trainees with passive suicidal ideation and 70.0% of those with active suicidal ideation experienced it before entering psychiatry training programmes.

Mean scores on MBI-GS subscales for Japanese subjects were EE 3.0±1.5, CY 2.3±1.4 and PE 3.7±1.1. All three scores were worse compared to the means for all 1,980 subjects; 2.6±1.4, 2.0±1.4 and 4.5±1.1, respectively. Two group comparisons between presence and absence of suicidal ideation demonstrated no statistically significant difference. However, the trainees with current or previous suicidal ideation had higher EE and CY, and lower PE scores on MBI-GS, that is, they had more severe burnout

compared to those without suicidal ideation.

Discussion

Japan has a higher suicide rate than most other countries. OECD data show that the annual suicide rate in Japan is 20.9 per 100,000 population, 4th highest among 34 member countries.[8] This is much higher than the mean for all OECD countries, 12.4 per 100,000.

Previous studies have revealed that the suicide rate among physicians is much higher than in the general population.[9] This fact may be explained, at least partially, by the stigma against psychiatric services among non-psychiatry specialists and the fear that receiving psychiatric treatment could lead to the loss of their medical license even though they are aware of the necessity of psychiatric intervention.[10]

To the best of our knowledge, this study is the first to investigate suicidal ideation among psychiatric trainees in Japan by using SIBQ. Our results demonstrated that, among 91 Japanese psychiatric trainees who replied to our invitation, 38.5% had experienced passive suicidal ideation and 22.0% of them had experienced active suicidal ideation. Both of the rates were higher than those among psychiatry trainees in other countries, suggesting a higher risk of suicide.

The burnout rate among Japanese psychiatric trainees was 40.0% according to the results of the MBI-GS subscales, while the rate of burnout was 36.7% in the whole study. A tendency for correlation was observed between current/previous suicidal ideation and burnout. Burnout may be linked to drop-out from speciality training programmes and malpractice in clinical settings.[11]

Statistical analyses of the whole dataset from BoSS International (n=1,980) showed that younger age and longer working hours were associated with burnout.[4] Further analyses revealed that reduced contact hours with their supervisors could be related to burnout among psychiatric trainees. Clinical mentors should be aware of the higher risk of burnout in young residents and the importance of regular and sufficient supervision to prevent burnout and to diminish suicidal ideation. Furthermore, program directors should pay careful attention to trainees with current/previous suicidal ideation because they may be more susceptible to burnout.

This study has several limitations. Sample size was too small to draw definitive conclusions because the total number of trainees in Japan at the time of study was estimated as 1,922 (Representative rate: 4.9%). However, this is the largest study on suicidal ideation and burnout among psychiatric trainees in Japan. Previous history of suicidal ideation may affect motivation for entering psychiatry training programmes

and this fact may bias the results. There may be differences in the time when thoughts and behaviors assessed by SIBQ and MBI-GS were experienced.

The Japanese Government revised the Industrial Safety and Health Act in order to improve the mental health of workers in every field, and obliged employers to regularly conduct “psychological stress checks" of all workers since December 2015. The results of BoSS International reveal that burnout was associated with long working hours, lack of supervision, and not having regular rest. More attention should be paid to the work conditions of psychiatric trainees because some of them might have a risk of suicide.

References

1. Demerouti E, Bakker AB, Leiter M. Burnout and job performance: the moderating role of selection, optimization, and compensation strategies. Journal of occupational health psychology. 2014; 19: 96-107.
2. Maslach C, Schaufeli WB, Leiter MP. Job burnout. Annual review of psychology. 2001; 52: 397-422.
3. Shanafelt TD, Balch CM, Dyrbye L, et al. Special report: suicidal ideation among American surgeons. Archives of surgery. 2011; 146: 54-62.
4. Jovanovic N, Podlesek A, Volpe U, et al. Burnout syndrome among psychiatric trainees in 22 countries: Risk increased by long working hours, lack of supervision, and psychiatry not being first career choice. European psychiatry : the journal of the Association of European Psychiatrists. 2016; 32: 34-41.
5. Marusic A, Roskar S, Zorko M. Questionnaire on suicide ideation and behaviour. In: Shrivastava A, ed. Suicide prevention in developing countries. London: Gaskell; 2007. 201-9.
6. Maslach C, Jackson SE, Leiter MP. Maslach burnout inventory manual. Palo Alto: Consulting Psychologists Press; 1996.
7. Jovanovic N, Podlesek A, Medved V, et al. Association between psychopathology and suicidal behavior in schizophrenia. A cross-sectional study of 509 participants. Crisis. 2013; 34: 374-81.
8. OECD. Making Mental Health Count - The Social and Economic Costs of Neglecting Mental Health Care (Report). Paris: OECD; 2014.
9. Schernhammer ES, Colditz GA. Suicide rates among physicians: a quantitative and gender assessment (meta-analysis). The American journal of psychiatry. 2004; 161: 2295-302.
10. Rubin R. Recent suicides highlight need to address depression in medical students and residents. Jama. 2014; 312: 1725-7.
11. Thomas NK. Resident burnout. Jama. 2004; 292: 2880-9.

Figure legend

Table 1
A two-group comparison of work environment and burnout between absence and presence of passive suicidal ideation assessed by using SIBQ