In higher education, globalization has been rapidly occurring worldwide. International students are exposed to new cultures and some develop severe mental health disorders resulting in poor outcomes, such as suicide. However, there are no cohort studies on mental health literacy. Thus, we elucidated how to prevent poor mental health outcomes when studying abroad via a five-year retrospective cohort study undertaken at a Japanese university.

Demographic data, language ability, diagnoses, main stressors, and help-seeking behavior were analyzed and then poor and non-poor outcome cases were compared. Non-Asian regions, particularly Latin American and African regions, and non-regular student status showed higher risks for poor mental health outcomes. In poor outcome cases, self-help-seeking behavior was poorer, delusional psychoses had an earlier onset after arriving in the host country, and culture shock was experienced. Depressive withdrawal disorders had a later onset and were related to individual vulnerabilities.

From the above, early detection and intervention is essential for the prevention of such cases. Peer supporters and supervisors should pay attention to international students who appear to be vulnerable to mental disorders, and they had better to refer them to health services as soon as they notice their unsociable change. Furthermore, orientation to social resources for health, mental health guidance for their instructors, frequent encouragement of help-seeking behavior, and enlightenment for stigma against mental health issues, are also all important for the complete prevention of poor outcome cases.
because of their family’s absence in the host countries. Thus, some individuals will exhibit poor outcomes, such as forced return home or, in extreme examples, suicide\(^\text{[7,8]}\). However, there has not yet been a cohort study on the prevalence of poor mental health outcomes among those studying abroad. Therefore, we conducted a retrospective cohort study with international students at an integrated university over a five-year period.

This study had two aims: First, we sought to extract the characteristics of poor mental health outcomes among international students and to elucidate the main risk factors in order to prevent severe cases from occurring through comparison non-poor outcome cases. Second, we aimed to clarify the details of poor outcome cases, classifying them into two sub-groups: psychotic mental disorders and so-called common mental disorders. The ultimate goals in this study are to establish a method of intervening in mental health issues at an earlier stage and to better prevent such severe cases more precisely.

### Results

Demographic data, language ability, diagnoses, main stressors, and help-seeking behavior were analyzed and then poor and non-poor outcome cases were compared.

Non-Asian regions, particularly Latin American and African regions, and non-regular student status showed higher risks for poor mental health outcomes. In poor outcome cases, self-help-seeking behavior was poorer, delusional psychoses had an earlier onset after arriving in the host country, and culture shock was experienced. Depressive withdrawal disorders had a later onset and were related to individual vulnerabilities.

### Conclusions

The prevention of delusional psychosis is essential. Mother tongue use and home culture connection is needed for gradual acclimatization, and social support and medical education should be conducted for newcomers. For depressive withdrawal disorders, early detection and intervention and total health promotion for both students and supervisors is necessary.

### Keywords

Mental health, Transcultural psychiatry, Poor outcome, Globalization, Acute psychosis, Depression

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