



Appetite loss as a potential predictor of suicidal ideation and self-harm in adolescents: A school-based study



Yuko Kitagawa ^{a, b}, Shuntaro Ando ^c, Syudo Yamasaki ^c, Jerome Clifford Foo ^a,
Yuji Okazaki ^d, Shinji Shimodera ^{e, **}, Atsushi Nishida ^{c, *}, Fumiharu Togo ^a,
Tsukasa Sasaki ^a

^a Department of Physical and Health Education, Graduate School of Education, University of Tokyo, 7-3-1, Hongo, Bunkyo-ku, Tokyo, 113-0033, Japan

^b Japan Society for the Promotion of Science, 5-3-1, Koujimachi, Chiyoda-ku, Tokyo, 102-0083, Japan

^c Department of Psychiatry and Behavioral Sciences, Tokyo Metropolitan Institute of Medical Science, 2-1-6, Kamikitazawa, Setagaya-ku, Tokyo, 156-8506, Japan

^d Tokyo Metropolitan Matsuzawa Hospital, 2-1-1, Kamikitazawa, Setagaya-ku, Tokyo, 156-0057, Japan

^e Department of Neuropsychiatry, Kochi Medical School, Kochi University, Oko-cho, Kohasu, Nankoku-shi, Kochi, 783-8505, Japan

ARTICLE INFO

Article history:

Received 5 August 2016

Received in revised form

11 December 2016

Accepted 19 December 2016

Available online 21 December 2016

Keywords:

Appetite loss

Insomnia

Suicidal ideation

Self-harm

Adolescence

ABSTRACT

Suicide is a leading cause of death in adolescents, but detection of its risk is often challenging. Many mental illnesses share the common symptom of appetite loss and it is also known that people who suffer from these illnesses are at greater risk of suicide. However, the relationship between appetite loss and suicide risk has yet to be examined. For adolescents in particular, questions about appetite loss may be easier to answer than sensitive questions regarding mental health. The present study aims to investigate the association of appetite loss with suicidal ideation and self-harm in adolescents. Rates of adolescents with suicidal ideation or self-harm associated with appetite-loss were examined in 18,250 Japanese junior and senior high school students (aged 12–18) using a self-report questionnaire. Insomnia, a physical symptom which has previously been associated with suicide risk, was also controlled for in the analysis. Results showed that rates of adolescents with suicidal ideation or self-harm significantly increased according to the degree of self-reported appetite loss. Similar results were observed for insomnia. Odds ratios (ORs) for suicidal ideation and self-harm were 5.5 and 4.1 for adolescents with appetite loss compared to those without it, and the ORs were 5.5 and 3.5 for those with insomnia compared to those without it, respectively, adjusting for sex and age ($p < 0.001$). ORs remained statistically significant after adjusting for depression/anxiety (General Health Questionnaire-12 score). In conclusion, self-reported appetite loss was highly associated with suicidal ideation and self-harm in adolescents; adolescents reporting physical symptoms such as loss of appetite or insomnia should be given careful attention.

© 2016 Elsevier Ltd. All rights reserved.

1. Introduction

Suicide is a leading cause of death among adolescents worldwide (Hawton, Saunders, & O'Connor, 2012; World Health

Organization, 2014). Early detection of suicide risk in adolescents is critical for decreasing suicide rates and attempts, but presents a difficult challenge for a number of reasons. For example, it has been shown that adolescents tend to hesitate when seeking help and answering sensitive questions about their psychological problems (Gould et al., 2004; Rickwood, Frank, & Wilson, 2007), especially when it comes to problems as serious and sensitive as suicide (Deane, Wilson, & Ciarrochi, 2001; Kitagawa et al., 2014; Wilson, Deane, Marshall, & Dalley, 2010). Moreover, in comparison to adults, younger people tend to have difficulties recognizing mental symptoms such as depressive feelings (Christensen, Cuijpers, Reynolds, & Iii, 2016; Gulliver, Griffiths, & Christensen, 2010). As

* Corresponding author.

** Corresponding author.

E-mail addresses: yk@p.u-tokyo.ac.jp (Y. Kitagawa), ando-st@igakuken.or.jp (S. Ando), yamasaki-sd@igakuken.or.jp (S. Yamasaki), jeromefoo@gmail.com (J.C. Foo), yokazaki18510@gmail.com (Y. Okazaki), shimodes@kochi-u.ac.jp (S. Shimodera), nishida-at@igakuken.or.jp (A. Nishida), tougou@p.u-tokyo.ac.jp (F. Togo), psytko@yahoo.co.jp, sasaki@p.u-tokyo.ac.jp (T. Sasaki).

such, simple and easy-to-answer questions about the physical symptoms significantly associated with suicidal problems have the potential to improve detection of the risk of suicide in adolescents.

Mental illnesses such as depressive disorders are known to be major risk factors of suicide (Hawton et al., 2012). Appetite loss is one of the most commonly observed physical symptoms in people with mental illnesses, and is also a diagnostic criterion for several of these illnesses, including depressive disorders (American Psychiatric Association, 2013). However, to our knowledge, only a single study has examined the relationship between appetite loss and suicide. This study (McGirr et al., 2007) observed significant loss of appetite (and body weight) in subjects with major depressive disorder (MDD, mean age = 42 years) who completed suicide compared with MDD subjects who had no suicide attempts. This lack of research on the relationship between appetite loss and suicide contrasts with an abundance of research about the links between suicide and insomnia, another physical symptom frequently observed in people with mental illnesses (Junker, Bjorngaard, Gunnell, & Bjerkeset, 2014; McCall & Black, 2013; Tang & Crane, 2006). A number of studies have observed significant associations between suicide and insomnia in various populations including adolescents, pointing to insomnia as a potential predictor of suicidal thoughts and suicide risk (Cappuccio, D'Elia, Strazzullo, & Miller, 2010; Goldstein, Bridge, & Brent, 2008).

While insomnia has been linked to suicidal ideation, it is unlikely to be the only physical symptom which has the potential to predict suicide risk; symptom presentation often differs between individuals, and using additional physical indicators may improve early detection. Appetite loss has the potential to act as a predictor alongside insomnia (McGirr et al., 2007). Given its high prevalence in mental illness, it may even be more informative, making it worthwhile to investigate its associations with suicidal ideation (Mann, 1998).

In the present study we investigated the relationship between appetite loss and the risk of suicidal ideation and self-harm in adolescents. Specifically, using a self-report questionnaire with grade 7–12 students, we examined whether having suicidal ideation or experiencing self-harm was significantly correlated with suffering appetite loss. In addition, we examined the associations between these suicidal problems and insomnia.

2. Methods

2.1. Subjects

A cross-sectional survey of psychopathologies was conducted between 2008 and 2009 in Kochi and Mie prefectures in Japan. Data were collected from students at 25 junior high schools (grade 7–9, aged 12–15) and 28 senior high schools (grade 10–12, aged 15–18). Of all students in those schools ($n = 19,436$), 798 (4.1%) were absent on the days of the survey and 388 (2.0%) declined to participate. Thus, a total of 18,250 students (93.9% of 19,436, 8992 males and 9112 females) agreed to participate in the survey. Due to incomplete data on appetite loss, insomnia, and demographics for 232 students, 18,018 responses comprised the final dataset. Of these students, 8985 (49.7%) were male, and 9108 (50.3%) were female.

The principal investigators approached the principals of the schools and requested their co-operation with the survey. If they agreed, the principals then consulted with teachers and parents of students, obtaining written parental informed consent. On the day of the survey, teachers distributed a self-report questionnaire and an envelope to each student, explaining that participation in the study was anonymous and voluntary, and that strict confidentiality would be maintained. Students completed and sealed questionnaires in the provided envelopes. Research staff collected the sealed

questionnaires at each school.

The study was planned and conducted in accordance with the Ethical Guidelines for Epidemiological Research of Japan and approved by the ethics committees of the Tokyo Metropolitan Institute of Psychiatry, the Mie University School of Medicine, and the Kochi Medical School at Kochi University.

2.2. Measures

The questionnaire included items on: 1) suicidal ideation, 2) self-harm, 3) appetite, 4) insomnia, 5) depression/anxiety, and 6) other variables including demographic characteristics such as sex and age. An expert in child and adolescent psychology and three teachers from the participating schools, including a Japanese language teacher, examined the questions for age-appropriateness and reading difficulty.

2.3. Suicidal ideation

Suicidal ideation was measured using the following question: “Do you currently have thoughts that life is no longer worth living?” as used in Paykel, Myers, Lindenthal, & Tanner, 1974 (Paykel et al., 1974). The participants selected one of four responses: “No”, “Probably Not”, “Possibly Yes” and “Yes”. Only adolescents who answered “Yes” were defined as having suicidal ideation because we wanted to distinguish clear suicidal ideation from possible depressive or negative but not suicidal thoughts.

2.4. Self-harm

Self-harm was measured using following question: “Did you intentionally injure yourself within the past year?” The participants were requested to answer “Yes” or “No”, and when the answer was “Yes”, they were requested to give details about the injury. The description of the details was scrutinized by two of the authors. When the self-injury was found to be deliberate, it was considered “self-harm”. It should be noted that although self-harm often shows high comorbidity with suicide, it has also been shown that not all self-injurious behaviors are on a continuum with suicide (Muehlenkamp & Gutierrez, 2004).

2.5. Appetite loss

Appetite loss was measured using the following question: “During the last week, how was your appetite?” Participants were asked to select one of the following responses: “No appetite” (appetite loss), “Not much appetite”, “Almost regular appetite”, and “Regular appetite” (no appetite loss).

2.6. Insomnia

Insomnia was measured using the following question: “Do you have difficulty in sleeping at night?” The participants were asked to select one of the following responses: “Yes” (= insomnia), “A little difficulty”, “Almost no difficulty” and “No” (= no insomnia).

2.7. Depression/anxiety

Depression/anxiety was evaluated using the Japanese version of the 12-item General Health Questionnaire (GHQ-12) (Goldberg, Rickels, Downing, & Heshbacher, 1976). A four-point scale with binary scoring (0011) was used for each of the questions. Responses of ‘1’ were then added together to form the total score, giving a range from 0 (lowest depression/anxiety symptoms) to 12 (highest depression/anxiety symptoms).

Download English Version:

<https://daneshyari.com/en/article/5044242>

Download Persian Version:

<https://daneshyari.com/article/5044242>

[Daneshyari.com](https://daneshyari.com)