

Available online at www.sciencedirect.com

ScienceDirect

journal homepage: www.jfma-online.com

ORIGINAL ARTICLE

Self-harm and its association with internet addiction and internet exposure to suicidal thought in adolescents

Hui-Ching Liu ^{a,b}, Shen-Ing Liu ^{a,b,c,d,*}, Jin-Jin Tjung ^e,
Fang-Ju Sun ^{b,c}, Hui-Chun Huang ^{b,c}, Chun-Kai Fang ^{a,c,d,f}

^a Department of Psychiatry, MacKay Memorial Hospital, Taipei, Taiwan

^b MacKay Junior College of Medicine, Nursing, and Management, Taipei, Taiwan

^c Department of Medical Research, MacKay Memorial Hospital, Taipei, Taiwan

^d Department of Medicine, MacKay Medical College, Taipei, Taiwan

^e Department of Family Medicine, MacKay Memorial Hospital, Taipei, Taiwan

^f Department of Thanatology and Health Counseling, National Taipei University of Nursing and Health Sciences, Taiwan

Received 13 November 2015; received in revised form 8 March 2016; accepted 18 March 2016

KEYWORDS

adolescent;
internet;
self-injurious
behavior;
suicidal ideation;
teen

Background/Purpose: Self-harm (SH) is a risk factor for suicide. We aimed to determine whether internet addiction and internet exposure to suicidal ideation are associated with SH in adolescents.

Methods: This study was a cross-sectional survey of students who self-completed a series of online questionnaires including a sociodemographic information questionnaire, questionnaire for suicidality and SH, Chen Internet Addiction Scale (CIAS), Patient Health Questionnaire (PHQ-9), multi-dimensional support scale (MDSS), Rosenberg self-esteem scale (RSES), Alcohol Use Disorder Identification Test-Consumption (AUDIT-C), and questionnaire for substance abuse.

Results: A total of 2479 students completed the questionnaires (response rate = 62.1%). They had a mean age of 15.44 years (range 14–19 years; standard deviation 0.61), and were mostly female ($n = 1494$; 60.3%). The prevalence of SH within the previous year was 10.1% ($n = 250$). Among the participants, 17.1% had internet addiction ($n = 425$) and 3.3% had been exposed to suicidal content on the internet ($n = 82$). In the hierarchical logistic regression analysis, internet addiction and internet exposure to suicidal thoughts were both significantly related to an increased risk of SH, after controlling for gender, family factors, exposure to suicidal thoughts in the real life, depression, alcohol/tobacco use, concurrent suicidality, and perceived social support. However, the association between internet addiction and SH

Conflicts of interest: The authors have no conflicts of interest relevant to this article.

* Corresponding author. Department of Psychiatry, MacKay Memorial Hospital, Number 92, Section 2, Chungshan North Road, Taipei 10449, Taiwan.

E-mail address: maryliuyip@gmail.com (S.-I. Liu).

<http://dx.doi.org/10.1016/j.jfma.2016.03.010>

0929-6646/Copyright © 2016, Formosan Medical Association. Published by Elsevier Taiwan LLC. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Please cite this article in press as: Liu H-C, et al., Self-harm and its association with internet addiction and internet exposure to suicidal thought in adolescents, Journal of the Formosan Medical Association (2016), <http://dx.doi.org/10.1016/j.jfma.2016.03.010>

weakened after adjusting for the level of self-esteem, while internet exposure to suicidal thoughts remained significantly related to an increased risk of SH (odds ratio = 1.96; 95% confidence interval: 1.06–3.64).

Conclusion: Online experiences are associated with SH in adolescents. Preventive strategies may include education to increase social awareness, to identify the youths most at risk, and to provide prompt help.

Copyright © 2016, Formosan Medical Association. Published by Elsevier Taiwan LLC. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

1. Introduction

Self-harm (SH) is a term used to describe all intentional acts of self-poisoning or self-injury in many European countries, irrespective of the presence of suicidal intention. This phenomenon is important to understand because repetition of SH is frequent and an independent risk factor for suicide, although many acts of SH in adolescents begin with non-suicidal intentions.¹ Longitudinal studies following up SH in adolescents found that individuals with acts of SH have an overall four-fold excess death rate compared with the expected rate (suicide being the main reason for this increased risk),² and an increased rate of having a psychiatric disorder in young adulthood.³

The risk factors for SH in adolescents are multifactorial and often intercorrelated. A systematic review of risk factors for adolescent SH indicated that adolescents with nonfatal SH have similar characteristics to those of adolescents who completed suicide.⁴ Among the identified factors, exposure to suicide (either clustering of suicides/contagion of suicidal behavior or media influence) is considered to be more influential on adolescents than adults.^{5,6} Exposure to nonfatal suicidal behaviors in family and friends is found to be predictive of SH in adolescents.⁷ However, little is known about the relationship between exposure to confided suicidal thoughts from others, particularly in the unique social context created by the internet, and a teenager's self-harmful behavior at the community level.

Internet addiction is characterized as a maladaptive pattern of internet use leading to clinically significant impairment or distress.⁸ It includes a preoccupation with internet activities, recurrent failure to resist the impulse to use the internet, tolerance, withdrawal, use of the internet for a period of time longer than intended, persistent desire and/or unsuccessful attempts to cut down or reduce internet use, excessive time spent on internet activities and leaving the internet, excessive effort spent on activities necessary to obtain access to the internet, and continued heavy internet use despite knowledge of having a persistent or recurrent physical or psychological problem likely to have been caused or exacerbated by internet use.⁹ Previous studies have found that adolescents with internet addiction have a higher level of attention deficit hyperactivity disorder symptoms, depression, and hostility, and an increased risk of engaging in aggressive behaviors.^{10,11} However, little is known about the association between internet addiction and SH in adolescents. More research examining this relationship and the possible underlying

mechanism is needed in order to appropriately identify and manage SH in adolescents.

In this study, our aim was to examine the relationship of SH in adolescents to internet exposure to confided suicidal ideation from others. We also tried to clarify the relationship of internet addiction to SH in adolescents, by controlling the effects of depression, concurrent suicidality, exposure to confided suicidal ideation, substance use, specific family factors, perceived social support, and self-esteem.^{4,12} For those who have harmed themselves, we further looked at the differences in the number of acts and suicide intent, and whether the methods of SH researched on the internet differed between internet addicted and nonaddicted adolescents. The characteristics of SH-related experiences were explored by examining internet exposure to suicidal thoughts.

2. Methods

2.1. Study design and sample

This study was a cross-sectional survey carried out in Taipei City and Taipei County from October 2008 to January 2009. There were 13 participating senior high schools (8 urban, 3 suburban, and 2 rural schools according to Taiwan-Fukien Demographic Fact Book¹³). All of the participating schools were equipped with classroom computing facilities, which the students utilized for self-completion of online questionnaires.

The recruitment was performed by a master's level research assistant, without any involvement of school staff, to avoid the risk of coercion. The research assistant carefully explained the aims and procedures of this study, emphasized the confidentiality issues, and obtained the participants' written informed consents. A letter was given to parents asking for their permission and their written response was brought back by the participating students. Ethical approval of this study was obtained from the Institutional Review Board of MacKay Memorial Hospital prior to recruitment.

2.2. Measurement

The online questionnaire was interactive with skip pattern design and took about 30 minutes to complete. The total number of items for each respondent depended on the respondent's answers. The following information was obtained.

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات