

The effect of suicide attempts on suicide ideation by family members in fast developed country, Korea

Sung-In Jang, Hong-Chul Bae, Jaeyong Shin, Suk-yong Jang, Seri Hong, Kyu-Tae Han, Eun-Cheol Park*

Department of Preventive Medicine and Institute of Health Services Research, Yonsei University College of Medicine, Severance Hospital, 50 Yonsei-ro Seodaemun-gu, Seoul 120-752, Republic of Korea

Abstract

Introduction: Suicide is a leading cause of death globally and is one of the most exigent health problems, especially in Korea. Individuals think about suicide first before they attempt and possibly complete suicide. If attempted or completed suicide affects suicidal ideation by family members or close individuals, suicide could spread like an infectious disease. We hypothesized that a suicide attempt by a family member could affect suicidal ideation. We analyzed the association between suicidal ideation and previous suicide attempts by family members.

Methods: This study used data from the fourth and fifth Korea National Health and Nutrition Examination Survey (2007–2012). The independent variable of interest is the existence of a cohabitating family member who previously attempted suicide. The dependent variable is self-reported suicide ideation during past year. The data analysis was conducted using the chi-square test and survey logistic regression.

Results: Suicidal ideation was reported by 14.3% of the total study population (9.5% of males, 19.0% of females), by 23.6% (22.8% of males, 31.3% of females) of individuals with a family member who attempted suicide, and by 14.1% (9.3% of males, 19.9% of females) of individuals without a family member who attempted suicide.

Individuals with a family member who attempted suicide had increased odds of suicidal ideation compared with those without a family member who attempted suicide (odds ratio = 2.09, 95% CI 1.48–2.49, $p < 0.001$).

Conclusions: To prevent suicide spreading like an infectious disease, government and policy makers should give thought and consideration to individuals with a family member who attempts suicide.

© 2016 Elsevier Inc. All rights reserved.

1. Introduction

Suicide, defined as death caused by intentional, self-inflicted poisoning or injury [1], is one of the leading causes of death and years of life lost globally [2] [3]. The suicide rate for the world as a whole was estimated at 11.6 suicides per 100,000 inhabitants, accounting for 1.4% of total mortalities and 15% of injury mortalities [2].

In Korea, the suicide rate was 33.5 suicides per 100,000 inhabitants in 2010. This is the highest rate among the

Organization for Economic Cooperation and Development (OECD) countries [4] and the second highest rate among the 105 countries included in Peeter's report [5]. Hence, suicide is accepted as one of the highest-priority subjects for public health management planning in Korea [6].

Much literature has been published on the subject of suicide, from which a multitude of personal and social risk factors have been identified, including gender, age, mental health status, life event and prior suicidal ideation [7–9]. Suicidal ideation tends to increase in the period immediately preceding a suicide attempt and could therefore act as a marker for the imminent threat of suicidal behavior and a key stage in the pathway leading to eventual suicide [7,10].

According to a report from a cross-national prevalence study, the cross-national lifetime prevalence of suicidal ideation and attempts is 9.2% and 2.7%, respectively [11]. The prevalence of suicidal ideation is far higher than that in Korea. A recent study showed that 19.1% of adolescents in

Conflict of interest statement: No conflict declared.

Financial disclosure: All authors have no financial disclosures.

* Corresponding author at: Department of Preventive Medicine and Institute of Health Services Research, Yonsei University College of Medicine, 50 Yonsei-ro, Seodaemun-gu, Seoul 120-752, Republic of Korea. Tel.: +82 2 2228 1862; fax: +82 2 392 8133.

E-mail address: ecpark@yuhs.ac (E.-C. Park).

Korea have suicidal ideation and that 4.9% have attempted suicide [12]. Also, 15.5% of adults in Korea have suicidal ideation [13]. Many studies have investigated the influence of demographic, socio-psychological, economic, and lifestyle-related factors on suicidal behaviors [14–19]. Additionally, there are reports that suicide is associated with stressful life events and with the family environment [1,20]. It is difficult, however, to find literature about the association between suicidal ideation and the existence of a family member who has attempted suicide.

In Korea, many people think about suicide, and many people die by suicide. The aims of this study are to provide the evidence for need about clinical assessment on suicide attempter's family member and to suggest that political need is needed to this vulnerable people for public health. So we hypothesized that a suicide attempt by a family member could affect suicidal ideation. If so, suicide attempt could make further more suicide risk, and the other way, the preventive care on family member of suicide attempter would be effective management for reduce suicide burden. In this study, we analyzed the association between suicidal ideation and suicide attempts by family members.

2. Methods

This study used data from the fourth and fifth Korea National Health and Nutrition Examination Survey (KNHANES III–IV, 2007–2012). The KNHANES is a national survey conducted annually by the Korea Centers for Disease Control and Prevention. The survey, which aims to assess the health status and the health-related perceptions and behaviors of Koreans, provides reliable and representative results at the national, municipal, and provincial levels. The survey, targeting all family members older than 1 year of age, included 2300 households in 2007, 4600 households in 2008 and 2009, respectively, and 3800 households in 2010, 2011, and 2012, respectively. The response rate ranged from 71.2% to 82.8% (2007, 71.2%; 2008, 77.8%; 2009, 82.8%; 2010, 81.9%; 2011, 80.4%; 2012, 80.0%). Our study did not require ethical committee approval, because the KNHANES data are secondary data that are available in the public domain and do not contain personal information.

Of the 50,405 individuals in the dataset (22,926 males, 27,479 females), this study included 39,251 individuals who responded to the survey question regarding diagnosed depression (17,098 males, 39,251 females; age ≥ 13). Of those, 38,887 individuals were included in the data analysis. We excluded the 364 individuals who had attempted suicide (128 males, 364 females).

The variable of interest was the existence of an individual in the family who had attempted suicide. Survey asked about experience of suicide attempt as "Have you ever attempted suicide during the past 1 year actually?". Answer was "Yes" or "No" and if anyone answered "Yes", his (or her) family was defined "Family member of suicide attempter".

The dependent variable was the existence of suicidal ideation within the past year. The KNHANES inquiry regarding the experience of suicidal ideation was: "Have you ever considered ending your own life during the past 1 year?" The responses were binary (Yes or No).

The independent variables included the survey year, gender, age, diagnosis of depression, family income, education level, job, marital status, self-reported health condition, underlying chronic disease, number of family members, and sleep duration.

Age was treated as a continuous variable. The family income was categorized into four quartiles, adjusted by family size. The education level was categorized into four groups (graduation from university or more, graduation from high school, graduation from middle school, and graduation from elementary school). The job variable was divided into three groups (office worker, site worker, and unemployed or homemaker). The marital status was categorized into three groups (marriage with cohabitation, other types of marriage [e.g., separated], and single). Self-reported health condition was divided into three groups (good, common, and bad). Underlying disease was considered present if the respondent was diagnosed with hypertension or diabetes by a doctor. The number of family members was divided into five groups (one, two, three, four, and more than four). Because sleep duration is independently associated with suicide ideation, we categorized sleep duration into five groups (<6 h, 6 h, 7 h, 8 h, and ≥ 9 h). All of the variables had statistically significant associations with suicidal ideation.

Our study did not require ethical committee approval because the KNHANES data are secondary data that are available in the public domain and do not contain private information.

The data analysis was conducted using the chi-square test and survey logistic regression. The data were analyzed for the entire sample and then stratified by gender. Additionally, we analyzed the data stratified by depression diagnosis and self-reported health condition. Results were considered significant if the p -value < 0.05 . SAS 9.2 was used for the statistical data analysis.

3. Results

Table 1 shows the rate of suicidal ideation for all levels of the independent variables within the entire sample and for each sex. Suicidal ideation was reported by 14.3% of the total sample population (9.5% of males, 19.0% of females). Among the individuals with a family member who had attempted suicide, the rate of reported suicidal ideation was 23.6% (22.8% of males, 31.3% of females). Among the individuals who did not have a family member who had attempted suicide, the rate of suicidal ideation was 14.1% (9.3% of males, 19.9% of females). A relatively high proportion (42.6%) of individuals with diagnosed depression had suicidal ideation. The rate of suicidal ideation was elevated among individuals with low family income, bad health condition, and chronic disease, respectively. Individuals who reported sleeping too much or too

Download English Version:

<https://daneshyari.com/en/article/6789661>

Download Persian Version:

<https://daneshyari.com/article/6789661>

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