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Research report

Factors associated with suicidal ideation and attempts in Spain for different age groups. Prevalence before and after the onset of the economic crisis

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ABSTRACT

Background: Little is known about whether the prevalence of suicidal ideation and attempts has changed in the wake of the economic crisis. The aim of this study was to estimate current prevalence of suicidal ideation and attempts in the general population in Spain, to compare it with the prevalence found before the economic crisis, and to analyse the factors associated with suicidality in different age groups.
Methods: A total of 4583 non-institutionalised adults were interviewed in a cross-sectional household survey of a nationally representative sample in Spain. Several modules of an adapted version of the Composite International Diagnostic Interview were administered to the participants, and logistic regression models were employed in each age group.
Results: Lifetime prevalence of suicidal ideation and attempts in Spain were respectively, 3.67% and 1.46%. Mental disorders presented the highest significant effects on lifetime suicidal ideation. Marital status, heavy alcohol consumption, and occupational status were associated with lifetime suicidal ideation in people aged 18–49, whereas loneliness was associated with the 50–64 group, and financial problems with the 65+ group. A younger age, poor health status and the presence of depression were all associated with lifetime suicide attempts.
Limitations: The cross-sectional design of the study represents a methodological limitation.
Conclusions: The current prevalence of suicidal ideation and attempts in Spain is similar to the one found ten years ago, before the recent economic crisis. The factors associated with suicidality vary among age groups. Suicide prevention programmes should focus on early detection and prevention for depression and anxiety disorders.

1. Introduction

Suicide is among the leading causes of death for individuals aged 15–49 years worldwide, as well as a top ten cause of years of life lost for all age groups in the world regions with the most advanced health transition (Lozano et al., 2012). The burden of disease in terms of disability-adjusted life years (DALYs) for both attempted suicide and suicidal ideation is also very high (Kerkhof, 2012), and so are the social and financial costs of suicide attempts (Czernin et al., 2012).

Previous local studies in Spain have found a two-week prevalence of suicidal ideation of 2.3% in the city of Santander (Casey et al., 2008) and a prevalence of suicidal ideation in recent weeks of 6.5% on the island of Formentera (Gili-Planas et al., 2001). The European Study on the Epidemiology of Mental Disorders (ESEMED) found that the lifetime prevalence of suicidal ideation in Spain in 2001/2002 was 4.4%, whereas the lifetime prevalence of suicide attempts was 1.5% (Bernal et al., 2007; Gabilondo et al., 2007). ESEMED was a cross-sectional household survey carried out in a probability representative sample of non-institutionalised adults (aged 18 years or older) in six European countries

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(Alonso et al., 2004). The study was part of the World Health Organization World Mental Health Surveys initiative.

However, little is known about whether this prevalence has changed in recent years. The present economic recession in Europe, and more precisely, the strict fiscal austerity and policy decisions on how to respond to the economic downturn, are expected to produce adverse health effects, such as an increase in the prevalence of mental disorders and in suicide rates (Karanikolos et al., 2013; Wahlbeck and McDaid, 2012). The changes in health coverage, which is no longer universal, and the austerity measures imposed on the health care services, mean that the effects might be higher in the weakest and most vulnerable members of society (Karanikolos et al., 2013). Nevertheless, these effects might vary across countries. Although increased unemployment has led to higher suicide rates in some countries (Barr et al., 2012; Reeves et al., 2012), this has not been proved to be the case in other countries, such as Portugal (Ayuso-Mateos et al., 2013) and the Baltic states (Stankunas et al., 2013). In Spain, there are still no conclusive results. Although Lopez Bernal et al. (2013) have reported an association of the financial crisis with a relative increase in suicides, other studies have not identified a strong suicide effect directly linked to the current crisis (Ayuso-Mateos et al., 2013; Salvador-Carulla and Roca, 2013), and evidence regarding changes in the prevalence of suicidal ideas and attempts is even more scarce.

The prevalence (Schmidtke et al., 2004) as well as the predictors (Fairweather-Schmidt et al., 2010; Haw and Hawton, 2008; Heikkinen et al., 1995) of suicidal behaviour change with age. Financial and employment problems seem to be more associated with suicidality in younger age groups (Fairweather-Schmidt et al., 2010; Haw and Hawton, 2008; Heikkinen et al., 1995). Not being married or with a partner has been found to be associated with increased probability of experiencing serious suicidality in young females (Fairweather-Schmidt et al., 2010) whereas other studies have found that social isolation problems contributed more to deliberate self-harm with increasing age (Haw and Hawton, 2008). The evidence regarding the role of other variables is more inconsistent. Although some studies have found that the importance of physical illness in contributing to suicidal behaviour increased with advancing age (De Leo et al., 1999; Haw and Hawton, 2008; Heikkinen et al., 1995), Fairweather-Schmidt et al. (2010) found that females in their 20s had higher odds of suicidal behaviour if suffering a physical medical condition. Identifying the factors associated with suicidality in specific age groups is crucial to guide evidence-based suicide prevention actions.

The previous evidence suggests the need to estimate the prevalence of suicidal ideation and attempts in the general population in Spain in the wake of the economic crisis and the implementation of austerity measures. Furthermore, it is also important to determine the specific factors associated with suicidality in this country, and to analyse whether these factors change across age groups in order to create tailored suicide prevention programmes. The aims of the present study were to estimate the prevalence of suicidality in the general population in Spain; to compare this prevalence with the one found in the ESEMED study ten years ago; and to analyse the social, demographic, clinical, and economic factors associated with suicidal ideas and attempts in different age groups at present.

2. Methods

2.1. Design

Cross-sectional household survey of a probabilistic sample representative of the non-institutionalised adult population in Spain.

2.2. Sample and procedure

A nationally representative sample comprising non-institutionalised adults (aged 18 years or older) from Spain was interviewed within the Collaborative Research on Ageing in Europe project (http://courageproject.eu/). An age-stratified sampling procedure was employed. A multi-stage clustered design was used; four strata based on the number of inhabitants of the municipalities were built for each of the 17 autonomous communities (self-governing regions) in Spain. Clusters were selected within the strata with a probability proportional to size. Households within each cluster were selected randomly from a list of all households. If there was more than one individual from the corresponding age group in the household, a random method was used to select the individual participant. Interviews were conducted face-to-face by Computer-Assisted Personal Interviewing (CAPI) at respondents' homes. All the interviewers participated in a training course for the administration of the survey. The survey was conducted between July 25, 2011 and May 8, 2012. Quality assurance procedures were implemented during fieldwork (Üstun et al., 2005). Ethical approvals from the Ethics Review Committees of Parc Sanitari Sant Joan de Déu (Barcelona) and of La Princesa University Hospital (Madrid), as well as written informed consent from participants, were obtained. The individual response rate was 69.9%.

2.3. Measures

The World Health Organization Composite International Diagnostic Interview (CIDI 3.0) (Gabilondo et al., 2007), a fully structured lay administered diagnostic interview, was used to evaluate the presence of suicidality. The suicidality module assessed suicidal ideation, suicide planning, and suicide attempts, both lifetime and during the previous 12 months. Due to the sensitive nature of the questions, respondents were provided with labelled written statements (*you seriously thought about committing suicide*, *you made a plan for committing suicide* and *you attempted suicide*) and then they were asked verbally, using the labels rather than explicitly referencing suicidal behaviours, whether these experiences had happened to them over their lifetimes or in the previous 12 months (e.g., *Did experience A ever happen to you?*). Subjects with lifetime suicidal ideation were asked for the age of the first suicidal ideation; those who reported having attempted suicide were asked for the age of the first suicide attempt and number of suicide attempts throughout their lives. The questions were the same ones used to evaluate suicidality in the ESEMED study in Spain a decade ago; the sole difference was that in the ESEMED study only people reporting lifetime suicidal ideation were asked about suicide attempts. Using an adapted version of the CIDI 3.0, prevalence estimates of depression, generalised anxiety disorder and panic disorder were determined by analysing whether respondents' symptomatology met the diagnostic criteria for a mental disorder according to the fourth revision of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) (American Psychiatric Association, 1994). In the case of the anxiety disorders, lifetime and 12-month prevalence were assessed with the CIDI. In the case of depression, 12-month prevalence was assessed with the CIDI and lifetime prevalence was determined if the respondents reported having been diagnosed anytime in their lives, or when they met DSM-IV criteria for depression in the previous 12 months. The CIDI has been widely used as a fully-structured interview administered by trained lay interviewers for the assessment of mental disorders in many surveys, such as the World Mental Health Surveys (Demyttenaere et al., 2004), the Canadian Community Health Survey (Ratcliffe et al., 2008), and the Netherlands Mental Health