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LETTER TO THE EDITOR

Are the epidemiological studies of suicide in Spain conclusive?☆

¿Son concluyentes los estudios epidemiológicos de suicidio en España?

Dear Editor,

After reading the original work entitled ''Suicide mortality trends in Spain, 1980—2016'',[1] we believe it to be important to suggest a reflection on the data it uses, and above all on the changes which occurred in registries during the period analysed, as these may affect the cases of suicide that are recorded in the country.

On the one hand, it is necessary to take into account that the National Institute of Statistics (INE), the source of the data used in the said study, has traditionally registered fewer suicides than actually occur in Spain.[2–4] Among other causes, this has been attributed to the fact that until January 2020 the Statistical Registry of Deaths with Judicial Intervention (BEDJ) was not completed by a forensic doctor, but rather by a civil servant in the Registry Office who often lacked information about the cause of death. A work published in 2014 by Giner and Guija,[4] which compared the data registered in several IML with those recorded by the INE over a 5-year period, concluded that the average suicide rate was 15% higher than the one recorded in the INE. On the other hand, in Malaga, the province with the highest standardized suicide rate in Spain,[5] Moreno-Küstner and González Sánchez found that in the year 2017 only 27% of suicides were identified as such in the BEDJ[6]; it must be borne in mind that the families involved were the main source of information used in this study, not the IML, which is the most reliable direct source.

Although the authors mention this under-reporting in the discussion, we understand that it should be taken very much into account, when the results show rates of incidence that may be compared to those published in other European countries.

In connection with the tendency described by Cayuela et al., it is necessary to underline that during the years they analyse changes were made in the data gathering system for violent deaths. Until 2009 deaths with medical-legal intervention required an additional document in the declaration, the MNP.52 (Natural Population Movement), which specified the cause of death and, together with the Statistical Registry of Deaths, was completed by the Court civil servant and then sent to the Registry Office and then the INE. In January 2009, with the aim of improving the quality of certification, the MNP.52 was replaced by the BEDJ, which is completed directly in the Registry Office.[7] These changes may affect the final notification of the cases, which in turn will affect the tendency found in the period studied.

To finish, specifically in the Community of Madrid (which has 14.2% of the total population of Spain), until 2013 the INE had no access to the data of the Forensic Anatomical Institute of Madrid. After this year a change in methodology occurred, varying certain aspects of how cause of death was assigned in cases with judicial intervention.[5] It should be taken into account that from 2010 to 2012, based on the data which the INE has given us, the average annual suicide rate in Madrid was 1.8 suicides per 100,000 inhabitants, and that this rate rose to 5.1 suicides per 100,000 inhabitants in 2013. The peculiarities of certain autonomous regions may affect the results found in connection with the tendency.

To conclude, although we consider the increase in the suicide rate described by Cayuela et al.[1] should lead to new detailed studies, and although there can be no doubt that the long period analysed by their work is a strong point, the registration of violent deaths in Spain has been highly deficient. Although the official suicide rates in our country are lower than the real rates, registration is improving and this may partially explain the increase in the rate in Spain.

Future works that analyse these statistics over time should take into account that in January 2020 the BEDJ started to be completed by forensic doctors, and that this will foreseeably lead to a greater increase in the number of registered suicides, even though this will not necessarily imply there has actually been a rise in their number.

Only by registering cases properly will it be possible to undertake sufficiently high-quality epidemiological studies and develop effective preventive campaigns.

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Improving the effectiveness of electroconvulsive therapy through the determination of anaesthetic depth. Preliminary results☆

Mejora de la efectividad de la terapia electroconvulsiva mediante la determinación de la profundidad anestésica. Resultados preliminares

Dear Editor,

The anaesthetic agents such as propofol used in modified ECT may hinder an optimum convulsion[1], thereby reducing its antidepressant effect and increasing the secondary cognitive effects because the stimulus energy has to be increased[1]. The PSI (Patient State Index) was specifically designed to control patient sedation and the effect of drugs in intraoperative interventions and intensive cures[2], predicting loss of consciousness and detecting intraoperative waking[3]. Use of this index has made it possible to reduce the dose of propofol used in anaesthesia, improving recovery time without increasing intraoperative recall[4]. The first results are presented of an experimental prospective study with a control group, to determine the impact in terms of efficacy and safety of using the ECT procedure while monitoring the depth of anaesthesia using the PSI, in comparison with the traditional clinical method.

The sample is composed of 31 patients admitted to the BM-CASM-HGG Psychiatric Unit. They were recruited from November 2017 to September 2020 and fulfilled the criteria for major depressive disorder according to the DSM-IV-TR and the indication for ECT.

This study fulfils the conditions of the Helsinki Declaration, and it was approved by the Clinical Research Ethics Committee of Granollers H. General. The patients voluntarily accepted taking part, giving their informed consent. 2 sessions per week with propofol and succinylcholine took place, using Thymatron SYSTEM IV apparatus (Somatics LLC, U.S.A.), and determining the PSI with a SedLine® monitor (Masimo Corporation, U.S.A.). The stimulus dose was calculated using the ''age-based method''[5] and using a pulse width of 0.5 ms. for bifrontotemporal ECT and 0.25 ms. for the unilateral right side. Patients in the PSI group were stimulated when its value showed a tendency to rise between the values of 50–70, and those in the control group were stimulated when the score was 5–6 on the Ramsay scale[6] and the fasciculations caused by the succinylcholine had ended. Patients were re-stimulated if the convulsion lasted for less than 25 s in the EEG. The appropriateness of the convulsion was evaluated in each session according to a method similar to that used by Rattehalli[7], together with the presence of delirium and waking intra-ECT[8]; likewise clinical state using HDRS-17 and CGI in alternating sessions and cognitive state with the MCE. The patients finalized the study when they achieved clinical remission or if after 12 sessions this was not possible, and if with a stimulus of 100% energy a convulsion of at least 25 s was not achieved.

The SPSS program (version 23, IBM Corp., NY, U.S.A) was used for statistical analysis; the Mann-Whitney U test was used for quantitative variables and the χ^2 test was used for qualitative variables. Statistical significance was considered to exist if $P \leq .05$.

No statistically significant differences were found between the clinical and sociodemographic characteristics of both groups. The average PSI value was 56.71 ± 6.81.

The PSI group obtained longer and higher quality convulsions with less energy, and required fewer repeat stimulations (Table 1). Unlike other studies[9], the number of sessions was neither lower nor statistically significant in the PSI group, probably because of the small size of the sample. The use of repeat stimulations and higher stimulation energies have been associated with adverse cognitive effects[10], and although we did not find this, it is possible that more sensitive tests than the MCE would be required[11].

The waiting time until the ideal PSI value was reached may explain reduced action of the anaesthesia at the instant of stimulation, as other studies have shown[12], and that in

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