

Available from: https://www.aemps.gob.es/cima/pdfs/es/ft/62661/62661_ft.pdf

3. Runkle I, Villabona C, Navarro A, Pose A, Formiga F, Tejedor A, et al. Tratamiento de la hiponatremia secundaria al síndrome de secreción inadecuada de la hormona antidiurética: algoritmo multidisciplinar. *Nefrología*. 2014;34:439–45.
4. Adrogué HJ, Madias NE. Hyponatremia. *N Engl J Med*. 2000;342:1581–9.
5. Brownfield MS, Greathouse J, Lorens SA, Armstrong J, Urban JH, Van de Kar LD. Neuropharmacological characterization of serotoninergic stimulation of vasopressin secretion in conscious rats. *Neuroendocrinology*. 1988;47:277–83.
6. Pedrós C, Cereza G, García N. Hiponatremia y SIADH por inhibidores selectivos de la recaptación de serotonina: revisión de notificaciones espontáneas. *Med Clin (Barc)*. 2004;123:516–7.
7. Gandhi S, Shariff SZ, Al-Jaishi A, Reiss JP, Mamdani MM, Hackam DG, et al. Second-generation antidepressants and hyponatremia risk: a population-based cohort study of older adults. *Am J Kidney Dis*. 2017;69:87–96.
8. Coupland C, Dhiman P, Morriss R, Arthur A, Barton G, Hippisley-Cox J. Antidepressant use and risk of adverse outcomes in older people: population based cohort study. *BMJ*. 2011;343:d4551.

Javier Miguel Martín Guerra*, Miguel Martín Asenjo, Luis Ángel Sánchez Muñoz, José María Prieto de Paula

Servicio de Medicina Interna, Hospital Clínico Universitario de Valladolid, Valladolid, Spain

*Corresponding author.

E-mail address: javi6vega@hotmail.com (J.M. Martín Guerra).

2173-5050/

© 2018 SEP y SEPB. Published by Elsevier España, S.L.U. All rights reserved.

Suicide: Contexts and persons[☆]



Suicidio: contextos y personas

Dear Editor,

Suicide is a public health problem of the highest magnitude. Of the 10 most common causes of death worldwide, suicide alone is the only one which has not decreased during the last decade, despite the enormous scientific accomplishments relating to it.¹ Despite the huge investment in research projects and increasing implementation of specific programmes, the prevention of suicide is a yet “unresolved clinical requirement”.² In their editorial, Barrigón and Baca-García proposed that some of the bases upon which the field of investigation into the prevention of suicide has been constructed over the last few decades should be reformulated.³ They suggested that the general framework of clinical research be based on individuals, and recommended evolving from the isolated study of risk factors to the definition of their algorithms, based on data processing with automatic learning techniques and personalised monitoring supported by new technologies.

We believe that the study and prevention of suicide should necessarily include a populational standpoint to understand and reduce their risk factors on an individual level. Since the publication of the Durheim sociological studies it has been accepted that suicide is a phenomenon where the rate at least partially responds to certain supraindividuals.⁴ Some examples support this idea: several countries, such as Lithuania have standardised rates of suicide 5 times higher than other countries, like for example, Greece.⁵ In U.S.A. the suicide rates in rural areas are double those of urban areas.⁶ Indeed, within the same city, London,

areas with higher ecological rates of social deprivation are associated with higher suicide rates.⁷

Modern epidemiology attempts to define what elements have a causal relationship with the presentation of diseases in populations. Development has led to paradigms which have determined the research questions and consequently the response obtained.⁸ The initial idea was eminently ecological: it is believed that modern epidemiology emerged with John Snow and spatial distribution of epidemics of cholera in 19th century London. After this, the discovery of the tubercle bacillus and other infectious agents paved the way for the molecular era. Lastly, as a result of the second world war, epidemiology of chronic non-transmissible diseases appeared. These are centred upon the subject, their behaviour and individual risk factors such as a tobacco habit or high blood pressure. Characteristically, each era of epidemiology has focused on a single level of study (ecological, molecular, individual), negating all others to a greater or lesser degree.⁸ Epidemiology of risk factors has therefore produced a sizable body of eminently individual causal knowledge. At present, however, we are witnessing the growth of an integral approach to epidemiology which some people have called multilevel epidemiology, and which proposes that disease phenomena respond to causal patterns with rationale that act at different molecular, individual and populational levels which interact on complex hierarchical networks.⁹ From this outlook, information collected by ecological variables, far from being considered an exchangeable estimator with data collected on an individual level, enjoy their own relevance for proper understanding of the sociological motives of the disease.¹⁰

One initiative stands out as an optimisation opportunity when giving ecological causal factors the place they have earned: overall mental health collaborations. By definition, an epidemiological study is able to analyse potentially causal relationships when a control exists with which to generate comparison. Through the inclusion of different research contexts using ecological measurements to pinpoint the differences between contexts, we may calculate the role played by supraindividual variables on suicide rates.

[☆] Please cite this article as: Martínez-Alés G, Mascayano F, Bravo-Ortiz MF. Suicidio: contextos y personas. *Rev Psiquiatr Salud Ment (Barc)*. 2019;12:253–254.

The study of all disease phenomena may benefit from a multilevel approach. In a recent example, the EU-FEI international consortium published enormous differences in the rate of psychosis between different European regions.¹¹ Their results also suggested that one of the best established risk factors for psychosis, the urban environment, probably does not have the same impact in Northern compared with Southern Europe.

Populational and individual outlooks will need to be included to understand the enormous variability in suicide rates and to improve our ability to prevent it. Ecological variables provide irreplaceable information for decision-making by clinicians, managers and politicians.

References

1. Swanson JW, Bonnie RJ, Appelbaum PS. Getting serious about reducing suicide more "how" and less "why". *JAMA*. 2015;314:2229–30.
2. Saiz P, Bobes J. Prevención del suicidio en España: una necesidad clínica no resuelta. *Rev Psiquiatr Salud Ment*. 2014;7:1–4.
3. Barrigón M, Baca-García E. Retos actuales en la investigación en suicidio. *Rev Psiquiatr Salud Ment*. 2018;11:1–3.
4. Durkheim E. *Le Suicide, étude de sociologie* par Emile Durkheim. 1897. Source gallica.bnf.fr/Bibliothèque nationale de France.
5. OCDE [accessed 20 Feb 2018]. Available from: <https://data.oecd.org/healthstat/suicide-rates>
6. Fontanella CA, Hiance-Steelesmith DL, Phillips GS, Bridge JA, Lester N, Sweeney HA, et al. Widening rural-urban disparities in youth suicides, United States, 1996–2010. *JAMA Pediatr*. 2015;169:466–73.
7. Rezaeian M, Dunn G, St Leger S, Appleby L. The ecological association between suicide rates and indices of deprivation in English local authorities. *Soc Psychiat Epidemiol*. 2005;40:785.
8. Susser M, Susser E. Choosing a future for epidemiology: I. Eras and paradigms. *Am J Public Health*. 1996;86:668–73.
9. Diez-Roux AV. Bringing context back into epidemiology: variables and fallacies in multilevel analysis. *Am J Public Health*. 1998;88:216–22.
10. Schwartz S. The fallacy of the ecological fallacy: the potential misuse of a concept and the consequences. *Am J Public Health*. 1994;84:819–24.
11. Jongsma HE, Gayer-Anderson C, Lasalvia A, Quattrone D, Mulè A, Szöke A, et al., European Network of National Schizophrenia Networks Studying Gene-Environment Interactions Work Package 2 (EU-GEI WP2) Group. Treated incidence of psychotic disorders in the multinational EU-GEI study. *JAMA Psychiat*. 2018;75:36–46.

Gonzalo Martínez-Alés^{a,b,*}, Franco Mascayano^c,
María Fe Bravo-Ortiz^{a,b}

^a *Servicio de Psiquiatría, Hospital Universitario La Paz, Madrid, Spain*

^b *Facultad de Medicina, Universidad Autónoma de Madrid, Madrid, Spain*

^c *Escuela Mailman de Salud Pública, Universidad de Columbia, New York, USA*

* Corresponding author.

E-mail address: gmartinezales@gmail.com

(G. Martínez-Alés).

2173-5050/

© 2018 SEP y SEPB. Published by Elsevier España, S.L.U. All rights reserved.