What are the correlations between depression and suicide?

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Davide Fassola
University of Bologna
Forlì, Italy
davide.fassola@studio.unibo.it | davide.fassola2@unibo.it
Orcid https://orcid.org/0009-0007-7185-7158
LinkedIn https://www.linkedin.com/in/davide-fassola-b63279208/
University of Bologna`s website, personal page https://www.unibo.it/sitoweb/davide.fassola2
Dipartimento di scienze mediche e chirurgiche, Università di Bologna

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Davide Fassola, University of Bologna, davide.fassola@studio.unibo.it

ABSTRACT

Epidemiological studies on depression have a rather recent origin; therefore it is rather difficult to refer to ongoing studies over time. Although therefore this area needs to be studied more, it is already possible to trace a draft of the population at risk, as well as to identify the main causal factors. The most important are social and experiential factors but above all one's lifestyle, and therefore, consequently, also the economic conditions.

It is also possible to trace some commonalities with suicide and the factors that cause suicide, since very often the victims of suicide suffered from depression during their lifetime.

Keywords: depression, suicide, social epidemiology, risk, lifestyle, drugs, diabetes.

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1. Introduction: a European framework on depression

Since 1910 it is possible to observe a continuous increase in cases of depression in Europe (Zimmerman-Tansella, 1994). The epidemiological-social studies in this regard are, however, immature (ibid.), Also because mental illnesses were

erroneously medicalized, up to the 50s / 60s of the twentieth century, through asylums, and depression was previously identified as 'melancholy', an evocative term only, which does not, however, do justice to what depression really is.
To be able to consider an epidemiological-social research it is necessary that this has well defined: 1) A precise geographical area; 2) A specific purpose and hypothesis; 3) A standardized method of measurement (Zimmerman-Tansella, 1994). The first studies with these points just mentioned begin to appear only in the 1980s (Torre, Marinoni, 1982; Bellantuono et al. 1987).
Depression is, however, the most common mental disorder, and it is estimated that as many as 7% of the European population is currently, a percentage that in Ireland reaches and exceeds 12%. The percentages increase dramatically if we consider the segment of the population that uses psychotropic drugs, estimated at around 20%.
Depression is often easily associated with severe chronic anxiety, which increases with age; therefore the older one becomes, the easier it is to contract depressive disorders, although it is not uncommon to encounter depression during the adolescent period.
Depressive disorders - it can be observed from the statistics - are much more frequent in cases of social and economic disadvantage, as well as at a low level of education.
It is also important to take into account working conditions: those who are inactive and / or unemployed are more likely to experience problems of anxiety and depression. It was also observed that the average number of days of absence from work is much higher if the employed person is affected by depression.
Furthermore, it emerges through the data, it is necessary to consider the reference to addictions, Alzheimer's and dementias, as well as, more generally, to one's health conditions.

2. Social factors and experiential factors. Are they influential?

In the very first epidemiological studies carried out, almost only socio-demographic factors were considered in identifying the causes that can lead to depression. Studies such as Bellantuono et al. 1987, Torre, Marinoni 1982, Coppo et al. 1991 considered other factors to be marginal and often identified spurious causes. Zimmerman-Tansella, in 1994, even came to the conclusion that age would have no influence on the onset of depression; this assumption has been denied by recent statistics, which show that the age group over 65, in any country of the European Union, is by far the most exposed to depression. It is not difficult to imagine why: loneliness, frequent mourning, the sudden approach of death are just some of the variables to be taken into consideration. Epidemiological studies of the 1980s and 1990s substantially associated the increase in the incidence of depression in the elderly with problems of the nervous system, considerations which, to date, seem largely outdated.
However, some factors highlighted in these researches, including socio-demographic ones, have been confirmed. For example those on social status. Singles, both single and single, are in fact more exposed to depression, as are those who have had a low level of education.
The importance of the role of the possible presence of emotional problems is also highlighted, that is, if you suffer from other diseases of the emotional sphere.
There moreover, the presence in the family of other people with emotional problems and / or depression exponentially increases the risk of influenza, that is of contracting depression (Zimmerman-Tansella, 1994). Similarly, having previously suffered from depression exposes the individual more to suffer from it again (ibid.) As well as their personal history, emotional experience and their own life history.
However, experiential factors prove to be important, as the sudden onset of unwanted events can upset one's own experience and break the stability created

within one's life.
In experiential factors it is important to take into account the gender perspective. In women it is much more frequent that depression appears after experiences of mourning and / or love relationships that ended badly; in humans, on the other hand, it is more frequent that depression arises due to work problems, or in any case in the financial sphere.
They have no gender perspective issues such as housing issues, such as evictions, which affect both men and women.
Finally, the role of physical health is also intertwined: the onset of diseases, even if not mental, can also compromise mental health and lead to a diagnosis of depression.

3. The lifestyle: population at risk.

When it comes to lifestyle, you need to include information about economic conditions as well. This is because those living in financial straits will find it much harder to afford an adequate lifestyle. A low-income person (or no one) will find it difficult to pay for the gym, or the psychologist, or to afford the healthiest products, perhaps even organic, at the supermarket or the greengrocer. So is it the lifestyle that influences the economic conditions? More properly, it is possible to say the opposite: lifestyle certainly has a correlation with economic conditions, but it is a spurious relationship: as an individual's poverty increases, the probability that this falls into the spiral of addictions or certain unhealthy lifestyles. Therefore it is rather the economic conditions that influence the way of life. And a bad lifestyle increases the likelihood of getting anxiety and depression. So logically it can be deduced that bad economic conditions lead to depression and a bad emotional status more easily (Patel, Miranda).
Going more specifically with regards to lifestyle, one of the most important

influences is given by the consumption of drugs. Of course, not all depressed people use drugs, but almost all drug addicts have emotional problems, and depression is not uncommon (ECA Report).
Other addictions also play an important role (Kessler et al, 1997), such as alcohol.
More recent research, and therefore in an embryonic state, still collects data that represent an evident correlation also between poor nutrition and addictions. Some research also shows that frequent use of the foods and drinks of fast foods such as 'McDonald's' creates emotional distress and sadness, if these activities are carried out often they can also lead to depression.
The presence of diabetes also increases the likelihood of depression, not only because this is a disease that affects physical health (and therefore, as mentioned, also mental health), but also because it alters the quantities of hormones and favors the addition of depression.
Finally, it is necessary to ask oneself one last question: is it depression that causes certain unfit lifestyles, or vice versa? Looking at the statistics it would be possible to observe that both statements are correct. However, with a more reasoned look it is possible to identify the origin: if bad lifestyle habits are added first, the depression could have been caused by them; but if the depression has formed for other reasons, then bad lifestyles are more likely to develop later, which in turn allow the depression to thrive in them.

Going to identify a population particularly at risk of depression, it is possible to observe:
1) Depression is more likely to manifest in individuals suffering from addictions: mainly drugs, but also alcohol and tobacco.
2) Depression is more likely to occur in those who are not in good physical health, and particularly in the case of diabetics.
3) Lifestyle is still important: those who play sports, enjoy good health, and can

afford proper nutrition are less likely to become depressed.
4) Those who do not suffer from financial hardship are less likely to get depressed.
5) Are particularly at risk the singles, the unemployed and the elderly.
6) Your personal experience can in any case lead to more or less sudden depressions, in particular in the case of bereavement, accidents, evictions, job loss, relationship problems.

4. A correlation with suicide?

Looking at the data relating to suicide in Europe, it is possible to identify some similarities and differences among the population at risk. Among these, the similarities appear particularly interesting since, if they are further and empirically studied, they could help to better identify the population at risk, and to elaborate intervention and prevention strategies.
The similarities concern above all the age factor: the elderly are more prone to depression and suicide, as well as both depression and suicide are among the main pathologies and causes of death among the very young (under the age of 19). In these perspectives, suicide and depression seem to move in a context of direct proportionality. Just as in suicide, having poor economic conditions can increase the probability of suicide, so it also happens in depression. Personal experiences and one's own experience or sexual orientation also seem to move at the same time. Finally, it seems that depression, like suicide, also seems to be based on social cohesion (Durkheim, 1897; Barbagli, 2015): in conditions of isolation and / or solitude, or in the absence of strong ties with religious life, political life and family life are much more likely to become depressed and commit suicide (ibid.).
Finally, a very clear data must be considered: about 10-15% of depressed people end their lives through suicide, and, moreover, up to 70% of depressed patients

have suicidal thoughts.
Among the differences, however, the list is shorter: once again the gender perspective is important: men and women are depressed in different ways, and at different rates: depressed men in Europe can be calculated in a percentage between 2.6% and 5.5% and women, on the other hand, in a range between 6% and 11.8%. The percentages are reversed when it comes to suicide: although women attempt suicide even more often than men, 75% of suicides are represented by men alone. In the case of women, in fact, suicide fails much more frequently (generally only one attempt in ten succeeds) since methods that do not allow the disfigurement of the face tend to be used. A final obvious difference is represented by the educational qualification: while the less educated tend to be more depressed, they also have a lower risk of committing suicide than the uneducated.

5. Some (temporary) conclusions.

The conclusions can be summarized in the following points:

The depressive phenomenon has only recently been studied in social epidemiology and therefore the conclusions are temporary, pending empirical research after due time to allow a greater study of the data and correlations, some of which, observed between the 1980s and 90 'have already proved spurious.
There is an increasing importance of social factors, which before were certainly considered, but little, marginally, and in particular of social cohesion and socio- demographic data.
Being single or celibate, unemployed, poorly educated, sick, in contact with depressed people, the elderly, women, also greatly increases the risk of depression.

The experiential experience is important: the presence of sudden events such as bereavement, evictions, job losses etc. increases the likelihood of being depressed.
Lifestyle emerges in recent years as a decisive factor: having poor economic conditions, using drugs, or abusing alcohol, tobacco and being addicted to them increases the likelihood of depression.
It is advisable to study the presence of correlations with suicide, ie to determine whether the population at risk is the same. The common denominators are mainly factors such as social cohesion, isolation and socio-demographic factors, while the differences are mainly in gender: men commit suicide more but get less depressed and women get depressed more but commit suicide less.

1) J.P. Lépine, M. Briley, 'The increasing burden of depression', 2011, doi: 10.2147/NDT.S19617
2) W.W. Eaton, 'Epidemiologic evidence on the comorbidity of depression and diabetes, in 'Journal of Psuchosomatic Research, 53:4, 903-906.
3) L. Pratt, D. Brody, 'Depression in the United States household population, 2005-2006', 2008,Series: NCHS data brief ; no. 7
4) J. Maselko, 'Social Epidemiology and Global Mental Health: Expanding the Evidence from High-Income to Low- and Middle-Income Countries', in *Current Epidemiology Repor*66–173 (2017)
5) Eastwood et al. 'A Critical Realist Translational Social Epidemiology Protocol for Concretising and Contextualising a "Theory of Neighbourhood Context, Stress, Depression, and the Developmental Origins of Health and Disease (DOHaD)", Sydney Australia', 2019, doi: 10.5334/ijic.3962
6) K. Sanderson, G. Andrews, 'Common mental disorders in the workforce: recent findings from descriptive and social epidemiology', 2006,

https://doi.org/10.1177/070674370605100202

7) S.L. Reisner et al., 'Social Epidemiology of depression and anxiety by gender identity', in 'Journal of adolescent Health', 59:2, 203-208, 2006, https://doi.org/10.1016/j.jadohealth.2016.04.006

8) ISTAT, 'La salute mentale nelle varie fasi della vita', Report, 2018.

9) M.A. Pizzichini, 'La depressione è una questione di stile', 2012

10) WEBER M., L'etica protestante e lo spirito del capitalismo,1903 e 1904.

11) ADLER A., La psicologia individuale, 1927

12) REGIER D.A., et al.. Comorbidity of Mental Disorders With Alcohol and Other Drug Abuse. Results From the Epidemiologic Catchment Area (ECA) Study JAMA. 1990, 264:2511-2518.

13) Durkheim, E. 'Il suicidio, uno studio di sociologia', 1897.

14)Bellantuono C, Fiorio R., Zanotelli R. & Tansella M. (1987). Psychiatric screening in general practice in Italy. A validity study of the GHQ. Social Psychiatry 22, 113-117

15) Coppo P., Morosini P. & Gallevi M. (1991). Disturbo mentale e ricerca di cure in una comunita. Rivista Sperimentale di Freniatria 115, 64-7

16) Tansella M. (1993). The Research Unit of the Servizio di Psicologia Medica at the Institute of Psychiatry of the University of Verona, 1980- 1991. Psychological Medicine 23, 239-247.

17) Torre E. & Marinoni A. (1982). Un registro dei casi psichiatrici e la sua utilizzazione per studi valutativi. In Servizi Sanitari e Psichiatria (ed. D. Kemali, P.L. Morosini e A. Amati), pp. 139-152. II Pensiero Scientifico Editore: Roma.

18) Zimmermann-Tansella Ch. & Lattanzi M. (1991). The Ryle Marital Patterns Test as a predictor of symptoms of anxiety and depression in couples in the community. Social Psychiatry and Psychiatric Epidemiology 26, 221-229.

19) Zimmermann-Tansella Ch. & Siciliani O. (1990). Social problems, social

support and emotional distress in the community. In The Public Impact of Mental Disorder (ed. D. Goldberg and D. Tantam), pp. 129-137. Hogrefe and Huber: Toronto.

20) Zimmermann-Tansella Ch., Garzotto N., Williams P. & Siciliani O. (1987). Psychological ill-health in families: a study in an Italian urban population. In Psychiatric Epidemiology. Progress and Prospects (ed. B. Cooper), pp. 120-135. Croom Helm: London. Zimmermann-Tansella Ch., Doni

21) Cassem EH: Depressive disorders in the medically ill: an overiew. Psychosomatics 36:S2-S10, 1995

22) Fava et Al.: Definition and epidemiology of treatment-resistant depression. Psychiatr Clin North Am 19;179-195, 1996

23) Reynolds et Al.: Sleep, gender and depression: an analysis of gender effect on the electroencephalographic sleep of 302 depressed outpatients. Biol Psychiatry 28:673-684, 1990

24) McDaniel JS et Al.: Depression in patients with cancer. Arch Gen Psychiatry 52:89-99, 1995

25) Germano C. *L'approccio psicoterapeutico al paziente anziano.* Intervento durante la giornata di studio sul tema: La psicologia gerontologica: stato attuale e prospettive, Torino, 21 marzo 1998

26) Crombeque A, e Coll. *Indications à la psychothérapie d'inspiration psychanalitique en psychiatrie gériatrique.* Psychothérapies 1990;3:153-159

27) Giordani L, e Coll. *La psicoterapia dinamica del paziente anziano depresso.* Rivista sperimentale di Freniatria 1995;1:174-189

28) Mencacci C. et al. 'Depressione di genere', in Quaderni Italiani di Psichiatria, 28:1, 6-14, 2009.