

PROMOTION AND PREVENTION IN MENTAL HEALTH: WELL-FOUNDED HOPE, FUTILE ILLUSION OR PSYCHOPATHOLOGIZING CONTRABAND?

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La promoción y prevención en salud mental son crecientemente reconocidas como estrategias fundamentales. Se ha demostrado que programas promocionales y preventivos en esta área pueden ser efectivos. Existe la expectativa de que la diseminación de estos programas pueda ayudar a disminuir la brecha entre necesidades de atención en salud mental y recursos
disponibles. Junto con describir estos antecedentes, este artículo analiza algunos desafíos centrales para que esta área pueda
tener el desarrollo esperado. Se plantea que si este desarrollo se realiza desde la lógica del modelo médico puede contribuir
a generar respuestas inadecuadas y, paradójicamente, a incrementar las necesidades de recursos en salud mental. Se analiza
el riesgo que implicaría el uso masivo y recurrente del tamizaje de trastornos mentales desde una concepción medicalizadora.
Se propone que el desarrollo de la promoción y prevención en salud mental es un desafío mayor y necesario pero que debe
atender a las advertencias de lo que se denomina prevención cuaternaria.

Palabras dave: Promoción-prevención-salud mental-prevención cuaternaria-tamizaje.

Promotion and prevention are increasingly recognized as essential strategies in mental health. It has been shown that promotional and preventive programs in this area can be effective. It is expected that spreading these programs may help to decrease the gap between the assistance needs in mental health and the resources available. Besides describing this background, this article analyzes some of the main challenges necessary to achieve the desired development in this area. It is considered that, if this development is carried out based on the logic of the medical model, it may contribute to creating inappropriate answers and, paradoxically, to increasing the need for resources in mental health. We analyze the risks involved in the massive and recurrent use of mental disorder screening based on a medicalizing conception. Finally, we propose that developing promotion and prevention in mental health is a great and necessary challenge, but it must take into consideration the warnings arising from what is known as quaternary prevention.

Key words: Promotion-prevention-mental health-quaternary prevention-screening.

or several decades, the relevance of mental health promotion and prevention has been highlighted by experts and by various institutions (Campion, Bhui, & Bhugra, 2012; NRC/loM, 2009; WHO, 2004, 2005). Although these approaches have not yet had a notable impact on the agendas of health systems, they are increasingly gaining recognition and, in some countries, significant initiatives can already be seen (Bährer-Kohler & Carod-Artal, 2017). Historically, promotion and prevention, in general, and mental health, specifically, have not been priorities in the field of health, so this recognition is doubly significant (Knifton & Quinn, 2013).

Although voices regarding the value of promotion and prevention in mental health have always existed, and can be traced, in modern-day language, to approaches such as the

Received: 10 November 2018 - Accepted: 14 February 2019 Correspondence: Pamela Grandón Fernández, Facultad de Ciencias Sociales, Departamento de Psicología, Universidad de Concepción. Email: pgrandon@udec.cl importance of "mental hygiene" in the mid-nineteenth century (Ray, 1863), a number of factors have meant that these voices have become more intense in recent years. One of these has been the development of a mental health perspective of public health. This perspective has shown that the mental health needs of populations are enormous and that it is impossible, as well as illogical, to address them based on the sole logic of treatment and rehabilitation (Petersen, Barry, Lund, & Bhana, 2014). The expectation is, therefore, that promotional and preventive policies and programs can contribute to a greater wellbeing and positive mental health (promotion), to avoiding the development of mental health problems and disorders (primary prevention), and to reducing the impact of the latter through detection and early treatment (secondary prevention). Effective promotional and preventive programs would decrease the personal and social cost of presenting mental health problems or disorders and reduce the need for treatment and rehabilitation (CIHI, 2011). Currently, even the countries with the highest income and with the most resources to address mental health



needs have huge gaps between the estimated needs for care and support for people with mental health problems and disorders, and the services available (Saraceno, 2014).

A second factor that is affecting the greater efforts in the research and development of preventive and promotional policies and programs in mental health is that it is currently possible to counteract the historical skepticism regarding the effectiveness of actions in this area with empirical findings (Arango et al. al., 2018). For a decade or so, the reviews indicate the availability of a wide range of empirically proven programs to implement the prevention of mental disorders (Jeste & Bell, 2011; Saxena, Jane-Llopis, & Hosman, 2006), all of which has done nothing but increase (Greenberg & Riggs, 2015). Even the elusive concepts of well-being and positive mental health have been operationalized, in some way, allowing the accumulation of evidence of effective promotional strategies (Anderson & Llané-Jopis, 2011; Patel, Fliher, Nakapota, & Malhotra, 2008).

However, an overly optimistic perspective on the challenges still facing the field of mental health promotion and prevention would be risky. The valuable and legitimate desire to achieve greater efforts and resources in this area should not dispense with the need for critical reflection. To contribute to this reflection, this article analyzes achievements, challenges, and risks in the area, focusing on how certain conceptualizations can not only limit its future development but also contribute to the fact that, paradoxically, the expansion of promotion and prevention in mental health promotes a greater medicalization of society, in the negative sense of the term.

Prior to this reflection, clarification of the concept and terminology is important. In this article, the terms mental health problem and disorder are used according to the usual conventions. The concept of mental health problem is imprecise and less "technical", but it has the merit of not substantiating the phenomenon that it describes, and it makes clearer the importance of qualifying what is being talked about, stimulating contextualized analyses. The opposite occurs with the concept of mental disorder, which generates the illusion of alluding to specific and well-defined phenomena. The concept of mental disorder is difficult to separate from a biomedical conception (López & Costa, 2012). From the perspective of the authors of this article, breaking with the biomedical conception is one of the most relevant challenges in mental health in general, and specifically, in the area of promotion and prevention in the area. For the same reason, in the article, although the term mental disorder is used occasionally, we are conscious that it is a very debatable concept and, perhaps, on the way to obsolescence. In fact, the critique of this concept is one of the foci of the analysis presented.

RESEARCH IN MENTAL HEALTH PROMOTION AND PREVENTION

The development of the field of mental health promotion and prevention depends closely on the quality of the studies that support it. Most of the research has been aimed at evaluating the efficacy of the programs. Many of these efficacy investigations have been carried out with relatively high methodological standards (for example, randomized clinical trials), although they often have limitations such as short follow-up periods and the use of outcome measures that are highly dependent on the subjectivity of the participants. Another limitation is that there are few replications of efficacy studies by teams that are independent of the authors of these programs (Greenberg & Riggs, 2015). In general, it has been possible to obtain evidence proving that, in various areas of mental health, well-designed programs can have some degree of efficacy: prevention of depression, anxiety, eating disorders, substance abuse, aggression and behavior problems and disorders, child abuse, and suicide; promotion of child development, and promotion of quality of life in older adults (Barry, 2015; Patel et al., 2008; NCR/IoM, 2009). Although the effect sizes of the best-established programs are medium or low, their consequences could be relevant at the population level (Ahern, Jones, Bakshis, & Galea, 2008). The strongest evidence is related to preventive programs of behavioral disorders in childhood (Scott, 2018).

In recent years, research has shifted from efficacy studies to studies of effectiveness or dissemination (Marchand, Stice, Rohde, & Becker, 2011). It is not clear that programs with positive indicators of efficacy maintain them when they are executed in "natural conditions" —studies of "effectiveness"— or when disseminated widely (Spoth et al., 2013). Valuations of the cost-effectiveness of various programs are also being carried out, with encouraging results, which suggest that some actions —for example, preventive programs in childhood— have relatively fast economic returns and others have long-term but equally positive returns (Knapp, McDaid, & Parsonage, 2011).

Despite the criticisms that exist regarding the way of conceptualizing and measuring mental disorders, today it is still considered that a limitation of many prevention studies in mental health is that they do not show that programs are effective in reducing the incidence of the disorders themselves but instead show alternative measures (for example, reduction of symptomatology or risk factors). Demonstrating efficacy or effectiveness at the level of the incidence of a mental disorder involves the use of very large samples and the use of very long followup periods (Cuijpers, 2003). However, it is debatable to what extent this is an effectively relevant limitation of the investigations because it assumes that the diagnostic criteria for mental disorders are valid, an issue that is increasingly debated (Wakefield, 2016). On the other hand, it has been shown that it is a mistake to think that the programs will have specific effects on each disorder, given that the same determinants can give rise to different consequences and disorders; also, a particular mental health problem or disorder can have different causes (equipotentiality and multifinality, respectively) (Toth, Petrenko, Gravener-Davis, & Handley, 2016). Consequently, programs are likely to have broader effects than just reducing the incidence of a particular type of disorder (Arango et al., 2018; Cuijpers, 2011).



LEVELS OF ACTION IN MENTAL HEALTH PROMOTION AND PREVENTION

Overcoming the skepticism regarding the possibilities of promoting and preventing mental health through specific programs has been a great achievement. Today there is the reverse risk: that the complexity and multidimensionality of the factors that are involved in the well-being and mental health of individuals and societies are ignored and the potential of limited programs is overstated. While all the documentation on the subject always starts by recognizing the multiplicity of factors, on different levels, that affect the well-being and mental health of people and societies, emphasizing the importance of considering macro-structural factors such as economic, social, and cultural ones (Petersen et al., 2014), the truth is that most of the programs seek to act, above all, at a microsocial and individual level. Taken in rigor, the concepts of prevention and, particularly of the promotion of well-being and mental health are revolutionary, since they involve questioning the complete models of society and culture, inequitable and excluding social structures, the ways of organizing life in large cities, or the dominant social values centered on production and consumption, for example. There is a risk that the social determinants of well-being and mental health are considered only at a rhetorical level and that it is understood that, in practice, promoting mental health and well-being is only a task of public awareness (for example, media campaigns), or of mere encouragement to the development of capacities and competences at micro and individual levels through specific programs (for example, individual resilience development programs). All this may imply the related risk of overloading the health sector, which is the sector most involved in the subject, with expectations and roles that surpass it (Saraceno, 2014), as well as the risk of repeating to some degree, the experience of promoting healthy lifestyles in the field of "physical" health, a model whose limitations have already been recognized (Cockerham, 2005).

PROMOTION AND PREVENTION OF MENTAL HEALTH AND MEDICALIZATION

The intense medicalization of contemporary societies has generated concern due to its negative and iatrogenic effects (Conrad, 2007). In this context, the concept of quaternary prevention emerged, understood as actions aimed at avoiding or mitigating the negative consequences of the excessive activity of the health system (Jamoulle, 2009). In the field of mental health, quaternary prevention has as its main object psychologization, psychopathologization, and social psychiatrization, the abuse of the psychopathological diagnosis, and the excessive use of psychopharmacology, but also of psychotherapy (Ortiz & Ibáñez, 2011). Until now, interest in the risks and possible iatrogenic effects of mental health promotion and prevention has been limited, except in specific situations such as the negative effects of "debriefing" in relation to the development of post-traumatic stress disorder (McNally, Bryant, & Ehlers, 2003), certain psychoeducational programs in relation to psychoactive substances (Werch & Owen, 2002), or concern about the risks of early psychosis prevention strategies through the identification and treatment of so-called high-risk mental states (Fonseca-Pedrero & Inchausti, 2018). It has rarely been seen that mental health promotion and prevention can, depending on how they are focused and conceived, contribute severely to a culture of fear of mental problems and disorders, of dissatisfaction with the non-achievement of pre-set standards, stigmatization of all those that are identified as persons or groups at risk, and to increase the dependence of people, groups, and institutions on professional networks. For years now it has been pointed out that the proliferation of diagnostic categories in mental health is contributing to generating a "culture of deficit" (Gergen, 1996) and an increasing "sickness" of all people (Frances & Paredes, 2014). Prevention and promotion in mental health can also contribute to this phenomenon.

It is perhaps in relation to the use of screening to identify people and groups at risk where these introgenic effects may be potentially more visible. In this regard, it should be considered that the installation of screening and early detection procedures can be extended to a variety of areas, and, in fact, this is suggested in the proposals of the teams working on the subject. A recent review that includes the various screening and detection options that can be implemented now or that are already being implemented shows what could become a climate of continuous surveillance: screening for family history of mental disorders; screening for genetic variants associated with an increased risk of neurocognitive and psychiatric phenotypes; postnatal depression screening; screening and monitoring of development trajectories; detection of delay or alterations in developmental milestones; detection of chronic irritability, hyperactivity and cognitive decline; detection of altered social behavior, insufficient school results, psychotic experiences; detection of cerebral or blood biomarkers (Arango et al., 2018). The iatrogenic effects that a climate of hypervigilance can generate derived from massive or indiscriminate use of screenings and early detection procedures can be accentuated by other factors. On the one hand, the current tools available in mental health screening and early detection procedures generate a high frequency of false positives and it is not foreseen that there will be others that may involve substantive changes in this regard in the short term (Horwitz & Wakefield, 2009). On the other hand, and more substantively, screening to identify the risk of disorder means that there is clarity about what a mental disorder is and the implications it has to satisfy the diagnostic criteria of a disorder. However, this clarity does not exist.

PROMOTION AND PREVENTION IN MENTAL HEALTH AND THE BIOMEDICAL MODEL

Traditionally, it has been thought that the actions of promotion and prevention arise from overcoming the biomedical model of health, but this is not completely accurate. Although promotion tends to break conceptually more clearly with the biomedical paradigm than prevention, it can also be included,



depending on how it is conceived and implemented, within a medicalizing logic. This can happen if promotion is understood as the search for the maximization of health, well-being, and the extension of life, without the considerations that nuance and contextualize these aims (Pérez, 1999). On the other hand, preventing the incidence of mental disorders is usually considered the main focus of prevention in mental health, making prevention dependent on this construct that belongs to the biomedical paradigm. Although it could be argued that even if the concept of mental disorder can be sustained from a nonbiomedical paradigm, its habitual understanding is still based on this paradigm. From this perspective, mental disorders are understood as discrete and delimited categories of "abnormal" or "dysfunctional" patterns of psychological suffering or maladaptation. These entities, in practice, become analogue to physical illnesses in the field of mental health. Given the impossibility, to date, of distinguishing these entities according to substantive criteria, descriptive diagnostic criteria have been developed for each disorder, but it is assumed that each one has a determined biological or psychological dysfunction at the base. The centrality of this conception of mental disorders for the dominant biomedical paradigm is what explains the enormous effort that has been made to generate "official" lists of mental disorders and the continuous renewal of diagnostic criteria (Bentall, 2009). This attempt to conceptualize mental disorders has been debated for a long time and is currently in open crisis (Poland & Tekin, 2017). The reliability, and, more importantly, the validity of the existing diagnostic systems and different categories of disorders is in doubt. So far, the field of prevention in mental health has given little account of this crisis. It is not clear what is involved or what it means to satisfy the diagnostic criteria of a particular disorder. There is some evidence that the diagnostic criteria do not differentiate between normal responses of malaise and maladaptation, and responses that it makes some sense to call psychopathological, which generates overdiagnosis and extends the psychopathologization of people. The criteria do not allow the differentiation between people who require mental health treatment and those who do not need it, nor do they contribute to the prognosis regarding the difficulties that people present (Bentall, 2009; Wakefield, 2016).

Preventing mental disorders, meaning reducing the incidence of disorders according to current diagnostic criteria or intervening is, therefore, a poorly defined objective. What is most serious is that, given the ubiquity of the mental disorders identified based on the current diagnostic criteria, trying to prevent them, particularly through screening programs and early detection, will only increase the number of people who will be informed that they are at risk and, instead of reducing the treatment needs, will cause more people to be referred to specialized treatment without necessarily needing it. And, equally as or even more serious, what happens to people will be understood through the lens of the disorder, which by definition involves and invites us to identify dysfunctions in the psyche itself (or bi-

ology), reducing the chances of understanding in a contextualized way the problems that may be affecting them. Diagnostic labels have known effects of labeling and stigmatization (and self-labeling and self-stigmatization) that can be extended, by way of screening people and groups identified as "at risk" of certain mental health "disorders". In this context, particularly worrisome is the misuse that can be made of possible genetics-based indicators that indicate the presence of a predisposition to experience particular disorders, increasing biologicism in understanding the mental health difficulties experienced by people (Demkow & Wolanczyk, 2017).

CONCLUSIONS

The development of promotion and prevention is a key area in promoting "global mental health" (Bährer-Kohler & Carod-Artal, 2017). The advances in the field in recent decades show its enormous potential. However, there are significant challenges and risks that must be addressed carefully. On the one hand, research in the field must transcend the emphasis on the study of the efficacy of programs implemented in highly controlled situations to the study of programs in natural environments, and must, progressively, contribute to the development of policies and programs that articulate in a real way the factors of macro, meso and micro levels that affect the well-being and mental health of societies and people. This requires a broad and ecological paradigm that is central to the future development of mental health promotion and prevention (WHO, 2004, 2005).

Consequently, overcoming the biomedical model, which also tends to dominate in the field of mental health promotion and prevention, is a central challenge. As proposed by Saraceno (2014), not every effort to reduce the gap between mental health needs and resources is beneficial; if it is not accompanied by a change of paradigm that separates mental health from biomedical conceptions, the reduction of the gap will consist in more people going to receive incomplete and/or inadequate treatments, particularly pharmacological ones, with dubious positive impacts, except for the profits of pharmaceutical companies. Although the risks of medicalization in the restricted sense of increased drug use are smaller in the field of promotion and prevention than in treatment, they are still present, and above all, there is the risk that the most diverse problems, and human diversity, will be interpreted based on the logic of the search for present or potential existing disorders that are "in the individual".

In summary, it is essential to give continuity to the efforts aimed at increasing the promotion of mental health and wellbeing, and the prevention of mental problems and disorders, but it is necessary for this to be accompanied by a review of how and where the valuable developments that have occurred in this field can continue.

CONFLICT OF INTERESTS

There is no conflict of interest.



REFERENCES

- Ahern, J., Jones, M. R., Bakshis, E., & Galea, S. (2008). Revisiting rose: Comparing the benefits and costs of population-wide and targeted interventions. *Milbank Quarterly*, 86, 581-600.
- Anderson, P., & Jane-Llopis, E. (2011). Mental health and global well-being. *Health promotion international*, 26(1), 147-155.
- Arango, C., Diaz-Caneja, C. M., McGorry, P. D., Rapoport, J., Sommer, I. E., Vorstman, J. A., . . . Carpenter, W. (2018). Preventive strategies for mental health. *Lancet Psychiatry*, 5, 591-604. doi:10.1016/S2215-0366(18)30057-9
- Bährer-Kohler, S. & Carod-Artal, F. J. (2017). *Global mental health*. New York, NY: Springer Berlin Heidelberg.
- Barry, M. M., Clarke, A. M., & Petersen, I. (2015). Promotion of mental health and prevention of mental disorders: priorities for implementation. *Eastern Mediterranean Health Journal*, 21, 503-511.
- Bentall, R. P. (2009). Doctoring the mind: is our current treatment of mental illness really any good? New York: University Press.
- Campion, J., Bhui, K., & Bhugra, D. (2012). European Psychiatric Association (EPA) guidance on prevention of mental disorders. European Psychiatry, 27, 68-80. doi: 10.1016/j.eurpsy.2011.10.004
- Canadian Institute for Health Information (2011). Return on investment: Mental health promotion and mental illness prevention. Ottawa: Author.
- Cockerham, W. C. (2005). Health lifestyle theory and the convergence of agency and structure. *Journal of Health and Social Behavior*, 46, 51-67. doi: 10.1177/002214650504600105
- Conrad, P. (2007). The medicalization of society: on the transformation of human conditions into treatable disorders. Baltimore: Johns Hopkins University Press.
- Cuijpers, P. (2003). Examining the effects of prevention programs on the incidence of new cases of mental disorders: The lack of statistical power. *American Journal of Psychiatry*, 160, 1385-1391.
- Cuijpers, P. (2011). Prevention of depressive disorders: towards a further reduction of the disease burden of mental disorders. *Early Intervention in Psychiatry*, *5*, 179-180.
- Demkow, U., & Wolanczyk, T. (2017). Genetic tests in major psychiatric disorders-integrating molecular medicine with clinical psychiatry-why is it so difficult? *Translational Psychi*atry, 7, 1-9. doi: 10.1038/tp.2017.106
- Frances, A., & Paredes, J. (2014). ¿Somos todos enfermos mentales? Manifiesto contra los abusos de la psiquiatría [Are we all mentally ill? A manifesto against the abuses of psychiatry]. Barcelona: Ariel.
- Gergen, K. (1996). Realidades y relaciones: aproximaciones a la construcción social [Realities and relationships: approaches to social construction]. Madrid: Paidós.
- Greenberg, M. & Riggs, N. (2015). Prevention of mental disor-

- ders and promotion of competence. In A. Thapar, D. Pine, J. Leckman, S. Scott, M. Snowling and E. Taylor. *Rutter's child and adolescent psychiatry* (215-226). Sussex: Wiley Blackwell.
- Horwitz, A. V., & Wakefield, J. C. (2009). Should screening for depression among children and adolescents be demedicalized? *Journal of the American Academy of Child and Adolescent Psychiatry*, 48, 683-687. doi: 10.1097/Chi.0b013e3181a5e3ad
- Jamoulle, M. (2009). About quaternary prevention. Swiss Medical Weekly, 139, 33-34.
- Jeste, D. V.& Bell, C. C. (2011). Prevention in mental health: Lifespan perspective. *Psychiatric Clinics*, *34*, 13-16.
- Knapp, M., McDaid, D., & Parsonage, M. (2011). Mental health promotion and mental illness prevention: The economic case. Department of Health, King's College London. Retrieved from http://eprints.lse.ac.uk/39302/1/Mental_health_promotion_a nd_mental_illness_prevention%28author%29.pdf
- Knifton, L. & Quinn, N. (2013). Public mental health: Global perspectives. UK: McGraw-Hill Education.
- Fonseca-Pedrero, E., & Inchausti, F. (2018). Actualización en la prevención de los trastornos del espectro psicótico [Update on the prevention of psychotic spectrum disorders]. *Papeles del Psicólogo, 39*, 127-139
- López Méndez, E., & Costa Cabanillas, M. (2012). Desvelar el secreto de los enigmas:
- Despatologizar la psicología clínica [Revealing the secret of the enigmas:
- Depathologizing clinical psychology]. *Papeles del Psicólogo,* 33, 162-171.
- Marchand, E., Stice, E., Rohde, P., & Becker, C. B. (2011). Moving from efficacy to effectiveness trials in prevention research. *Behaviour Research and Therapy*, 49, 32-41.
- McNally, R.J., Bryant, R.A., & Ehlers, A. (2003). Does early psychological intervention promote recovery from posttraumatic stress? *Psychological Science in the Public Interest, 4,* 45–79.
- National Research Council and Institute of Medicine (2009). Preventing mental, emotional, and behavioural disorders among young people. Progress and possibilities. Washington DC: National Academies Press.
- Ortiz, A., & Ibáñez, V. (2011). latrogenia y prevención cuaternaria en salud mental [latrogenesis and quaternary prevention in mental health]. Revista Española de Salud Pública, 85, 513-525.
- Patel, V., Fliher, A., Nikapota, A., & Malhotra, S. (2008). Promoting child and adolescent mental health in low and middle-income countries. *Journal of Child Psychology and Psychiatry*, 49, 313-343.
- Petersen, I., Barry, M., Lund, C. & Bhana, A. (2014). Mental health promotion and the prevention of mental disorders. In V. Patel, H. Minas, A. Cohen & M. Prince, M. Global mental health. Oxford: Oxford University Press.
- Poland, J. S., & Tekin, S. (2017). Extraordinary science and

- psychiatry: responses to the crisis in mental health research. Cambridge: MIT Press.
- Ray, I. (1863). Mental hygiene. Boston: Ticknor and Fields.
- Scott, S. (2018). Parenting skills and promotion of mental health over the lifespan. In Bhugra, D., Bhui, K., Wung, S., & Glisman, S. Oxford textbook of public mental health (1st edition. ed.) (371-383). New York, NY: Oxford University Press.
- Saraceno, B. (2014). Discurso global, sufrimientos locales [Global discourse, local suffering]. Barcelona: Herder.
- Saxena, S., Jane-Llopis, E., & Hosman, C. (2006). Prevention of mental and behavioural disorders: Implications for policy and practice. *World Psychiatry*, 5, 5-14.
- Spoth, R., Rohrbach, L. A., Greenberg, M., Leaf, P., Brown, C. H., Fagan, A.,... & Hawkins, J. D. (2013). Addressing core challenges for the next generation of type 2 translation research and systems: The translation science to population impact (TSci Impact) framework. *Prevention Science*, 14, 319-351.
- Van der Gaag, M., Smit, F., Bechdolf, A., French, P., Linszen, D. H., Yung, A. R., . . . Cuijpers, P. (2013). Preventing a first episode of psychosis: Meta-analysis of randomized controlled prevention trials of 12 month and longer-term followups. Schizophrenia Research, 149, 56-62.

- Pérez, M. (1999). Promoción de la salud y iatrogénesis [Promotion of health and iatrogenesis]. In M. A. Simón (Ed.), Manual de psicología de la salud. Fundamentos, metodología y aplicaciones [Manual of health psychology. Fundamentals, methodology and applications] (155-176). Madrid. Pirámide.
- Toth, S. L., Petrenko, C. L., Gravener Davis, J. A., & Handley, E. D. (2016). Advances in prevention science: A developmental psychopathology perspective. In D. Cicchetti (Ed.) *Developmental Psychopathology* (815-873). New Jersey: Wiley.
- Wakefield, J. C. (2016). Diagnostic issues and controversies in DSM-5: Return of the false positives problem. Annual Review of Clinical Psychology, 12, 105-132. doi:10.1146/annurev-clinpsy-032814-112800
- Werch, C.E., & Owen, D. (2002). latrogenic effects of alcohol and drug prevention programs. *Journal of Studies on Alcohol, 63, 581–590*.
- World Health Organization (2004). Prevention of mental disorders: effective interventions and policy options. Geneva: Author.
- World Health Organization (2005). Promoting mental health. Concepts, emerging evidence, and practice. Geneva: Author.