

Editorial

Has time come for broad-scale dissemination for prevention of depressive disorders?

It has long been thought that it is not possible to prevent the onset of mental disorders such as depression, because the processes involved in the etiology are too complex and not yet sufficiently understood. However, in the past 15 years, the knowledge about identifying target groups for prevention and about the effects of preventive interventions has increased considerably. In the 1990s the first studies were conducted which examined the effects of preventive interventions on the incidence of depressive disorders in people who did not meet diagnostic criteria for a depressive disorder (1, 2). In a recent meta-analytic review, we found 19 studies examining the effects of preventive interventions on the incidence of depression (3). This meta-analysis demonstrated that preventive interventions reduce the incidence of depressive disorders with 22% compared with control groups who did not receive the interventions. This is a statistically significant finding ($P < 0.01$), which supports the idea that preventive interventions are actually capable of preventing the onset of depressive disorders in some cases.

Most researchers and practitioners define prevention as interventions that are conducted before people meet the criteria of a depressive disorder according to the DSM-IV (4). Three types of prevention can be discerned: universal prevention, which is aimed at the general population or parts of the general population, regardless of whether they are at elevated risk of developing a disorder (e.g. school programs or mass media campaigns); selective prevention which is aimed at high-risk groups, who have not yet developed a mental disorder; and indicated prevention which is aimed at individuals who have some symptoms of a mental disorder but do not meet diagnostic criteria.

In our meta-analysis we found no indication that universal prevention was effective in reducing the incidence of depressive disorders. We did find indications that prevention, directed at people presenting with subthreshold depression is effective. It could be argued that indicated prevention may not be actual prevention at all, because these symptoms could be a part of the prodromal phase

of the disorder, and prevention is in fact early intervention in such cases, intervening in a process which has already started. However, our meta-analysis showed that selective prevention is also effective, suggesting that prevention of new cases is indeed possible. To be more specific, these preventive interventions are aimed at high-risk groups, such as pregnant women and general medical patients (5).

Although preventive interventions have been found to be effective in reducing the incidence of depressive disorders, more research in this area is clearly needed. One important challenge for future research is to improve the interventions' efficacy. In our meta-analysis, we found that preventive interventions reduce the incidence rate with 22%. We found some indications that interventions based on interpersonal psychotherapy may result in greater reductions in incidence. Another possibility to improve efficacy is to use stepped-care approaches in indicated preventive interventions (6). When someone has a subthreshold depression, it seems logical to monitor these symptoms regularly and when they do not improve, a non-intrusive intervention seems to be the best option. If such an intervention is not sufficient to ameliorate the symptoms, a more intensive intervention should be used, and when that fails, full pharmacological and psychological treatment can be applied. A series of trials examining the possibility of stepped care in prevention has recently started (6) and the outcomes are impressive.

Another area where future research is necessary, concerns defining the best target populations for preventive interventions. Methods to identify the most optimal target populations for prevention have been developed recently (7–9). In this line of research, epidemiological cohort data can be used to identify those target groups in which a maximum health gain can be generated against a minimal effort. To illustrate, it was shown in one study that older adults with subthreshold depression, functional limitations, a small social network and a female gender comprise only 8% of the total population, while 25% of the total number of

incident cases stem from this group (7). The next step in this line of research would be to conduct preventive trials specifically directed at these ultra-high-risk groups.

One other important way of identifying the optimal target groups for preventive interventions is to improve the definition of subthreshold depression. Indicated prevention is directed at people with subthreshold depression and identifying those persons with the highest risk of developing a depressive disorder could possibly improve the effectiveness of preventive interventions. As we have discussed earlier (10), there is little doubt that people with subthreshold depression are at increased risk of developing a depressive disorder. However, how large that risk is depends very much on how subthreshold depression is defined. The paper by Baumeister and Morar in this issue (11) shows that the prevalence of subthreshold depression is much lower when clinical significance criteria are included in the definition. It seems very well possible that the risk of developing a depressive disorder in this subset is higher than in other groups with subthreshold depression and, accordingly, that preventive interventions are more effective in this group.

Now, has the time come to start disseminating preventive interventions in routine practice? The answer should be a cautious yes. Our meta-analysis shows that it is possible to prevent the incidence of depressive disorders. The next step then is to examine how this knowledge can be applied in routine practice. In the Netherlands, for example, preventive services for depression are already offered on a regular basis in most mental health services. The 'Coping with Depression' course, which is a preventive intervention aimed at persons with subthreshold depression, is currently available for 80% of the general population in the Netherlands (12). At the same time, we must be cautious about starting to disseminate preventive interventions. As indicated, many research questions still have to be answered. Furthermore, the preventive interventions we have included in our meta-analysis have been examined in several settings, including the school setting, prenatal health services and general medical settings. In our meta-analysis we did not find evidence that interventions in each of these settings were equally effective. Only when we pooled all studies together the results were statistically significant. So, it seems to be advisable to start with pilot projects for dissemination, combined with research on the effectiveness in routine practice settings.

It is encouraging, however, that prevention of new cases of depressive disorders seems to be feasible and effective. As an adjunctive to treatment, prevention may play an important role in public mental health to reduce the enormous burden of depression. The development of evidence-based prevention of depression and other mental disorders should be an important scientific and public health objective for the 21st century.

Acta Psychiatrica Scandinavica
Pim Cuijpers and Filip Smit
Invited Guest Editors

References

1. MUÑOZ RF, YING YW, BERNAL G et al. Prevention of depression with primary care patients: a randomized controlled trial. *Am J Commun Psychol* 1995;**23**:199–222.
2. CLARKE GN, HAWKINS W, MURPHY M, SHEEBER LB, LEWINSOHN PM, SEELEY JR. Targeted prevention of unipolar depressive disorder in an at-risk sample of high school adolescents: a randomized trial of a group cognitive intervention. *J Am Acad Child Adol Psychiatry* 1995;**34**:312–321.
3. CUIJPERS P, VAN STRATEN A, SMIT F, BEEKMAN A. Preventing the onset of depressive disorders: A meta-analytic review of psychological interventions. *Am J Psychiatry* 2008;**165**:1272–1280.
4. MRAZEK PJ, HAGGERTY R (Ed). *Reducing risks of mental disorder: Frontiers for preventive intervention research*. Washington, DC: National Academy Press, 1994.
5. ROVNER BW, CASTEN RJ, HEGEL MT, LEIBY BE, TASMAN WS. Preventing depression in age-related macular degeneration. *Arch Gen Psychiatry* 2007;**64**:886–892.
6. VAN'T VEER-TAZELAAR PJ, VAN MARWIJK HWJ, VAN OPPEN P et al. Prevention of anxiety and depression in the age group of 75 years and over: a randomised controlled trial testing the feasibility and effectiveness of a generic stepped care programme among elderly community residents at high risk of developing anxiety and depression versus usual care. *BMC Publ Health* 2006;**6**:186.
7. SMIT F, EDERVEEN A, CUIJPERS P, DEEG D, BEEKMAN A. Opportunities for cost-effective prevention of late-life depression: An epidemiological approach. *Arch Gen Psychiatry* 2006;**63**:290–296.
8. SMIT F, COMIJS HC, SCHOEVERS R, CUIJPERS P, DEEG D, BEEKMAN A. Target groups for the prevention of late-life anxiety. *Br J Psychiatry* 2007;**190**:428–434.
9. SCHOEVERS RA, SMIT F, DEEG DJH et al. Prevention of late-life depression in primary care; do we know where to begin? *Am J Psychiatry* 2006;**163**:1611–1621.
10. CUIJPERS P, SMIT F. Subthreshold depression as a risk indicator for major depressive disorder: a systematic review of prospective studies. *Acta Psychiatr Scand* 2004;**109**:325–331.
11. BAUMEISTER H, MORAR V. The impact of clinical significance criteria on subthreshold depression prevalence rates. *Acta Psychiatr Scand* 2008;**118**:443–450.
12. CUIJPERS P. A psycho-educational approach to the treatment of depression; a meta-analysis of Lewinsohn's 'Coping with Depression' course. *Behav Ther* 1998;**29**:521–533.

Copyright of *Acta Psychiatrica Scandinavica* is the property of Blackwell Publishing Limited and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.