

# Assessing effective treatment coverage for depression

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Major depression is a common mental disorder and causes a substantial burden to the world population, with an average lifetime prevalence estimate (using DSM-IV diagnostic criteria) of 14.6% in ten high-income (HIC) and 11.1% in the eight low- to middle-income countries (LMIC) participating to the World Mental Health Survey Initiative.<sup>1</sup> Given the availability of efficacious and cost-effective treatments of major depression, a key question is the extent of effective treatment coverage for this condition.

In their important contribution, Chen and colleagues<sup>2</sup> used public data from two surveys (Health Survey for England, USE; Survey of Health, Ageing and Retirement in Europe, SHARE) covering 19 European countries to compare the use of antidepressants (ADs) in two time-periods (2011–2015 and 2015–2018). The population of interest was represented by people screening positive for depressive symptoms by self-report.

Across 37,250 participants, after controlling for age, sex, wealth, and physical disability, Chen and colleagues found that antidepressant use (amongst those screening positive) increased significantly in 14 out of 19 countries. Furthermore, there was marked variability in the extent of use and in the size of increased use across different countries.

This study raises new questions about treatment coverage for depression, including the appropriate prescription of ADs. The report has several strengths, including wide coverage of different countries. However, as the authors acknowledge, the findings need to be interpreted against the context of several limitations, including the absence of data on formal psychiatric diagnosis of major depression and non-medication treatment, and that the HSE dataset included only people aged 50 or over. A number of issues regarding treatment coverage for depression in general, and effective AD coverage in particular, deserve further discussion and debate.

First, there is the question of potential treatment coverage. Are health services available, accessible, and acceptable? Chen and colleagues document important differences across countries in structural barriers, including expenditure on health care. However, there is also likely to be crucial variance in attitudinal barriers to care. Such variance may well be relevant to explaining differences in caregiver and user views of AD medication, which may contribute to described age and sex differences in prevalence of AD prescription. In the World Mental Health (WMH) surveys, for example, women and younger people with disorders were more likely to recognize a need for treatment.<sup>3</sup>

Relatedly, Chen and colleagues do not comment on depression severity; it is notable that in the WHM surveys attitudinal barriers dominated for mild-moderate cases and structural barriers for severe cases. From a public health perspective, measures are therefore needed to address both structural and attitudinal barriers to treatment of the full spectrum of depressive disorders, across the life course.<sup>4</sup> In order to monitor the efficacy of such measures, ongoing work on potential treatment coverage of depression, exploring structural and attitudinal barriers in different sociodemographic groups, and in patients with different levels of depression severity, is needed in Europe and globally.<sup>5</sup>

Second, there is the question of actual treatment coverage.<sup>6</sup> Actual coverage is composed of both contact coverage and effective coverage. Chen and colleagues document AD prescription for those with depressive symptoms. While such contact coverage data are useful, the treatment-prevalence paradox emphasizes that treatment availability may not translate into decreased depression prevalence.<sup>7</sup> Indeed, Chen et al are unable to indicate whether ADs are being prescribed to those with major depressive disorder according to evidence-based treatment guidelines, and whether health benefits are obtained; thus, conclusions about effective coverage are hard to draw. This limitation is of particular relevance in the case of ADs prescribed to young people (not included in the SHARE dataset), which have markedly increased in Europe in the last two decades.<sup>4</sup>

Relatedly, it is relevant to note that effective coverage is a function of both the quality of treatment provided, and of user adherence. In their work on effective

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treatment coverage of depression in the World Mental Health surveys, Vigo and colleagues adjusted for both treatment quality (e.g., type of pharmacotherapy used) as well as adherence quality (e.g., dose of AD taken),<sup>8</sup> and also took into account different depression severity levels. They reported underutilization of pharmacotherapy as well as psychotherapy globally, noting that severe cases were more likely than mild-moderate cases to receive either adequate pharmacotherapy or psychotherapy, but less likely to receive an adequate combination.

To address treatment underutilization, scaling up care for depression will require attention to community education and outreach, to supply of pharmacotherapy and psychotherapy, and to quality of health care services.<sup>9</sup> Treatment quality rests not only on appropriate diagnosis, but also on tailoring care according to a range of post-diagnostic considerations<sup>10</sup>; future epidemiological work on such treatment personalization would be useful, and may benefit from access to large clinical datasets.

#### Contributors

Both authors contributed equally.

#### Declaration of interests

The authors have no competing interests to declare.

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