Editorial:The Israel National Health Survey: Initial Results and Future Directions

The Israel National Health Survey (INHS) is a goldmine of information on the prevalence and correlates of mental disorders in the Israeli population. The survey was carried out using a stateof-the-art diagnostic interview (1) that has been shown to yield valid assessments of mental disorders (2). The survey was implemented using rigorous field procedures and careful quality control monitoring to ensure the integrity of the data. The senior investigators are to be applauded for the rigor with which the survey was implemented and for the rapid dissemination of the basic survey results in the reports presented here. Through their participation in the World Health Organization (WHO) World Mental Health (WMH) Survey Initiative (www.hcp.med.harvard.edu/wmh), the INHS results can also be compared to those in many other countries throughout the world.

The WMH Survey Initiative was launched to address the fact that government health policy decision-makers continue to neglect mental disorders despite evidence from the WHO Global Burden of Disease (GBD) Study (3) that mental disorders are among the most burdensome health problems in the world (4). This neglect occurs despite the fact that some mental disorders can be treated as effectively as many chronic physical disorders (5, 6). However, the fact that GBD results are based largely on expert ratings of comparative illness impact rather than on empirical evidence has led to skepticism about the accuracy of estimates (7, 8). The WMH surveys address this skepticism by carrying out rigorous general population evaluation of the prevalence and societal impacts of mental disorders. The surveys also assess modifiable risk factors that can be used to target interventions as well as patterns of and barriers to service use.

The first series of INHS papers in this special issue of the Israel Journal of Psychiatry presents important results that speak directly to the aims of the larger WMH initiative. These results also raise equally important questions for future investigation. The results regarding the prevalence of anxiety and mood disorders, for example, are surprising in that estimated prevalence is found to be very similar overall to that in many Western European countries (9) despite the much greater exposure to traumatic experiences in the Israeli population than in the populations of other developed countries. One curious difference that warrants further investigation in this regard is that the ratio of mood to anxiety disorders is considerably higher in Israel than in most other developed WMH countries. More detailed examination is also needed of the age of onset (AOO) distributions of the anxiety-mood disorders found in the INHS, as the age structure in Israel is different than in most developed countries and consideration of AOO distributions is needed to make thoughtful projections of future needs for mental health services. Comparisons with other WMH surveys could be especially helpful in this regard.

Another striking INHS result that requires further investigation is that roughly 60% of people with a lifetime history of an anxiety-mood disorder continued to have an active episode of an anxiety-mood disorder in the past year. This ratio is higher than in most other WMH surveys. It might be that the special life circumstances in Israel influence AOO and course of illness more than they influence lifetime prevalence. Decomposition of results is needed to investigate this possibility in a cross-national perspective. Disorder-specific patterns of onset and persistence as a function of geographic and intertemporal variation in life experiences related to

Address for Correspondence: R.C. Kessler, Department of Health Care Policy, Harvard Medical School, 180 Longwood Avenue, Boston, MA 02115, U.S.A. E-mail: kessler@hcp.med.harvard.edu

trauma exposure could be especially illuminating in this regard. The rich data in the INHS and the other WMH surveys on exposure to traumatic experiences could be used to carry out analyses of this sort. It would be very useful to carry out such analyses in parallel within INHS sub-samples of Arab-Israelis and Jewish-Israelis. These analyses should consider not only mental disorders, but also substance disorders and suicidality.

The initial INHS results regarding 12-month use of services for mental reasons are similar to those in other developed countries in the WMH series in that a considerable number of people are found to obtain services despite not meeting criteria for a 12-month mental disorder, while a high proportion of people with a 12-month mental disorder fail to receive services. Several issues need to be examined in more detail regarding this pattern. First, a more fine-grained analysis of need for treatment should be carried out among people who received treatment despite not having a 12-month disorder. Preliminary results in several other WMH countries show that the vast majority of such patients have a lifetime history of disorder and are either receiving maintenance treatment (as in bipolar disorder and non-affective psychosis) or receiving treatment for sub-threshold episodes based on the patients being proactive in attempting to prevent disorder recurrence. Patterns of this sort document considerable rationality in the allocation of mental health services, especially when the intensity of treatment is lower for these subthreshold cases than for active cases.

Second, a more detailed consideration is needed in future INHS analyses of the adequacy of mental health treatment. Published guidelines now exist for the treatment of most common mental disorders. It is important to determine the extent to which at least the minimum requirements regarding duration and type of treatment are being met in the treatment provided to patients with mental disorders in Israel. The INHS contains information about the details of treatment that makes it possible to carry out an analysis of treatment adequacy. Comparable analyses in other WMH countries have found disturbingly low proportions of patients meeting even minimal standards of treatment adequacy (10). We do not yet know whether this same problem exists in Israel, but

it is important for the next phase of INHS analysis to investigate this question.

Third, the INHS contains valuable information on barriers to seeking treatment as well as information on reasons for treatment dropout. These data need to be mined to search for modifiable determinants of unmet need for treatment of mental disorders. If the INHS results parallel those in other developed countries, the data will show that a substantial part of inadequate treatment is due to patients dropping out before a full course of treatment is provided. Previous studies in the U.S. have found that this is especially common among patients who are treated in primary care (11, 12). The policy implications of the INHS results will be greatly increased when these aspects of the data are explored.

Another important policy area not considered in the initial reports, but that the INHS investigators are currently pursuing, involves the societal burden of mental disorders in relation to commonly occurring physical disorders. We are all aware of the fact that the resources made available for the treatment of mental disorders in most countries are far less than those made available for the treatment of physical disorders that are often less common and less impairing than mental disorders. The Israeli National Health Insurance Law is very progressive in reducing disparities of this sort, but it is nonetheless important to investigate whether a continuing mismatch exists between need and treatment that might be more pronounced for mental than physical disorders.

The existence of such a mismatch might be expected even in the presence of parity of access to treatment due to the fact that greater psychological barriers exist for treatment of mental than physical disorders because of the greater stigma of mental disorders. If such differences in obtaining treatment are documented in the INHS, they might be addressed with special mental disorder screening systems, outreach services, case management programs, and other initiatives. The INHS is ideally poised to investigate the existence of such mismatches because it included a series of questions about the prevalence and treatment of a wide range of physical conditions (e.g., arthritis, asthma, diabetes) in order to facilitate comparative analyses. The effects of physical conditions on role functioning are

assessed in the INHS using exactly the same measures used to assess the effects of mental disorders on role functioning, making it possible to carry out comparative analyses of the societal burden of mental disorders and physical disorders. The results of these anticipated future INHS analyses could have profound policy implications.

As suggested by the above remarks, I feel quite sure that the intriguing results reported in this special issue of the Israel Journal of Psychiatry are just the first phase in an extensive series of future reports from the INHS. Many areas of investigation can be examined in the rich INHS data. For example, the interview schedule contains fully structured versions of standard clinical severity measures, such as the Quick Inventory of Depressive Symptoms Self-Report (QIDS-SR) (13), the Young Mania Rating Scale (14), and the Panic Disorder Severity Scale (15). Analysis of these severity measures will allow the INHS investigators to create a cross-walk to clinical studies that has heretofore been missing in community psychiatric epidemiology. The detailed assessment of sub-threshold disorders in the survey will provide useful information about diagnostic thresholds that can be used to inform decisions about changes in diagnostic criteria in upcoming revisions of the ICD and DSM systems. The rich array of risk factors in the survey, in addition, will provide important information about modifiable social determinants of mental illness.

Given the special circumstances of life in Israel, the expanded assessment of post-traumatic stress disorder (PTSD) in the INHS and other WMH surveys is especially noteworthy. A detailed assessment of lifetime trauma exposure and an innovative assessment of PTSD associated both with extreme traumas and with a random selection of less extreme traumas make it possible to assess PTSD in unprecedented depth. Comparative analysis could be especially interesting here in that a number of other nationally representative WMH surveys included exactly the same assessment in other countries that have been exposed to sectarian violence both in the same (Iraq, Lebanon) and in other regions of the world (Northern Ireland, South Africa). Investigations of comparability and differences in the experiences of people living in these different countries and the effects of these experiences on PTSD could have considerable value for expanding our understanding of emotional responses to traumatic experiences.

Before closing, I want to be clear that all the investigators involved in the INHS and the larger WMH initiative recognize the inevitable limitations imposed on their work by the rigidity of existing diagnostic systems, by the constraints of cross-sectional data collection, and by the use of fully structured assessments rather than semi-structured clinical assessments (4, 16). The collaborators are now actively engaged in thoughtful and subtle methodological studies that address these limitations. A wide range of substantive analyses are also underway that go well beyond the simple head-counting that characterizes so much of psychiatric epidemiology. Finally, recognizing that the INHS and the other WMH surveys are not definitive, but merely a next step in the natural evolution of psychiatric epidemiology, the WMH investigators are using insights gleaned from this round of surveys to address weaknesses in the surveys by carrying out measurement studies aimed at improving the quality of future investigations, with the ultimate goal of providing maximally useful information to improve the public health of the populations of the participating WMH countries. We look forward to a long and productive continued collaboration with the INHS team in these joint activities.

Acknowledgements

This editorial was prepared in conjunction with the author's involvement as a co-director of the WHO World Mental Health (WMH) Survey Initiative. Core activities of WMH are supported by the Alden Trust, AstraZeneca, Eli Lilly and Company, GlaxoSmithKline, the Robert Wood Johnson Foundation, the John D. and Catherine T. MacArthur Foundation, OrthoMcNeil Pharmaceuticals, the Pan American Health Organization, the Pfizer Foundation, Pfizer, Inc., the U.S. Public Health Service (R13MH066849, R01MH069864, R01DA016558), and Wyeth-Ayerst. The WMH surveys carried out in individual countries received support from a wide range of local funders listed on the WMH web site at www.hcp.med.harvard.edu/wmh.

References

- Kessler RC, Ustun TB. The World Mental Health (WMH) Survey Initiative Version of the World Health Organization (WHO) Composite International Diagnostic Interview (CIDI). Int J Methods Psychiatr Res 2004;13:93-121.
- Haro JM, Arbabzadeh-Bouchez S, Brugha TS, de Girolamo G, Guyer ME, Jin R, Lepine JP, Mazzi F, Reneses B, Vilagut Saiz G, Sampson NA, Kessler RC. Concordance of the Composite International Diagnostic Interview Version 3.0 (CIDI 3.0) with standardized clinical assessments in the WHO World Mental Health Surveys. Int J Methods Psychiatr Res 2006;15:167-180.
- 3. Murray CJL, Lopez AD. The global burden of disease: A comprehensive assessment of mortality and disability from diseases, injuries and risk factors in 1990 and projected to 2020. Cambridge, Mass.: Harvard University, 1996.
- 4. Kessler RC, Haro JM, Heeringa SG, Pennell B-E, Ustun TB. The World Health Organization World Mental Health Survey Initiative [editorial]. Epidemiologia e Psichiatria Sociale 2006;15:161-166.
- 5. Bradley R, Greene J, Russ E, Dutra L, Westen D. A multidimensional meta-analysis of psychotherapy for PTSD. Am J Psychiatry 2005;162:214-227.
- 6. Haby MM, Donnelly M, Corry J, Vos T. Cognitive behavioural therapy for depression, panic disorder and generalized anxiety disorder: A meta-regression of factors that may predict outcome. Aust N Z J Psychiatry 2006;40:9-19.
- Cohen J. The global burden of disease study: A useful projection of future global health? J Public Health Med 2000:22:518–524.
- 8. Sanderson K, Andrews G. Mental disorders and burden of disease: How was disability estimated and is it valid? Aust N Z J Psychiatry 2001;35:668-676.
- 9. Demyttenaere K, Bruffaerts R, Posada-Villa J, Gasquet I, Kovess V, Lepine JP, Angermeyer MC, Bernert S, de Girolamo G, Morosini P, Polidori G, Kikkawa T, Kawakami N, Ono Y, Takeshima T, Uda H, Karam EG, Fayyad JA, Karam AN, Mneimneh ZN, Medina-Mora ME, Borges G, Lara C, de Graaf R, Ormel J, Gureje O, Shen Y, Huang Y, Zhang M, Alonso J, Haro JM, Vilagut G, Bromet EJ, Gluzman S, Webb C, Kessler RC, Merikangas KR, Anthony JC, Von Korff MR, Wang PS, Brugha TS, Aguilar-Gaxiola S, Lee S, Heeringa S,

- Pennell BE, Zaslavsky AM, Chatterji S, Ustun TB. Prevalence, severity, and unmet need for treatment of mental disorders in the World Health Organization World Mental Health Surveys. JAMA 2004;291:2581–2590.
- 10. Wang PS, Aguilar-Gaxiola S, Alonso J, Angermeyer MC, Borges G, Bromet EJ, Bruffaerts R, de Girolamo G, de Graaf R, Gureje O, Haro JM, Karam EG, Kessler RC, Kovess V, Lane MC, Lee S, Levinson D, Ono Y, Petukhova M, Posada-Villa J, Seedat S, Wells JE. Worldwide Use of mental health services for anxiety, mood, and substance disorders: Results from 17 Countries in the WHO World Mental Health (WMH) Surveys. Lancet, in press.
- 11. Edlund MJ, Wang PS, Berglund PA, Katz SJ, Lin E, Kessler RC. Dropping out of mental health treatment: Patterns and predictors among epidemiological survey respondents in the United States and Ontario. Am J Psychiatry 2002;159:845–851.
- 12. Wang PS, Demler O, Kessler RC. Adequacy of treatment for serious mental illness in the United States. Am J Public Health 2002;92:92-98.
- 13. Rush AJ, Trivedi MH, Ibrahim HM, Carmody TJ, Arnow B, Klein DN, Markowitz JC, Ninan PT, Kornstein S, Manber R, Thase ME, Kocsis JH, Keller MB. The 16-Item Quick Inventory of Depressive Symptomatology (QIDS), clinician rating (QIDS-C), and self-report (QIDS-SR): A psychometric evaluation in patients with chronic major depression. Biol Psychiatry 2003;54:573–583.
- 14. Young RC, Biggs JT, Ziegler VE, Meyer DA. A rating scale for mania: Reliability, validity and sensitivity. Br J Psychiatry 1978;133:429–435.
- 15. Shear MK, Rucci P, Williams J, Frank E, Grochocinski V, Vander Bilt J, Houck P, Wang T. Reliability and validity of the Panic Disorder Severity Scale: Replication and extension. J Psychiatr Res 2001;35:293–296.
- 16. Kessler RC. Comments on the initial papers from Te Rau Hinengaro: The New Zealand Mental Health Survey (NZMHS). Aust N Z J Psychiatry 2006;40:823.

Ronald C. Kessler, PhD Harvard Medical School, Boston, Massachusetts, U.S.A.