iours. This argument provides support for including substance use disorders, gambling disorder and gaming disorder in a single section of the chapter on mental, behavioural or neurodevelopmental disorders in ICD-11.

Dan J. Stein[1], Joël Billieux[2], Henrietta Bowden-Jones[3], Jon E. Grant[4], Naomi Fineberg[5], Susumu Higuchi[6], Wei Hao[7], Karl Mann[8], Hisato Matsunaga[9], Marc N. Potenza[10], Hans-Jürgen M. Rumpf[11], David Veale[12], Rajat Ray[13], John B. Saunders[14], Geoffrey M. Reed[15], Vladimir Poznyak[15]

[1]Department of Psychiatry and Mental Health, SA Medical Research Council Unit on Risk and Resilience in Mental Disorders, University of Cape Town, Cape Town, South Africa; [2]Institute for Health and Behaviour, University of Luxembourg, Luxembourg; [3]Division of Brain Science, Imperial College London, London, UK; [4]Department of Psychiatry and Behavioral Neuroscience, University of Chicago, Chicago, IL, USA; [5]University of Hertfordshire, Hatfield, and School of Clinical Medicine, Cambridge University, Cambridge, UK; [6]National Center for Addiction Services Administration, Yokosuka, Kanagawa, Japan; [7]Mental Health Institute, Central South University, Changsha, China; [8]Central Institute of Mental Health, Mannheim, Germany; [9]Department of Neuropsychiatry, Hyogo College of Medicine, Nishinomiya, Japan; [10]Yale University School of Medicine, and Connecticut Council on Problem Gaming, Clinton, CT, USA; [11]Clinic for Psychiatry and Psychotherapy, University of Lübeck, Lübeck, Germany; [12]Institute of Psychiatry, Psychology and Neuroscience, King's College London, London, UK; [13]Department of Psychiatry, Swami Rama Himalayan University, Dehradun, India; [14]Disciplines of Psychiatry and Addiction Medicine, University of Sydney, Sydney, NSW, Australia; [15]Department of Mental Health and Substance Abuse, World Health Organization, Geneva, Switzerland

The authors alone are responsible for the views expressed in this letter and they do not necessarily represent the decisions, policy or views of the World Health Organization. The letter is based in part upon work from Action CA16207 "European Network for Problematic Usage of Internet", supported by the European Cooperation in Science and Technology (COST).

1. Chamberlain SR, Lochner C, Stein DJ et al. Eur Neuropsychopharmacol 2016;26:841-55.
2. Saunders JB, Hao W, Long J et al. J Behav Addict 2017;6:271-9.
3. Starcevic V. Aust N Z J Psychiatry 2016;50:721-5.
4. Aarseth E, Bean AM, Boonen H et al. J Behav Addict 2017;6:267-70.
5. Hasin DS, O'Brien CP, Auriacombe M et al. Am J Psychiatry 2013;170:834-51.
6. Petry NM. Addiction 2006;101(Suppl. 1):152-60.
7. Potenza MN. Addiction 2006;101(Suppl. 1):142-51.
8. Saunders JB. Curr Opin Psychiatry 2017;30:227-37.
9. Grant JE, Atmaca M, Fineberg NA et al. World Psychiatry 2014;13:125-7.

DOI:10.1002/wps.20570

Evidence of the clinical utility of a prolonged grief disorder diagnosis

A substantial body of research has shown that prolonged grief disorder (PGD), characterized by persistent and severe separation distress, constitutes a disorder distinct from bereavement-related major depressive disorder (MDD) and post-traumatic stress disorder (PTSD)[1]. Reviewing the available evidence, the work group covering the Disorders Specifically Associated With Stress section in the ICD-11 decided to slate PGD for inclusion as a new stress response syndrome[2]. Still, mental health professionals and laypersons have expressed concerns that diagnosing PGD represents a "medicalization" of normal grief reactions[3]. Fears of the overdiagnosis of normal responses remain[4-6].

As a new disorder, it is of paramount importance to determine whether PGD is a clinically useful diagnosis. According to First[7], a mental disorder or diagnostic system has clinical utility if it: a) helps communication, b) facilitates effective interventions, c) predicts management needs and outcomes, and d) differentiates disorder from non-disorder and comorbid disorders. Whereas a large body of evidence has demonstrated the construct, predictive and incremental validity of PGD, clinicians' perceptions of its clinical utility have yet to be tested experimentally.

To address this gap, our group recently completed a two-phase National Institute of Mental Health (NIMH)-funded randomized controlled trial in the US that evaluated the clinical utility of PGD by examining the impact of providing information about the diagnosis on clinicians' ability to differentially diagnose PGD in "virtual standardized patients" (VSPs). The use of VSPs allowed us to standardize clinical presentations, control influential confounding variables and patient characteristics, and avoid burdening bereaved participants. Using VSPs (rather than written vignettes or clinicians selecting their own patients[8], as has been done in prior studies) increased the external validity of this investigation.

In Phase 1 of the study, video-recorded case vignettes for the VSPs were developed with the input of seven bereavement experts. They reflected cases of PGD, normative grief not meeting criteria for PGD, MDD, and PTSD. Four blinded, expert diagnosticians were asked to review the VSPs and evaluate the cases to establish "gold" or "criterion" standard diagnoses. There was full agreement on 12 of the cases, which were included in Phase 2 of the study.

In Phase 2, clinicians (N=120 completers) were randomized to receive written information about PGD (informed) or not (not informed). Participants were asked about their background and experience working with the bereaved, and were invited to provide a diagnosis and treatment recommendations for four VSPs depicting normative grief, PGD, MDD and/or PTSD. Participants were also surveyed about PGD's clinical utility. Participants included psychiatrists (17%), psychologists (27%), social workers (43%), and other licensed clinicians (13%). They were 76% female and 66% White.

We found that clinicians provided with information about PGD, compared to those not receiving such information, were 4.5 times more likely to diagnose PGD accurately. There were no significant group differences in the likelihood of clinicians accurately diagnosing normative grief, MDD or PTSD, but there were significant between-group differences in treatment recommendations for PGD cases. Clinical utility ratings of the PGD diagnostic criteria were high, with the majority of clini-

cians rating those criteria as easy to use (97%) and overall clinically useful (95%).

There has been significant concern that introducing a diagnosis of prolonged grief would increase the likelihood that clinicians will medicalize or pathologize grief[4-6]. We found, however, that mental health providers who received information about PGD were no more likely to pathologize normative grief than those who did not receive this information in advance of evaluating standardized patients. Furthermore, clinicians who correctly diagnosed PGD were shown to be *less* likely to recommend antidepressants for individuals they accurately diagnosed with PGD and *more* likely to recommend psychotherapies that have direct relevance to PGD symptoms, such as disbelief (emotion-focused therapy), loss of meaning (existential therapy), and persistent suffering (acceptance and commitment therapy). This may reflect clinicians' perception that PGD is less biologically based than, for example, MDD. Although, like the DSM, the PGD tutorial did not offer treatment recommendations, it did describe risk factors that were psychological in nature, which may have affected the recommendations made.

This study also suggests the clinical value of using straightforward diagnostic criteria to distinguish pathological grief from other clinical presentations. The proposed PGD criteria are highly specific, which should reduce the risk of pathologizing normative grief reactions[1]. At the same time, they are sufficiently sensitive to capture those in need[1]. Under-recognition of PGD and misclassifying it as another diagnosis is likely to lead to suboptimal treatment. PGD improves when specific interventions, such as those recommended by the study participants, target unique pathological grief symptoms[9]. The misdiagnosis of PGD as MDD or PTSD may promote the use of inappropriate interventions.

Although this study was limited by a relatively small sample size and by the biases inherent in those who chose to participate, it demonstrates that PGD is perceived and shown to be clinically useful. We therefore believe that educating clinicians about PGD is likely to improve their ability to distinguish normal from pathological grief; to enhance communication between clinicians, patients, and their families; and to assist in the delivery of effective treatments for PGD[7].

Wendy G. Lichtenthal[1,2], Paul K. Maciejewski[2], Caraline Craig Demirjian[1], Kailey E. Roberts[1], Michael B. First[5], David W. Kissane[1-3], Robert A. Neimeyer[4], William Breitbart[1,2], Elizabeth Slivjak[1], Greta Jankauskaite[1], Stephanie Napolitano[1], Andreas Maercker[6], Holly G. Prigerson[2]

[1]Memorial Sloan Kettering Cancer Center, New York, NY, USA; [2]Weill Cornell Medicine, New York, NY, USA; [3]Monash University, Clayton, VIC, Australia; [4]University of Memphis, Memphis, TN, USA; [5]Columbia University Medical Center, New York, NY, USA; [6]University of Zurich, Zurich, Switzerland

The authors would like to thank the experts who reviewed the VSP scripts, including N. Alston, P. Boelen, J.A. García-García, A. Ghesquiere, A. Papa and S. Schachter. They are also indebted to misterBIT for developing the online study platform and to the mental health providers who gave their time to this study. This research was supported by the NIMH grant R21MH095378 and National Cancer Institute grants R35CA197730, K07CA172216 and P30CA008748.

1. Prigerson HG, Horowitz MJ, Jacobs SC et al. PLoS Med 2009;6:e1000121.
2. Maerker A, Brewin CR, Bryant RA et al. World Psychiatry 2013;12:198-206.
3. Breen LJ, Penman EL, Prigerson HG et al. J Nerv Ment Dis 2015;203:569-73.
4. Wakefield JC. World Psychiatry 2013;12:171-3.
5. Prigerson HG, Maciejewski PK. JAMA Psychiatry 2017;74:435-6.
6. Dodd A, Guerin S, Delaney S et al. Patient Educ Couns 2017;100:1447-58.
7. First MB. Prof Psychol Res Pract 2010;41:465-73.
8. Spitzer RL, First MB, Shedler J et al. J Nerv Ment Dis 2008;196:356-74.
9. Mancini AD, Griffin P, Bonanno GA. Curr Opin Psychiatry 2012;25:46-51.

DOI:10.1002/wps.20544

Diet as a hot topic in psychiatry: a population-scale study of nutritional intake and inflammatory potential in severe mental illness

People with severe mental illnesses (SMIs) – including schizophrenia, major depressive disorder (MDD) and bipolar disorder – have excessive caloric intake, a low-quality diet, and poor nutritional status compared to the general population[1,2]. Poor diet increases the risk of diabetes and cardiovascular mortality in this population[3]. Furthermore, excessive consumption of high-fat and high-sugar foods can increase systemic inflammation[4]. Indeed, all classes of SMI show heightened levels of peripheral inflammatory markers, which is linked to worse prognosis in these conditions. However, there currently is an absence of large-scale studies comparing the nutritional intake and inflammatory profile of the diets of individuals with SMIs.

To address this, we used detailed dietary intake data from the baseline phase (2007-2010) of the UK Biobank study[5] to examine differences in nutritional intake and diet-associated inflammation between people with SMIs and the general population. Full details on the UK Biobank, including approval from the National Health Service (NHS) Research Ethics Committee, are available elsewhere[5]. We used patient hospital records to identify individuals with a ICD-10 diagnostic history of recurrent depressive disorder, bipolar disorder (type I or II) or schizophrenia. Additionally, participants' answers to questions from the Structured Clinical Interview for DSM-IV Axis I Disorders (SCID-I) and Patient Health Questionnaire (PHQ), administered at the UK Biobank baseline, were used to identify additional individuals with MDD or bipolar disorder[6]. Participants who fell into multiple psychiatric categories were assigned hierarchically to only one, in this order: schizophrenia, bipolar disorder, MDD. Healthy controls were derived from all UK Biobank participants who had no indication of any previous or pre-