



## Mental health professionals' perceived clinical utility of the ICD-10 vs. ICD-11 classification of personality disorders

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### ABSTRACT

**Aim** – The ICD-11 classification of personality disorders (PDs) has adopted a dimensional approach which includes three levels of severity (mild, moderate and severe) with the option of specifying five trait qualifiers (negative affectivity, detachment, dissociality, disinhibition and anankastia) and one borderline pattern qualifier. This study examined mental health professionals' perceived clinical utility of the ICD-11 PD framework compared with the ICD-10 categorical PD framework.

**Method** – A sample of 163 mental health professionals (primarily psychologists, nurses and medical doctors) completed a survey in which they were asked to apply the ICD-10 and ICD-11 PD classifications on one of their patients followed by judgement of their clinical utility.

**Results** – The ICD-11 PD framework was generally rated as being slightly more useful than the ICD-10 framework even when accounting for educational background and years of experience. This advantage particularly involved the utility for treatment planning, communicating with patients, comprehensiveness and ease of use. The two frameworks showed no significant differences with respect to utility for communicating with other professionals and describing global personality.

**Conclusion** – This study provided initial evidence that mental health professionals perceive the ICD-11 PD classification as slightly more useful for clinical practice than the ICD-10 classification. © 2019 John Wiley & Sons, Ltd.

### Introduction

In June 2018, the World Health Organization (WHO) released the initial version of the 11th revision of the *International Classification of Diseases*

(ICD-11), which includes a fundamentally new way of classifying personality disorders (PDs). Essentially, the WHO forecasts that a classification that does not provide clinically useful information at the encounter level may not be used and

therefore cannot provide valid data for health policy and decision making.<sup>1</sup> Consequently, the *ICD-11* is aimed at providing consistent, accessible and clinically useful guidelines that help in identifying people in need of mental health services while also indicating treatments that are most likely to be effective, at the point at which they are most likely to encounter opportunities for care.<sup>2-4</sup> The *ICD-11* PD classification will eventually be used for coding purposes by clinicians in all WHO member states, including countries such as the USA and UK along with Bangladesh and Botswana. Thus, it seems imperative that mental health professionals to some degree find the new *ICD-11* PD framework useful for the aforementioned clinical purposes, which the present paper therefore aimed to investigate.

### *The ICD-11 classification of personality disorders*

There have long been concerns regarding the scientific validity and clinical utility of the PD categories as defined in *ICD-10* and *DSM-5*.<sup>5-7</sup> In recognition of these concerns, the *ICD-10* 'Blue Book' explicitly underscores that '[...] a new approach to the description of personality disorders is required'.<sup>8</sup> Accordingly, an empirically derived PD classification was originally proposed for the *DSM-5* (involving separate ratings of PD functioning and PD traits), which was eventually included in *DSM-5* Section III ('Emerging Measures and Models') as the alternative model of personality disorders (AMPD), while the *DSM-IV* categorical PD model was retained in Section II.<sup>9</sup> In June 2018, the WHO released a draft version of the forthcoming *ICD-11*, which included a dimensional classification of PDs that is similar to the *DSM-5* AMPD framework.<sup>10,11</sup> In contrast to the nine *ICD-10* PD categories, the *ICD-11* PD classification focuses on core personality dysfunction, described at three levels of PD severity (mild, moderate and severe) as well

as a subthreshold degree of 'personality difficulty', with the option of specifying one or more prominent trait domain qualifiers (i.e. negative affectivity, detachment, disinhibition, dissociality and anankastia). Additionally, the *ICD-11* classification scheme also includes an option for specifying a borderline pattern qualifier.<sup>10,12</sup>

The empirical rationale for the *ICD-11* PD classification was informed by reviews of the literature on PD severity and traits.<sup>13-16</sup> Moreover, a number of preliminary studies have sought to examine the new framework with regard to its reliability and validity.<sup>14,17-25</sup>

### *Previous research on perceived clinical utility of personality disorder models*

As previously noted, the aim of the *ICD-11* PD classification is first and foremost to provide a useful diagnostic scheme for clinicians worldwide, with the ultimate goal of helping to reduce suffering among individuals with mental disorders.<sup>26,27</sup> In the following, we therefore provide an overview of research investigating the perceived clinical utility of the five-factor model (FFM) of PDs, which mirrors the trait component of the *ICD-11* PD classification framework<sup>2</sup> as well as the trait component of the *DSM-5* AMPD framework. Importantly, both the AMPD and FFM frameworks are largely commensurate to the severity and the trait features in the *ICD-11* classification of PDs.<sup>19,22</sup>

Samuel and Widiger<sup>28</sup> compared the perceived clinical utility of the FFM with the *DSM-IV* categorical model of PDs, which showed that clinicians generally rated the utility of the FFM higher than the utility of *DSM-IV*, especially in regard to describing the patient's global personality features, to communicate the patient's problems, and providing useful information for treatment

<sup>1</sup>Which also applies to the largely identical *DSM-III* and *DSM-IV*.

<sup>2</sup>Neuroticism = Negative Affectivity; Low Extraversion = Detachment; Low Agreeableness = Dissociality; Low Conscientiousness = Disinhibition; High Conscientiousness = Anankastia.

planning. In a follow-up study, using the same clinical utility questions, Mullins-Sweatt and Widiger<sup>29</sup> also found that clinicians generally rated the FFM as more clinically useful than the *DSM-IV* PD model, particularly in terms of providing a global description of the patient's personality, communicating information to patients and comprehensively incorporating all of the individual's important personality difficulties.

Morey et al.<sup>30</sup> compared clinicians' judgments of the *DSM-IV/5* categorical model vs. the *DSM-5* AMPD model (including global level of personality dysfunction and specific traits), in terms of their perceived clinical utility. Results showed that regardless of professional background, the *DSM-5* AMPD model was rated as easier to use and more useful for communication with other professionals than the categorical PD model.

Nelson et al.<sup>31</sup> compared the perceived clinical utility of four different diagnostic models including the *DSM-5* AMPD trait model, and they found that the *DSM-5* AMPD trait model was rated significantly higher than the other three models for nearly all clinical utility aspects.

Recently, Garcia et al.<sup>32</sup> evaluated the clinical utility of the *DSM-5* AMPD using a vignette methodology, and their main focus was the Level of Personality Functioning Scale (criterion A) largely corresponding to the *ICD-11* classification of PD severity. The results generally showed superior ratings of the AMPD model in most clinical utility aspects, in particular with respect to utility for treatment planning and communicating with other professionals.

Other studies evaluating perceived clinical utility have shown mixed results with less support for dimensional PD models in comparison with the established categorical PD model.<sup>33,34</sup> However, in their review, Mullins-Sweatt and Lengel<sup>35</sup> emphasized the importance of comparing diagnostic models by using comparable assessment methods (i.e. measures equivalent in terms of length and time for completion). Accordingly, they discovered that when this premise was accounted for, the FFM performed equivalent or better in terms

of clinical utility than did the categorical PD model.

Taken together, prior clinical utility studies generally provide support for a severity-oriented and/or trait-oriented approach to the diagnosis and conceptualization of PDs, which appears to be positively rated by mental health professionals relative to the established categorical system. These findings are consistent with a previous large-scale opinion survey among PD experts, where 80% felt that PDs are better conceived of as personality dimensions along a continuum with general personality functioning in contrast to categories.<sup>36</sup> Similarly, the *DSM-5* field trial showed that the clinical utility of the severity-oriented and trait-oriented AMPD framework was particularly positively evaluated by practitioners than are most of other diagnostic categories.<sup>37</sup>

### *The current study*

To date, the *ICD-11* PD classification has received much less attention than the *DSM-5* AMPD model, and even though the *ICD-11* model is highly comparable with the *DSM-5* AMPD approach, a great deal more information is needed about its specific clinical utility in routine practice. Thus, the goal of the present study was to evaluate mental health professionals' perceived clinical utility of the *ICD-11* vs. *ICD-10* classification of PDs, when applied to one of their own patient cases. Consistent with the majority of the aforementioned studies, we investigated the perceived clinical utility in terms of (1) ease of use, (2) communication with other professionals, (3) communication with the patient, (4) describing all personality problems, (5) formulation of effective treatment and (6) describing the global personality.<sup>28–31</sup>

## **Method**

### *Participants and procedure*

A total of 257 mental health professionals were originally enrolled to participate in the survey, of

which 48 did not provide any data and 55 provided insufficient data. Eventually, this resulted in a final sample of 163 respondents. On average, the participants had 11.5 years of clinical experience ranging from less than a year to at least 40 years of experience, which ensured heterogeneity in terms of clinical experience. See composition of the participants' professional background in Table 1.

Data were collected using an online survey designed for the purpose of this project (section on 'Survey'). Participants were recruited in two stages: First, mental health professionals were invited to participate via emails, which were sent to all mental health professionals working within the Danish region of Zealand and associated institutions (approximately 2,500 recipients). Next, pre-graduate psychology students with some clinical experience were recruited through two local university departments of psychology including interns working in psychiatry (approximately 300 recipients).

The invitation email contained a brief description of the study's purpose and included a unique link to access the survey. The email address was recorded for each responding participant in order to be able to send out reminders in case a participant did not complete the survey and in order to ensure

that each respondent only completed one survey. In order to ensure anonymity, the email addresses were subsequently omitted from the dataset before analysing the pattern of responses. Data collection proceeded on a secure server in accordance with local ethical research standards and was approved by the Danish Data Agency.

### Survey

First, the respondents were requested to recall a familiar patient or client with whom they had worked with for at least 5 h and which they should keep in mind while completing the survey. Consistent with previous surveys on clinical utility,<sup>30,31</sup> this 5-h contact requirement was used in order to maximize the likelihood that respondents were sufficiently familiar with the patient to address diverse areas of personality functioning. To assist respondents in remembering their selected patient case, they were asked to provide an alias or nickname for the particular patient, which was used to prompt the respondent throughout the survey. Participants also reported the gender, age and recorded clinical diagnoses of their patient. Characteristics of survey participants and patients are presented in Tables 1 and 2 respectively.

Second, participants were presented with the defined constructs from the two diagnostic classification models without referring to their respective editions (i.e. *ICD-10* and *ICD-11*). Instead, the two models were referred to as 'model 1' and 'model 2'. All diagnostic concepts were described according to the *ICD-10* clinical descriptions and the *ICD-11* draft descriptions respectively, using approximately the same number of words for the presentation of each concept.

*Model 1 (ICD-10 classification).* In this part of the survey, participants were asked to evaluate their patient's personality on the basis of 12 PD types and categories from the *ICD-10* (F.60.0–F61), which included F60.0 paranoid; F60.1 schizoid; F60.2 dissocial; F60.30 emotionally unstable,

Table 1: Clinicians' professional backgrounds

Mean years of experience (SD)	11.5 (11.23)
Educational background	N (%)
Nurse	37 (22.7%)
Medical doctor	20 (12.3%)
Psychologist	50 (30.7%)
Occupational therapist	2 (1.2%)
Physiotherapist	2 (1.2%)
Nurse assistant	12 (7.4%)
Medical trainee	1 (0.6%)
Psychologist intern	17 (10.4%)
Nurse intern	2 (1.2%)
Other	8 (4.9%)
Pre-graduate psychology student	12 (7.4%)
Total	163

Table 2: Patient characteristics

	M (SD)	Range
Age	33.15 (14.88)	10–82
Gender	N	%
Female	114	69.9
Male	49	30.1
Diagnoses	N	%
Psychotic disorders	33	20.2
Bipolar affective disorders	7	4.3
Depressive disorders	32	19.6
Social anxiety disorder	4	2.5
Panic disorder	4	2.5
Generalized anxiety disorder	8	4.9
Obsessive-compulsive disorder	7	4.3
Post-traumatic stress disorder	9	5.5
Adjustment disorders	7	4.3
Health anxiety	3	1.8
Anorexia nervosa	7	4.3
Bulimia nervosa	1	0.6
Personality disorder	62	38
Autism or Asperger syndrome	4	2.5
ADHD/ADD	12	7.4
Other	36	22.1

Note. Diagnostic characteristics were reported by the survey participants. As some participants reported more than one diagnosis, the total number of diagnoses exceeds the number of patients.

impulsive type; F60.31 emotionally unstable, borderline type; F60.4 histrionic; F60.5 anankastic; F60.6 anxious/avoidant; F60.7 dependent; F60.8 other specified (e.g. narcissistic); F60.9 unspecified; and F61 mixed type. Participants were asked to specify whether each category described or did not describe their patient.

*Model 2 (ICD-11 classification).* In this part of the survey, participants were requested to specify their patient's personality functioning on the basis of five levels of severity including no personality problems, QF40.7 personality difficulty, 6D10 mild personality disorder, 6D10.1 moderate personality disorder and 6D10.2 severe personality disorder. Subsequently, participants were asked to rate which five trait domain qualifiers contributed to the expression of their patient's personality

dysfunction (i.e. 6D11.0 negative affectivity, 6D11.1 detachment, 6D11.2 dissociability, 6D11.3 disinhibition and 6D11.4 anankastia) along with the option of specifying a 6D11.5 borderline pattern qualifier.

*Clinical utility questionnaire.* Immediately after the aforementioned application of the two models, the participants were asked to judge the clinical utility of the information provided in the two models in terms of the six clinical utility domains presented in Table 3. The six questions were presented along with the two classification models, separately. These particular questions were designed to assess essential components of clinical utility as originally outlined by First et al.,<sup>26</sup> and ratings were provided on a 5-point Likert scale from 1 (not at all useful) to 5 (extremely useful). To allow for comparisons across studies, the wording of the questions and the 5-point response scale was identical to previous research on clinical utility.<sup>28–30,32,38</sup>

## Results

Clinical utility ratings across the six utility variables were explored for *ICD-10* vs. *ICD-11* classification in the total sample and across the three subgroups of professionals. Table 3 shows mean clinical utility ratings for the total sample, whereas Table 4 shows mean clinical utility ratings across subgroups of mental health professionals. Statistical significance of differences was explored using paired-samples *t*-tests, and the magnitude of differences was estimated using Cohen's *d* effect sizes as indicators of small (0.20), medium (0.50) and large (0.80) differential effects.<sup>39</sup>

As shown in Table 3, the *ICD-11* classification overall showed slightly superior clinical utility ratings relative to the *ICD-10* classification ( $M = 3.05$ , standard deviation (SD) = 0.69; and  $M = 2.86$ , SD = 0.66 respectively). In the total sample, participants specifically judged the *ICD-11* classification as slightly more useful with respect to formulating an effective intervention for

Table 3: Perceived clinical utility differences for ICD-10 vs. ICD-11 classification of personality disorders in the total sample

Survey question	ICD-10		ICD-11		<i>d</i>
	M	SD	M	SD	
1. How easy do you feel it was to apply these concepts to [case]?	3.09	0.74	3.26	0.74	0.23*
2. How useful do you feel these concepts would be for communicating information about [case] with other mental health professionals?	3.07	0.78	3.19	0.73	0.15
3. How useful do you feel these concepts would be for communicating information about [case] to himself or herself?	2.71	0.94	2.96	0.94	0.27**
4. How useful are these concepts for comprehensively describing all the important personality problems [case] has?	2.68	0.87	2.90	0.87	0.25**
5. How useful would these concepts be for helping you to formulate an effective intervention for [case]?	2.74	0.89	3.00	0.80	0.31**
6. How useful were these concepts for describing the [case]'s global personality?	2.87	0.85	3.01	0.86	0.16
Overall utility score	2.86	0.66	3.05	0.69	0.28**

*N* = 163.

\*\**p* < 0.01.

\**p* < 0.05, *d* = Cohen's *d* effect size.

the patient, communicating with the patient about his or her problems, comprehensively describing the patient's problems and ease of use, in that order. No significant differences were identified for the utility domains of communicating with other professionals and describing the patient's global personality.

In the subgroup of psychologists (including psychologist interns and pre-graduate psychology students with clinical experience), the ICD-11 classification was overall judged as more useful than the ICD-10, which specifically applied to formulating an effective intervention plan for the patient and ease of use, in that order. No significant differences were identified for the other clinical utility domains.

In the subgroup of medical doctors (including medical doctor trainees), the overall judgement of clinical utility showed no significant differences between the ICD-10 and ICD-11 classifications. However, this subgroup judged the ICD-11 model as significantly more useful than the ICD-10 model with respect to formulating an effective intervention for the patient.

In the subgroup of nurses, nurse assistants and others (including nurse trainees), the overall

judgement of clinical utility showed no significant differences between the ICD-10 and ICD-11 classifications. However, this subgroup judged the ICD-11 classification as significantly more useful with respect to communicating with patients about their problems.

Finally, to explore a possible bias towards the ICD-10 model (owing to familiarity and years of clinical experience), the correlation between years of work experience in mental health care and the mean utility ratings for each model was examined using Spearman correlation analysis. Results showed no significant association between years of experience and clinical utility ratings for the ICD-10 ( $r = -0.002$ , *ns*) or the ICD-11 ( $r = -0.22$ , *ns*).

## Discussion

This survey aimed to investigate mental health professionals' perceived clinical utility of the ICD-11 vs. ICD-10 classification of PDs. To our knowledge, this was the first attempt to examine the perceived clinical utility of the forthcoming ICD-11 classification of PDs in comparison with the established ICD-10 categorical classification.

Table 4: Perceived clinical utility differences for subgroups

Features of clinical utility	Psychologists incl. trainees				Medical doctors incl. trainees				Nurses, nurse assistants and others						
	ICD-10		ICD-11		ICD-10		ICD-11		ICD-10		ICD-11				
	M	SD	M	d	M	SD	M	d	M	SD	M	d			
1. Ease of use	3.09	0.74	3.28	0.80	0.25	3.14	0.73	3.29	0.64	0.22	3.10	0.74	3.25	0.67	0.21
2. Communication with professionals	3.03	0.77	3.15	0.79	0.15	3.05	0.74	3.24	0.63	0.28	3.12	0.80	3.21	0.68	0.12
3. Communication with patient	2.76	0.90	3.03	0.99	0.29*	2.81	0.87	3.10	0.77	0.35	2.67	0.99	2.90	0.89	0.25*
4. Describing all personality problems	2.57	0.80	2.86	0.92	0.34*	2.67	0.86	2.90	0.70	0.29	2.79	0.92	2.93	0.83	0.16
5. Formulation of treatment planning	2.61	0.85	3.04	0.81	0.52**	2.57	0.81	3.00	0.71	0.57**	2.87	0.90	2.96	0.80	0.11
6. Describing global personality	2.72	0.78	2.96	0.90	0.28*	3.05	0.67	3.10	0.83	0.07	3.01	0.89	3.05	0.82	0.47
Overall utility score	2.80	0.59	3.05	0.74	0.37**	2.88	0.65	3.10	0.64	0.34	2.92	0.72	3.05	0.65	0.19

N = 163.

\*\* $p < 0.01$ .\* $p < 0.05$ ,  $d$  = Cohen's  $d$  effect size.

The findings indicated that the total sample of mental health professionals generally view the *ICD-11* approach as slightly more useful than the *ICD-10* approach in terms of utility for formulating an effective intervention for the patient, communication with the patient, comprehensively describing all the patient's personality problems and ease of use (four out of six aspects of clinical utility). Yet it should be noted that the estimated effect sizes were rather small. The *ICD-11* and *ICD-10* classifications of PDs were judged as equally useful in terms of their utility for communication with other professionals and for describing the patients' global personality (two out of six). Thus, the *ICD-11* PD classification appears to have some favourable appeal to mental health professionals in Denmark, in terms of clinical utility. Of note, none of the findings were significantly associated with the duration of participants' clinical experience. It is perhaps also worth noting that the participants were likely quite unfamiliar with the *ICD-11* classification and, in contrast, very familiar with the *ICD-10*. It is reasonable to suggest that as clinicians become more familiar with the *ICD-11* classification, their perceived utility will increase as well. Of course, this presumes that the severity rating, trait domain qualifiers and borderline qualifier will actually prove to be quite useful in clinical treatment.

#### Utility for treatment planning

The survey suggests that the utility for formulating an effective intervention comprises the most substantial contribution to the *ICD-11* classification's superiority in terms of clinical utility. Moreover, this finding remained significant even when the subgroups of psychologists and medical doctors were analysed separately (but not for the nurses and nurse assistants). This is perhaps the most important finding in the current study because previous large-scale surveys clearly indicate that 'utility for treatment planning' is the holy grail within clinical utility.<sup>40</sup> Because medical doctors and psychologists are the most frequent users of the *ICD*

system,<sup>2,3</sup> it seems promising that this finding remained significant for these two subgroups of professionals. In fact, the effect size was medium ( $d = 0.57$ ) for medical doctors despite the small group size and also medium ( $d = .52$ ) for psychologists.

A PD classification focusing on severity may provide clinicians with important information about level of risk, prognosis, treatment intensity and a variable for the assessment of change common to all individuals with a PD.<sup>13</sup> For example, the clinician may use the severity classification to assess and describe the risk of self-harm or harm to others, which is often useful. The more severe the classification, the less optimistic the clinician can be for a smooth treatment. In many cases, patients with severe PD may need more intensive clinical management including hospitalization and community psychiatry, whereas patients with mild PD may be sufficiently handled in primary care including private practicing psychologists or psychiatrists.<sup>41</sup> Simultaneously, the trait domain qualifiers contribute to the unique expression of the PD severity and may help inform focus and style of treatment (e.g. group and individual). Finally, it may also be more straightforward for psychotherapists to conceptualize PD severity and traits, separately, in terms of established clinical frameworks of psychotherapy and psychopathology.<sup>42–44</sup> Taken together, these are all considerations based on clinicians' subjective ratings; and in any case, such features of clinical utility require longitudinal clinical research to investigate.

#### *Ease of use*

As noted in the 'Introduction', a diagnostic classification system must be feasible to use by clinicians across various WHO member states; otherwise, it may not be used at all. It therefore seems essential to consider ease of use when evaluating the ICD-11 PD framework. The mental health professionals in the present study generally perceived the ICD-11 as easier to use than the ICD-10, but

only with a small effect size ( $d = .23$ ), and no significant differences were found in any of the three subgroups. This slightly superior rating of the ICD-11 classification in the total sample is worthy of attention because the participants were unfamiliar with the ICD-11 as opposed to the ICD-10. This finding is consistent with findings by Nelson et al.<sup>31</sup>

#### *Communication with the patient*

When evaluating the clinical utility in regard to patient communication, the ICD-11 was generally considered to be slightly more useful than the ICD-10 model, and these results were obtained across different educational backgrounds (except for medical doctors and medical trainees). Thus, mental health professionals generally seemed to view the ICD-11 as more useful than the ICD-10 for communicating information about the patient to himself or herself. These findings are important, as the main purpose of diagnostic classification is to provide a common language of communication, not only for mental health-care workers but also for the patients and their families.

#### *A comprehensive description of the patient's problems*

The survey participants generally expressed that the ICD-11 model provides a more comprehensive description of their patient's personality problems relative to the ICD-10. However, this superiority was only small in effect size ( $d = 0.25$ ) and did not remain significant in the subgroups of medical doctors and nurses. Nevertheless, the result is similar to that reported by Morey et al.,<sup>30</sup> Nelson et al.,<sup>31</sup> and Samuel and Widiger<sup>28</sup> in which trainees, psychologists, psychiatrists and other mental health professionals have been surveyed. This is a promising finding because one of the main goals of the ICD-11 development has been to meet the current categorical model's limitations as well as to provide more comprehensive personality descriptions.<sup>45</sup>

### *Professional communication*

The only area in which the *ICD-11* and *ICD-10* models were consistently judged as approximately equally useful (across the three subgroups) was in the area of professional communication. This result may not seem surprising because Danish mental health professionals have been using the *ICD-10* unaltered since 1994 and should have considerable familiarity using these concepts as the basis for professional communication. However, our survey sample also comprised some pre-graduate clinicians and interns who only had little experience using the *ICD-10* framework. Nevertheless, we found no significant correlations between years of experience in mental health care and particular judgments of clinical utility. Thus, the similar ratings for the two models should not simply be attributed to the participants' experience and familiarity with the *ICD-10*.

### *Role of professional background*

We tentatively analysed the three subgroups separately including psychologists (counting licenced psychologists, interns and pre-graduate psychology students), medical doctors (counting psychiatrists and medical trainees) and other mental health-care workers (counting nurses and nurse assistants). Overall, the subgroup of psychologists generally rated the *ICD-11* as more useful than the *ICD-10*, whereas medical doctors and other mental health-care workers generally viewed the two models as being equally useful (except from the utility for formulating an effective treatment and communication with the patient respectively). However, it should be noted that the sample size of medical doctors was rather low ( $n = 21$ ), and thus, results from subgroup analyses had less power to detect a difference.

There may be some reasonable explanations why different mental health-care workers view the utility of diagnostic models differently. For example, professional roles and choice of standard treatment usually differ across mental health professions. Medical doctors sometimes use

pharmacotherapy as adjunctive treatment to relieve symptoms, whereas psychologists primarily use psychotherapy. Traditionally, medical doctors are in charge of deciding whether a patient should be referred to a certain treatment, whether a patient should be hospitalized or whether a patient is healthy enough to be sent home. Thus, medical doctors may find a categorical diagnosis most appropriate for guiding their clinical management. Yet medical doctors are somewhat familiar with classification of severity for depression and mental retardation. Likewise, psychologists may find the framework of personality functioning (i.e. severity) and trait qualifiers more informative for psychotherapy and more consistent with their training in normal psychological functioning. Besides, it might as well be difficult for certain professionals to relate to some of the utility questions. For example, some utility questions may not be as relevant for a nurse assistant as it is for psychologists and medical doctors—or the other way around.

### **Limitations and future directions**

The conclusions of this survey should be viewed in the light of several limitations. First, despite persistent efforts to attract participants, our sample of 163 may have been more likely to have an interest in the development of *ICD-11* and thus the results may not be generalizable to the typical clinician. Accordingly, we cannot rule out that the 163 participants who completed the survey were actually more positive towards the *ICD-11* framework than were the many participants who did not take part in the survey. It is particularly important to note that the sample size for the subgroup of medical doctors was rather low ( $n = 21$ ) owing to recruitment difficulties. Consequently, results from subgroup analyses should be interpreted with caution. It is also important to note that with only a few exceptions, the differences in utility ratings were all of small to moderate effect sizes. The modest effect sizes may reflect the mixed findings of clinical utility ratings across professional groups, the small sample

size in general or simply the likely fact that there are no substantial differences between the two systems with respect to perceived utility. For more conclusive findings, the current study should therefore be replicated with a larger number of participants across various professional groups.

Second, although the exact titles of the *ICD-10* and *ICD-11* models were concealed when participants completed the ratings, the far majority of participants may easily (and inevitably) have recognized the familiar *ICD-10* framework anyway.

Third, participants were presented with the two diagnostic models in a non-randomized order, which could pose a risk for order-effect bias.<sup>46</sup> However, this was addressed by giving respondents the opportunity to click backwards in the questionnaire, and they were continually reminded of this option throughout the survey. In addition, the survey participants had an unlimited amount of time to complete the questionnaire, which gave them the opportunity to continuously adjust their scores, make the subsequent ratings comparable with previous ratings and thereby make optimal decisions. *The primacy effect* suggests that respondents assign higher scores to items appearing in the beginning of a list as opposed to items placed at the end of a list.<sup>47</sup> However, this may not have been the case in our study as the last clinical utility questionnaire applied to the *ICD-11* model, which was overall judged as most useful relative to the *ICD-10* model.

Fourth, we did not obtain information about the participants' theoretical orientation. Previous research has identified that theoretical orientation has an impact on a wide range of variables of clinical judgments, including preference for diagnostic models and clinical utility ratings.<sup>48</sup> Thus, it would be of interest for future studies to evaluate the relationship between theoretical orientation and judgments of clinical utility of the *ICD-10* and *ICD-11* models.

Fifth, only 43% of the participants were academically trained in the assessment of psychopathology (i.e. medical doctors and psychologists), which traditionally has been considered a

precondition for using diagnostic frameworks such as the *ICD-10* and *DSM-5*. However, WHO highlights that the *ICD-11* is intended for all health-care professionals by providing a common framework of guidelines for observation and communication.<sup>1</sup>

Sixth, future research should also explore whether the *ICD-11* classification actually informs more effective clinical decision making and treatment. However, such studies may only be performed empirically once mental health professionals begin to use the *ICD-11* and become increasingly familiar with it.

Seventh, the present survey was conducted in a country that is resource rich. Thus, it would be valuable to have the survey conducted in a range of countries, including those with more limited resources (where the more parsimonious classification of severity might have even greater clinical utility).

Finally, future research may also take a patient perspective on utility and acceptability into account, which has already been carried out in research on the *DSM-5* AMPD model.<sup>49</sup>

## Conflicts of interest

None declared.

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