Postępy Psychiatrii i Neurologii 2013; 22(1): 41–50
(original Polish version of this article)
Original paper

Concordance between diagnoses based on the Composite International Diagnostic Interview (CIDI) and clinical diagnoses made by psychiatrists[1]

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ABSTRACT

Objectives. *The aim of the study was to preliminarily assess concordance between diagnoses based on the Polish adaptation of the Composite International Diagnostic Interview (CIDI) and diagnoses made by clinicians-psychiatrists.*

Method. *The participants in the study were 139 patients of Mental Health Outpatient Clinics in Warsaw, and 152 subjects recruited from the general population. Diagnoses based on the CIDI were compared with those from the patients' medical records, or – in the general population sample – with diagnoses made by psychiatrists using the Mini International Neuropsychiatric Interview (MINI).*

Results. *Diagnoses concerning three categories of mood (affective), neurotic and stress-related disorders were compared. Fair levels of agreement prevailed both in the patient group and in the general population sample. In the latter group concordance levels could not be established for some disorder categories due to too few relevant diagnoses.*

Conclusions. *Despite the preliminary character of the study the findings seem promising enough to warrant further more detailed research in this area.*

Key words: Composite International Diagnostic Interview CIDI / diagnostic interviews / validation / concordance of diagnoses / epidemiological research

The CIDI questionnaire has the format of a structured interview and consists of several modules including screening items as well as detailed clinical sections corresponding to the criteria of international standard diagnostic classifications. Its most recently developed version, CIDI ver. 3.0 [1,2], can be used for the assessment of mental disorders based on the DSM-IV and ICD-10 diagnostic criteria. The CIDI questionnaire is designed so that it can be administered by specially trained and certified interviewers. The interview takes from 30 minutes to several hours. Both the CIDI translation into Polish and its adaptation were conducted in accordance with the standards of the WHO and the World Mental Health (WMH) Survey Initiative under the auspices of two Universities: Harvard and Michigan State [3].

The CIDI is widely used in population research, and owing to the WMH Survey Initiative – also in cross-country and cross-cultural comparative studies [1, 2, 4]. In the research on the prevalence of mental disorders in large groups, structured interviews that can be administered by interviewers with no specialist education and clinical experience are generally used due to financial and organizational reasons. Evaluation of such instruments in terms of their validity, reliability and concordance with diagnoses based on clinical examination remains an important issue.

A number of studies have confirmed the high validity, internal consistency and practical advantages of the CIDI [1, 2, 5, 6]. In a collaborative validation study conducted in France, Spain, Italy and the United States, the CIDI ver. 3.0 was found to have a moderate-to-substantial concordance with the *Structured Clinical Interview for DSM-IV* (SCID) used as the reference tool [2]. Satisfactory concordance levels of the CIDI 2.0 with SCID were reported also in earlier studies [5, 7, 8, 9]. However, in some studies concordance between the CIDI and structured or semi-structured

[1] The paper, prepared as a part of the EZOP Project (www.ezop.edu.pl), was co-supported by Norwegian financial mechanisms (grant No. PL0256) and by the Polish Ministry of Health.

diagnostic interviews turned out to be lower [10, 11]. Discrepant results reported in the literature warranted further work on the development of improved versions of the instrument. Despite some controversy, the credibility of the tool has been largely confirmed by various studies [2, 6], and it is commonly used worldwide. It should be also noted that it is the CIDI that serves as the gold standard for validation of other diagnostic methods [4, 12, 13].

OBJECTIVES

The aim of the reported study was a preliminary assessment of concordance between the Polish version of the *Composite International Diagnostic Interview* (CIDI ver. 3.1, CAPIv21) and mental disorder diagnoses made by Polish psychiatrists. The participants in the study were patients of Mental Health Outpatient Clinics (MHOCs) in Warsaw and a group of respondents recruited from the general population. The concordance assessment consisted in comparing the CIDI-based diagnosis either with that in the MHOC patient's medical records, or – in the population sample – with diagnoses made by psychiatrists using the *Mini International Neuropsychiatric Interview* (MINI) [14]. The Polish adaptation of the MINI 5.0.0. was developed by M. Masiak and J. Przychoda from the Department and Clinic of Psychiatry, Medical Academy in Lublin [15].

METHOD

Procedure

The study was carried out in Warsaw between April and August 2011. The respondents were interviewed by the SMG/KRC agency surveyors using the computerized questionnaire CIDI ver. 3.0. They had been trained and certified in the CIDI/CAPI administration for the purposes of the EZOP-Poland project, and had gained experience in using the tool in an earlier epidemiological study conducted on a random sample of 10,000 men and women from the Polish population, within the same project [3]. Two groups of participants were enrolled in the present study: patients diagnosed with mental disorders treated at mental health outpatient clinics, and persons from the general population. Research including these two groups provides answers to somewhat different questions, since the parametric characteristics of the CIDI questionnaire are investigated, on the one hand, in clinical groups, and on the other, in the general population characterized by a low prevalence of mental disorders. The total of 306 respondents were interviewed using the CIDI questionnaire. In that number 156 respondents had been recruited by the survey agency from the general population (the population sample), and 150 outpatients by 18 psychiatrists working in mental health outpatient clinics in Warsaw (the patient group).

Interviewers had not been informed about their interviewees' membership (either in the population sample or patient group). After the CIDI-based interview each respondent in the population sample had an appointment with a psychiatrist who conducted a diagnostic examination using the MINI questionnaire. The psychiatrists did not know their interviewees' CIDI scores. Respondents from both groups received monetary compensation for their participation in the study.

Study groups

Patient group. The total of 213 patients who consented to participate in the study were recruited by their attending psychiatrists at their respective mental health outpatient clinics. These outpatients' diagnoses registered in their medical records included categories F30-F-39 (mood/affective disorders) and F40-F48 (neurotic, stress-related and somatoform disorders) according to the ICD-10 diagnostic criteria that are mandatory in Poland. At the time of their participation in the study they were receiving pharmacological treatment and/or psychotherapy at their respective mental health outpatient clinics. Another inclusion criterion was the patients' age – from 18 to 65 years. Out of the 213 patients who had consented to participate, 19 individuals who did not meet the latter criterion were excluded. Of the remaining 194 patients only 150 (i.e. 77%) were enrolled, as in 44 cases the prospective candidates eventually refused to participate (despite their initial consent), or repeated attempts to contact them failed.

Since some disorders are not included in the Polish adaptation of the CIDI questionnaire (i.e. obsessive-compulsive disorders, categories F42xx, and somatoform disorders, F45xx), two subgroups of patients diagnosed with such disorders had to be excluded from further analyses of concordance between CIDI-based diagnoses and these made at mental health clinics. Finally, data obtained from 139 patients (36 men and 103 women) were analyzed. Patient characteristics are presented in Table 1.

Table 1. *Characteristics of the patient group*

	Sex		Total
	male	female	
Primary diagnosis			
F30-F39	21	62	83
F40-F48	15	41	56
Age range			
18-29	1	11	12
30-39	9	15	24
40-49	8	21	29
50-65	18	56	74
Total	36	103	139

The proportion of men in the patient group under study was lower than that in the population of patients treated at MHOCs in Warsaw. It is difficult to pinpoint the cause of this irregularity. Perhaps it was easier for male patients to refuse participation in the study when proposed by their psychiatrist. It seems also possible that female patients are more likely to keep their appointments regularly and attend the outpatient clinic more often.

The population sample. The respondents were selected from the general population so as to achieve in the sample equal proportions of sex (50:50 sex ratio), age (1/4 in each of the following age ranges: 18-29, 30-39, 40-49, 50-65 years), and education (33% at each of the three levels: university/college, secondary, primary/basic vocational). Each respondent in this sample was interviewed by a SMG/KRC agency surveyor using the CIDI questionnaire, and then at the interval of three to seven days had an appointment with one of the psychiatrists participating in the study, who conducted the brief structured diagnostic interview MINI. All respondents had given earlier their written informed consent. The total of 156 respondents (78 men, 78 women) were interviewed using the CIDI questionnaire, while only 152 were examined by psychiatrists by means of the MINI interview, since four persons failed to attend their appointment due to various reasons. The paper presents analyses of data obtained from the 152 respondents (75 men, 77 women) whocompleted diagnostic interviews with both these tools.

The population sample characteristics are shown in Table 2.

Table 2. *Characteristics of the population sample*

Age	Sex		Total
	male	female	
18-29	19	20	39
30-39	16	20	36
40-49	21	19	40
50-65	19	18	37
Total	75	77	152

Tools and variables in the patient group

In this part of the study concordance between the patients' diagnoses documented in MHOC medical records and those made using the CIDI in terms of the ICD-10 and DSM-IV classifications was analyzed for the following disorder categories:

- mood disorders (DSM-IV: affective disorders),
- neurotic and stress-related disorders (DSM-IV: anxiety disorders).

Comparisons at more detailed diagnostic levels were not possible since in the patients' medical records three-character diagnostic codes of the ICD-10 classification prevailed. More specific diagnoses were available only in 20 cases (14% of patients), therefore it was decided to analyze the broad diagnostic categories solely. More detailed analyses would be impossible also for another reason: there were too few cases in some specific diagnostic categories.

Diagnoses documented in medical records. The patients' primary (principal) and secondary (associated) diagnoses made according to the ICD-10 classification and documented in their medical records were entered in the concordance analysis. The diagnoses made earlier by the patient's attending psychiatrist in the course of consultations and treatment were not updated prior to the CIDI interview. In the patient group the following diagnostic units were represented: F31, F32, F33, F39 in the category of mood disorders, and F40, F41, F43, F48 in the group of neurotic and stress-related disorders.

CIDI-based diagnoses. In the Polish adaptation of the CIDI questionnaire 20 diagnostic sections are included allowing to identify particular mental disorders that meet the criteria of two diagnostic systems: ICD-10 and DSM-IV. The respondent's answers to the initial screening questions determined which sections were taken into account later in the interview. The CIDI questionnaire provides diagnoses that meet the criteria of both these diagnostic

classifications, separately for the past 30 days, past 12 months, and in lifetime. In the analysis of results data obtained from both these diagnostic classifications were processed to check for possible differences in this respect. Concordance analyses accounted for diagnoses based on these CIDI sections dealing with mood (affective) disorders (ICD-10)/affective disorders (DSM-IV), and neurotic/stress-related disorders (ICD-10)/anxiety disorders (DSM-IV). In CIDI-based mood disorder diagnoses according to the ICD-10, bipolar affective disorder is diagnosed according to the DSM-IV, since this subcategory is missing from the CIDI system. Concordance of diagnoses was assessed for the past 12 months and for the respondents' lifetime.

Tools and variables in the population sample

In the population sample concordance was assessed between diagnoses based on interviews conducted by surveyors using the CIDI questionnaire and diagnoses made by psychiatrists using the MINI questionnaire. Due to scarcity of specific detailed diagnoses, comparisons could be made for some broader diagnostic categories only. Diagnostic groups taken into account in both tools were selected for comparisons. The following diagnostic categories according to the DSM-IV classification were analyzed:

Affective disorders (296.xx, 300.4),

Anxiety disorders (300.01, 300.02, 300.21, 300.22, 300.23, 309.81),

Eating disorders (307.1, 307.51, 307.50),

Alcohol abuse/dependence (303.9/305.00),

Abuse/dependence on other psychoactive substances (304.00-90/305.20-90).

Both the CIDI and MINI questionnaires permit to diagnose mental disorders in terms of the DSM-IV and ICD-10 classifications, but the development of both these tools was originally based on the DSM-IV diagnostic criteria. Thus, it was decided to present the results in terms of the DSM-IV classification only.

Diagnoses based on the MINI questionnaire. The MINI is a diagnostic tool in the questionnaire format allowing to conduct a brief structured interview for major mental disorders. Similarly as the CIDI, the MINI includes a screening section followed by clinical sections based on the DSM-IV and ICD-10 classifications, but it is a much less comprehensive tool. While an interview using the CIDI takes on the average 1.5 hrs and may require much more time, the interview using the MINI takes on the average 15 minutes, usually no longer than 30-45 minutes.

Statistical analyses

The degree of concordance between mental disorder diagnoses made in the patient group and in the population sample was assessed using the model of inter-rated agreement with Cohen's Kappa coefficient (κ_C) [16]. The kappa coefficient measures the level of agreement between two experts or competent judges – this role can be fulfilled either by persons (e.g. an examiner or physician making a diagnosis) or by methods or classification tools (e.g. laboratory assays, diagnostic tests, etc.). The magnitude of kappa values indicating the level of inter-rater agreement was interpreted using the popular scale proposed by Landis and Koch [cf. 16] (see table 3).

Table 3. *Interpretation of Cohen's Kappa (K_C) coefficient values according to the Landis and Koch scale*

kappa (κ_C)	Inter-rater agreement level
< 0,00	no agreement
0,00 – 0,20	slight
0,21 – 0,40	fair
0,41 – 0,60	moderate
0,61 – 0,80	substantial
0,81 – 1,00	almost perfect

RESULTS

Patient group

The concordance of Mental Health Outpatient Clinic (MHOC) diagnoses with those based on the CIDI questionnaire was analyzed in the patient group for mood disorders as well as for neurotic and stress-related disorders separately. In the MHOC patients' medical records both their primary diagnoses and comorbid mental disorders were documented, but it should be noted that associated diagnoses were made in sporadic cases only. CIDI-based diagnoses using the criteria of both systems: ICD-10 and DSM-IV pertained to the past 12 months and to the respondents' lifetime. Table 4 presents the number and percent of male and female patients diagnosed with mood disorders or neurotic and stress-related disorders in their medical records and on the grounds of the CIDI interview.

In MHOC medical records 60% of cases (58% males and 61% females) were diagnosed with mood disorders, and 43% of patients (42% males and 44% females) – with neurotic and stress-related disorders

Table 4. *Frequency (number and percent of cases) of diagnoses documented in Mental Health Outpatient Clinic (MHOC) medical records and based on the CIDI by diagnostic category and sex*

Sex	MHOC diagnoses (primary and associated) n (%)	CIDI-based diagnoses (lifetime)		CIDI-based diagnoses (in the past 12 months)	
		acc. to ICD-10 n (%)	DSM-IV n (%)	ICD-10 n (%)	DSM-IV n (%)
Mood (affective) disorders (ICD-10) – Affective disorders (DSM-IV)					
Men	21 (58%)	17 (47%)	18 (50%)	12 (33%)	13 (36%)
Women	63 (61%)	63 (61%)	70 (68%)	45 (44%)	52 (51%)
Total	84 (60%)	80 (58%)	88 (63%)	57 (41%)	65 (47%)
Neurotic and stress-related disorders (ICD-10) – Anxiety disorders (DSM-IV)					
Men	15 (42%)	18 (50%)	17 (47%)	16 (44%)	13 (36%)
Women	45 (44%)	73 (71%)	76 (74%)	58 (56%)	52 (50%)
Total	60 (43%)	91 (65%)	93 (67%)	74 (53%)	65 (47%)

(Table 4). Proportions of cases diagnosed with mood disorders by means of the CIDI using the ICD-10 criteria are very similar to, and for female patients even identical with these documented in MHOC records. A considerable similarity was shown also by CIDI diagnoses based on the DSM-IV criteria (63% according to the DSM-IV as compared to 58% using the ICD-10 criteria), but this pertained only to lifetime diagnoses. As regards disorders experienced over the past 12 months, mood disorders are diagnosed by the CIDI (using either the ICD-10 or DSM-IV criteria) less often than by MHOC psychiatrists. On the other hand, CIDI-based diagnoses of neurotic and stress-related disorders were more concordant with these documented by MHOC for the past 12 months (43% in MHOC records, 53% according to the ICD-10, and 47% – to DSM-IV criteria). As regards lifetime diagnoses, neurotic and stress-related disorders were recognized much more often by the CIDI using the diagnostic criteria of either of the two classifications than it was documented in the respondents' MHOC medical records.

Concordance levels of CIDI-based diagnoses with these documented in the MHOC patients' medical records are analyzed for particular diagnostic categories in Tables 5, 6, 7 and 8. Tables 5 and 6 present concordance coefficients for disorders diagnosed in the past 12 months using the CIDI (Table 5 – according to the ICD-10 criteria, Table 6 – according to DSM-IV), while Tables 7 and 8 deal with lifetime diagnoses (based on the ICD-10 and DSM-IV, respectively). Levels of agreement were established by means of Cohen's kappa coefficient (κ_C), interpreted according to the Landis and Koch scale (see Table 3).

Table 5. *Concordance of CIDI diagnoses using the ICD-10 criteria for the past 12 months with diagnoses documented in Mental Health Outpatient Clinic (MHOC) medical records by diagnostic category*

	Diagnoses based on			kappa (κ_c)
	medical records and CIDI	CIDI only	medical records only	
Category of disorder				
Mood (affective) disorders F30-F39	44	14	40	0.26
Neurotic and stress-related disorders F40-F48	39	35	21	0.20

Table 6. *Concordance between CIDI diagnoses using the DSM-IV criteria for the past 12 months and diagnoses documented in Mental Health Outpatient Clinic (MHOC) medical records by diagnostic category*

Category of disorder	Diagnoses based on			kappa (κ_c)
	medical records and CIDI	CIDI only	medical records only	
Affective disorders (296.xx, 300.4)	51	14	33	0.33
Anxiety disorders (300.01, 300.02, 300.21, 300.22, 300.23, 309.81)	37	28	23	0.26

Fair levels of agreement between CIDI-based diagnoses concerning the past 12 months and diagnoses documented in the MHOC patients' medical records were found in all diagnostic categories (mood/affective disorders as well as neurotic and stress-related/anxiety disorders) (see Tables 5 and 6). The same fair agreement levels were found for diagnoses irrespective of the classification system used, ICD-10 and DSM-IV, although Cohen's kappa coefficients were somewhat higher for the DSM-IV (namely, for affective and anxiety disorders: κ_C =0.33 and κ_C = 0.26, respectively, while for ICD-based diagnoses of mood and neurotic/stress-related disorders the respective coefficients were κ_C = 0.26 and κ_C = 0.20).

Table 7. *Concordance between CIDI lifetime diagnoses using the ICD-10 criteria and diagnoses documented in Mental Health Outpatient Clinic (MHOC) medical records by diagnostic category*

Category of disorder	Diagnoses based on: medical records and CIDI	CIDI only	medical records only	kappa (κ_c)
Mood (affective) disorders F30-F39	60	20	24	0.35
Neurotic and stress-related disorders F40-F48	49	42	11	0.27

Table 8. *Concordance between CIDI lifetime diagnoses using the DSM-IV criteria and diagnoses documented in Mental Health Outpatient Clinic (MHOC) medical records by diagnostic category*

Category of disorder	Diagnoses based on: medical records and CIDI	CIDI only	medical records only	kappa (κ_c)
Affective disorders (296.xx, 300.4)	68	20	16	0.45
Anxiety disorders (300.01, 300.02, 300.21, 300.22, 300.23, 309.81)	48	45	12	0.22

Similarly, coefficients of agreement between lifetime diagnoses established using the CIDI and these documented at metal health clinics are shown in Table 7 (based on the ICD-10 classification) and Table 8 (based on the DSM-IV diagnostic criteria). In the category of mood disorders the level of agreement between the CIDI diagnoses according to the ICD-10 system and those established at MHOC remains fair (κ_C = 0.35), while a somewhat higher agreement (moderate, (κ_C = 0.45) can be seen when the DSM-IV classification was used. As regards neurotic and stress-related disorders, there was fair concordance between diagnoses in the patients' medical records and those based on the CIDI using either classification system, ICD-10 or DSM-IV (respective coefficients were: for the ICD-10: κ_C = 0.27, and for DSM-IV: κ_C = 0.22) (see Tables 7 and 8).

Population sample

In the population sample the degree of agreement was assessed between diagnoses based on the CIDI interview and diagnoses made by psychiatrists using the MINI. The presented results pertain only to broader diagnostic categories, since the number of cases diagnosed with more specific diagnostic units was too small to warrant statistical analysis. Diagnoses referring to "the present status" in the MINI questionnaire pertain to a period ranging from the past month to 2 years, depending on the diagnosis. In the CIDI questionnaire the period of the past 12 months was assumed to be acomparable time interval.

Table 9 presents the number and percent of patients interviewed using the CIDI and MINI and diagnosed with mental disorders in particular categories.

Table 9. *Number of cases diagnosed using the CIDI and MINI by diagnostic category and sex*

	CIDI-based diagnosis acc. to DSM-IV (past 12 months)	MINI-based diagnosis acc.to DSM-IV (at present)*
Affective disorders (296.xx, 300.4)		
Men	4 (5%)	8 (11%)
Women	4 (5%)	10 (13%)
Total	8 (5%)	18 (12%)
Anxiety disorders (300.01, 300.02, 300.21, 300.22, 300.23, 309.81)		
Men	6 (8%)	8 (11%)
Women	10 (13%)	7 (9%)
Total	16 (10%)	15 (10%)
Eating disorders (307.1, 307.51, 307.50)		
Men	1 (1%)	0
Women	4 (5%)	2 (3%)
Total	5 (3%)	2 (1%)
Alcohol abuse/dependence (303.9/305.00)		
Men	2 (3%)	6 (8%)
Women	0	1 (1%)
Total	2 (1%)	7 (5%)
Abuse/dependence on other psychoactive substances 304.00-90/305.20-90		
Men	1 (1%)	2 (3%)
Women	0	0
Total	1 (<1%)	2 (1%)

** a period ranging from 1 month to 2 years, depending on the diagnosis*

A comparison of scores obtained from the two diagnostic instruments suggests that affective disorders and alcohol abuse/dependence in particular are recognized more often by the MINI questionnaire. As compared to the CIDI-based diagnoses, psychiatrists using the MINI diagnosed more patients with affective disorders (MINI – 18 cases, CIDI – 8) and alcohol abuse (MINI – 7, CIDI – 2). Only eating disorders were more frequently recognized by means of the CIDI (MINI – 2 cases, CIDI – 5), while the number of patients diagnosed with anxiety disorders was similar for both these instruments (MINI – 15, and CIDI – 16 cases).

Table 10 presents the levels of inter-rater agreement between diagnoses made using the CIDI and MINI interviews by diagnostic category.

Table 10. *Concordance of diagnoses based on the CIDI and MINI assessments by diagnostic category*

Category of disorder	Diagnosis based on			kappa (κ_c)
	CIDI and MINI	CIDI only	MINI only	
Affective disorders (296. xx, 300.4)	5	3	13	0.34
Anxiety disorders (300.01, 300.02, 300.21, 300.22, 300.23, 309.81)	7	9	8	0.39
Eating disorders (307.1, 307.51, 307.50)	2	3	0	*0.56**
Alcohol abuse/ dependence (303.9/305.00)	1	1	6	*0.21**
Abuse/dependence on other psychoactive substances (304.00-90/305.20-90)	1	1	1	*0.49**

**Inter-rater agreement level could not be established due to too few cases diagnosed in this category*

Fair agreement was noted between the CIDI and MINI diagnoses of affective disorders and anxiety disorders ($\kappa_C = 0.34$, $\kappa_C = 0.39$, respectively). Since in the next three diagnostic categories (i.e. eating disorders, alcohol abuse/dependence and abuse/dependence on other psychoactive substances) there were rather few diagnoses in the population sample, the results should be interpreted with caution. The scarcity of diagnoses made in the study does not allow for the assessment of inter-rater agreement in these categories of mental disorders.

SUMMARY AND DISCUSSION OF RESULTS

In comparisons of mental disorder categories diagnosed using the CIDI and documented in medical records of patients treated at Mental Health Outpatient Clinics in Warsaw, fair concordance levels regarding CIDI diagnoses for the past 12 months, and either fair or moderate for lifetime diagnoses were found. A moderate, i.e. somewhat higher concordance level was noted only in the case of affective disorders diagnosed by the CIDI in terms of the DSM-IV classification. In the population sample, where agreement between the CIDI and MINI diagnoses was assessed, fair concordance was observed. Comparisons between the two questionnaires could be made only for two diagnostic categories, of affective and anxiety disorders. Since too few cases were diagnosed with eating disorders, and disorders related to abuse of alcohol and other psychoactive substances, it was not possible to assess concordance between the two instruments.

The presented preliminary study was conducted on small samples and the findings might be affected by a number of confounds that could not be controlled. Due to the small size of the samples comparisons could be made only for broad diagnostic categories. In the patient group CIDI-based diagnoses were compared with those documented in the MHOC patients' medical records. The latter were not confirmed by a current clinical examination, since it would be too expensive. Generally the MHOC patients had been diagnosed much earlier, before they started treatment. In the course of treatment some of their symptoms could have abated, so they could be symptom free at the time of the CIDI interview. Thus, it seems possible that the diagnostic criteria for the disorder initially diagnosed have not been met over the past 12 months. On the other hand, CIDI-based lifetime diagnoses could pertain to mental disorders experienced years ago, e.g. in childhood or early adolescence. Such disorders are not documented in MHOC medical records, which may partially explain discordance between compared diagnoses.

Moreover, it should be noted that diagnostic procedures used in mental health clinics and in the CIDI interview are somewhat different. In MHOCs, all the problems the patient presents are analyzed by the psychiatrist who formulates then the so-called primary or principal diagnosis. Unfortunately, such diagnoses provided by MHOC medical records were mostly limited to a three-character code of the ICD-10, while the CIDI-based diagnoses were much more detailed and included all the disorders whose diagnostic criteria were met, without indicating which was the primary or principal one.

In the population sample where diagnoses based on the MINI and CIDI interviews were compared,

confounds resulting in some discordances between these instruments might include the time frame differences between some disorders, as well as a small number of cases in some diagnostic categories. It seems also noteworthy that the MINI is a brief instrument, less comprehensive than the CIDI. Thus, it cannot be excluded that in some cases discordances might result from the MINI questionnaire imperfection. Considering these objections, none of the compared diagnostic instruments was assumed as a reference method, and the statistical analysis was based on the model of inter-rater agreement, commonly used to assess the level of concordance between two experts fulfilling the role of competent judges [16, 17].

In the worldwide literature on the CIDI validation and concordance with other diagnostic instruments, methodological problems affecting this type of studies are often discussed. One of the highlighted issues is the selection of a reference method, or the so-called gold standard (benchmark) against which the CIDI results should be compared to assess its validity and reliability [17]. The CIDI is a comprehensive and highly structured instrument. Comparisons of the CIDI with other tools having similar characteristics, such as e.g. SCID, generally confirm their high concordance [2, 5, 9]. However, in studies using only slightly less structured instruments, e.g. *Schedules for Clinical Assessment in Neuropsychiatry* (SCAN), discrepant findings are reported, with concordance levels ranging from poor [10] to good andvery good [16, 18]. Further, in some studies using clinical interviews as the reference method for comparisons with the CIDI the obtained concordance levels were unsatisfactory [19] or unsatisfactory for some diagnostic categories [20].

Even if these discrepant findings evoke some controversy regarding possibilities of a widespread use of structured diagnostic questionnaires, in the debate opinions seem to prevail that these discrepancies result rather from methodological errors and limitations than from the instruments themselves [11, 21]. The problem of a low concordance between diagnoses made by various psychiatrists has been discussed since the 1960s [22-25]. It is a serious hindrance to epidemiological comparisons. This problem was addressed by developing and improving international diagnostic criteria, as well as designing (in the framework of the WHO initiative) semi-structured and structured diagnostic instruments, such as the CIDI, for epidemiological research [25]. Such questionnaire interviews can be conducted by surveyors without medical or psychological education, and therefore are economically advantageous and applicable to large groups. Computerized versions of these interviews were expected to result in a higher standardization of diagnostic procedures, and the automated scoring system was to minimize errors associated with entering raw data and complicated calculation of scores. Comprehensive structured diagnostic questionnaires such as the CIDI are recommended by the WHO for epidemiological studies and cross-cultural comparisons. The CIDI questionnaire is increasingly more often regarded as the reference instrument, or the "gold standard" in the research on credibility and psychometric characteristics of other tools such as brief questionnaires and diagnostic scales. In the Polish literature the need for adapting the CIDI to the Polish cultural context has been highlighted by various authors, since such an adaptation would allow to conduct epidemiological cross-country comparative studies in Poland [26-28]. In the framework of the EZOP project the CIDI questionnaire was submitted to translation and cross-cultural adaptation, and used in a pilot study. The findings of the reported preliminary research on concordance between the CIDI-based diagnoses and these made using other methods seem promising. However, further research is required to determine the psychometric characteristics of the instrument in more detail.

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Submitted: 24.09.2012 Reviewed: 22.11.2012 Accepted: 4.12.2012

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