BRIEF REPORT

How Reliably Can General Practitioners Diagnose Depression Using ICD-10 Criteria?

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Abstract

Background: ICD-10 diagnostic coding has been obligatory for all doctors in Germany since January 2000. We examined how reliably General Practitioners (GPs) can diagnose depression according to ICD-10 criteria in a non-research setting.

Methods: 182 GPs volunteered during a two-day weekend seminar to diagnose a fictional patient. A fictional case was based on the ICD-10 diagnostic criteria for “Recurrent depressive disorder, current episode severe without psychotic symptoms” (F33.2), with therapy resistance over 12-months. Participants were given a choice of six possible diagnoses with the option to choose one.

Results: Only 24% of participants chose the most probable diagnosis according to the ICD-10 criteria.

Limitations: Our sample of participating GPs was not randomly selected. The case report relied on written psychiatric history and an actor’s video interview.

Conclusions: Any research based on psychiatric assessments in GP practices should take into account the possibility of a high rate of incorrect diagnoses (German J Psychiatry 2008; 11: 146-148).

Keywords: depression, general practice, ICD-10 coding, reliability, diagnosis

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Introduction

To promote cost-effectiveness and epidemiological research in the German Health-Care System, legislation made ICD-10 coding obligatory for all doctors in 2000 who received reimbursement of their fees from one of the state-run health insurers. The absence of an ICD-10 code leads to the loss of claimed fees. All doctors were given printed copies and electronic versions of the ICD-10 diagnostic criteria together with online coding advice (Keidel et al., 2005, Graubner, 2004). Central government launched the project nationwide to gather reliable data for future planning and distribution of resources with the object of achieving enhanced diagnostic accuracy. In research settings using structured clinical interviews and rating scales GPs are able to diagnose depressive syndromes reliably (Rush et al., 1993), although sensitivity is still quite low (Arroll et al., 2005). We were interested in the question whether GPs are able to diagnose and code reliably according to ICD-10 criteria outside of a research setting in day-to-day clinical practice.

Depression is the most frequent cause leading to consultation of a GP for psychiatric symptoms (Van Weelen-Baumgarten, 2000). ICD-10 guidelines are used for the diagnosis of psychiatric syndromes (Maier, 1996).
This study examines the reliability of diagnosing depression and ICD-10 coding in a group of 182 GPs who were presented with a patient suffering from typical depressive symptoms.

Methods

182 GPs volunteered during a two-day weekend seminar to diagnose a fictional patient. The seminar “Diagnosis and Therapy of Depression in General Practice” took place four times in Germany in 2006 and 2007 with 38, 49, 42 and 53 participating GPs. The seminars were held by a consultant psychiatrist, providing eight hours of consistently structured teaching for each meeting.

The fictional case was based on the ICD-10 diagnostic criteria for “Recurrent depressive disorder, current episode severe without psychotic symptoms” (F33.2), with therapy resistance over 12-months. The case-history was presented orally and as a written hand out. A 20-minute videotape showed the psychiatric interview conducted by an experienced psychiatrist including all relevant information relating to ICD-10 criteria and tailored to day-to-day clinical practice of GPs. Participants were given a choice of six possible diagnoses with the option to choose one.

Participants were informed that the patient was portrayed by an actor, who has been working as a psychotherapist for 20-years in treating depression. Such a substitute of a real patient by an actor is feasible because even experienced psychiatrists working as clinical investigators in phase III clinical trials cannot distinguish between an actor and a real patient (Rosen et al., 2004).

Case record

The patient is a 49 year-old female. She had been suffering with depressed mood and diurnal variation of symptoms, being worse in the morning for the past two-years, feelings of guilt, lack of concentration, fatigue, loss of interests and self-esteem, middle and late insomnia, headaches, muscle aches, loss of appetite and libido. She had no suicidal idea
tion but had ideas that life was not worth living. There were neither abnormalities of perception nor prominent cognitive deficits.

In 1977 she had suffered from similar symptoms for several months; she needed ten days inpatient treatment followed by outpatient psychotherapy. She had never experienced manic or hypomanic symptoms.

Her father was an alcoholic, who committed suicide after several unsuccessful attempts to abstain from alcohol. She smoked 20 cigarettes per day and regularly drank 0.35 litres of wine each evening. For ten-years her employment situation had been difficult, finally losing her nearby job three years previously. She moved to the call-centre of an IT company with the necessity to commute three-hours daily and an ongoing threat of dismissal. She had been on sick leave for 20-months, living on benefits and had applied for early retirement due to mental illness. She was in her second marriage to a former civil-servant who had retired early. Her two children are grown up.

She had been treated during the first year with trimipramine 150mg nocte for two months without any noticeable improvement in her symptoms. Prominent side-effects led to a discontinuation of this antidepressant followed by counseling for one hour per month. For the last six-weeks she had been taking fluoxetine 40mg daily without any subjective benefit or side-effects.

Results

During all four seminars more than 98% of participants made a diagnosis. Two participants gave no diagnosis. Table 1 shows the range of diagnoses.

In only 24% of participants chose the most probable diagnosis according to the ICD-10 criteria: Recurrent depressive disorder, current episode severe without psychotic symptoms (F33.2).

Discussion

Symptoms of anxiety and depression are the most frequent reason patients with mental health problems visit a GP. In a research setting using structured clinical interviews and rating scales, GPs are able to diagnose fairly reliably according to ICD-10 or DSM-IV criteria. But in a situation similar to routine clinical practice with only a 20-minute consultation
time available outside a research setting, the reliability of establishing a correct ICD-10 diagnosis declines. In our study, only 24% of 182 GPs were able to diagnose and code correctly, producing reliable data for epidemiological research and giving the opportunity to use guideline-supported therapy. The most frequent cited diagnosis mixed anxiety-depressive disorder seems to be a last resort entity although the fictional patient presented no prominent symptoms of anxiety and certainly more than subthreshold depressive symptoms. Even six-years after the introduction of obligatory ICD-10 coding, only a minority of German GPs seem to be familiar with the diagnostic criteria for mental diseases. Any research based on diagnostic data gathered in GP practices should take into account the possibility of a high rate of incorrect diagnoses.

GPs participating in this study were highly motivated in working with psychiatric patients because the seminars took place at weekends without the compensation of study leave or reimbursement. It is unlikely that any other sample of physicians would have done better. In an earlier study we were able to demonstrate a similar lack of diagnostic reliability for a group of psychiatrists. 32% of experienced psychiatrists (mean age 47.7 years, holding specialist registration for an average of 13.7 years) were able to correctly diagnose a depressive syndrome according to ICD-10 criteria (Dickmann et al., 2007).

References


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