Availability of doctors in outpatient clinics for substance abuse and for general psychiatry

BACKGROUND Substance abusers and psychiatric patients have a high degree of comorbid somatic disorders, are less frequently treated for their somatic disorders and have a high mortality rate. The objective of this study was to examine the availability of medical doctors in outpatient clinics for general psychiatry and for substance abuse, the presence of routines for medical assessment of all patients and of routine collection of blood samples.

MATERIAL AND METHOD In the period December 2012 – May 2013, emails containing five questions were sent to the outpatient clinics in question. An overview of the outpatient clinics was obtained from the websites of the hospital trusts and supplemented with information from the Free Hospital Choice scheme. Altogether 78 general psychiatry outpatient clinics, 39 outpatient clinics for substance abuse and 18 general psychiatry outpatient clinics with a substance abuse team were contacted.

RESULTS The response rate amounted to 90 %. The density of medical doctors (defined as man-years by other professions per man-year by doctors) varied from 1.3 to 140 (average 9.4 and median 5.0). Five per cent of the outpatient clinics reported that all patients saw a doctor during the course of treatment, while $53 \, \%$ reported that all patients were assessed indirectly by a doctor upon admission and/or by an interdisciplinary team/treatment meeting. Altogether $19 \, \%$ of the outpatient clinics routinely collected blood samples at the initiation of treatment.

INTERPRETATION The results indicate that there are major differences in terms of the availability of doctors and routines for medical assessment and collection of blood samples in outpatient clinics for general psychiatry and for substance abuse.

Substance abusers and psychiatric patients have a high degree of comorbid somatic disorders, such as cardiovascular diseases, diabetes, COPD and infections, but they are less frequently treated for their somatic disorders and have a high mortality rate (1, 2). In a number of medical conditions, mental symptoms may appear without any accompanying somatic ones, or the somatic symptoms can have their onset later in the course of disease than the mental ones. Examples include metabolic problems (3), vitamin B₁₂ and folic acid deficiency (4) and primary hyperparathyroidism (5).

Diagnosis of a mental disorder presupposes that any organic cause of the symptoms can be excluded (6). A number of studies have thoroughly investigated patients in psychiatric outpatient clinics and revealed medical conditions that have directly caused or exacerbated mental disorders in a considerable proportion of the patients (7–9). Cautious estimates indicate that in at least 10% of the patients, the mental symptoms are caused by somatic conditions.

The manual issued by the Directorate of Health for the regional psychiatric centres stipulates that the examination shall encompass mental, medical and psychosocial issues, and that the regional psychiatric centres must employ a sufficient proportion of specialists in medicine and psychology to handle this task, but without specifying any figures (10).

Staffing in general and the availability of senior consultants in particular vary between the regional psychiatric centres (11). The Norwegian Medical Association has voiced concerns regarding the availability of senior consultants at the regional psychiatric centres and claim that there needs to be a minimum staffing of one senior consultant for every three other specialist positions to ensure adequate psychiatric assessment and treatment of patients (12). Specialty registrars are here included in the other specialist positions. Figures from the Directorate of Health show the staffing at outpatient and inpatient units at the regional psychiatric centres and in specialised substance abuse units, but do not distinguish between different types of outpatient clinics (11).

The objective of this study was to investigate the availability of doctors in Norwegian outpatient clinics for general psychiatry and for substance abuse, the presence of routines for medical assessment of all patients and routines for collection of blood samples.

Material and method

An overview of the outpatient clinics was obtained with the aid of the hospital trusts'

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MAIN MESSAGE

There were major differences between the clinics in terms of their availability of medical doctors.

Few outpatient clinics had routines ensuring that all patients receive medical attendance.

Few outpatient clinics had routines for collecting blood samples as part of the psychiatric examination.

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Table 1 Questions that were put to the various outpatient clinics for general psychiatry and for substance abuse, and categorisation of responses

| Questions that were asked | Categorisation of responses ¹ |
|---|---|
| How many doctors are working at the clinic? | Doctor density = the sum of man-years by all other professions (psychologists and thera- pists with university-college training) per doctor man-year |
| How many psychologists? | |
| How many therapists with university-college training? | |
| Are all patients assessed by a doctor during the course of their treatment? | a) Yes, directly in a consultation b) Yes, indirectly on admission and/or in an interdisciplinary team/treatment meeting c) No |
| Are blood samples routinely collected at the initiation of treatment at NN regional psychiatric centre, NN outpatient clinic? | a) Yes b) No |

¹ No response alternatives were provided in the email to the clinics, the categorisation was retrospectively undertaken by the author

websites, supplemented with information from the Free Hospital Choice scheme (www.frittsykehusvalg.no).

Altogether 136 outpatient clinics were identified and included in the study. Of these, 78 were general psychiatry outpatient clinics/teams, 18 were general psychiatry

outpatient clinics that included a substance abuse team, and 40 were outpatient substance abuse clinics/teams. All clinics, represented by the head of clinic or a senior consultant, were contacted by email in the period December 2012–May 2013. The questions were open-ended and the categori-

sation of responses was later undertaken by the author. The questions and categorisations are shown in Table 1.

The staffing by professionals at the regional psychiatric centres consists of personnel with university or university-college training (13). Therapists with university-college training mainly include nurses, social educators, social workers and child-welfare officers. The concept of «therapists with university-college training» is well established in the outpatient clinics and has been chosen as a collective designation for the above-mentioned professions.

Responses were de-personalised by assigning a number to each clinic. Registrations included only the health region to which the clinic belonged and the type of clinic in question.

The density of doctors was estimated by dividing the sum of all man-years worked by other professions (psychologists and staff with university-college training) by the number of man-years worked by doctors, including senior consultants and speciality registrars. Since the objective of the study was to determine whether the clinics had established any routines to reveal relevant somatic disorders, the questions referred only to availability of doctors and not of senior consultants.

Table 2 Doctor density, proportion with high doctor density, routines for medical consultations, indirect medical assessment and routine blood samples in outpatient clinics for general psychiatry and for substance abuse by health region and type of outpatient clinic.

| | Doctor density ¹ (SD) | Prop. with high doc- tor density ² (%) | Routines for medical consultation (%) | Routines for indirect medical assessment ³ (%) | Routine blood samples at initiation of treatment [%] |
|--|--|--|--|--|---|
| Norway, N = 119 | 9,4 (17,5) | 32 | 5 | 53 | 19 |
| High doctor density (≤ 3 other man-years per doctor man-year) | | | 16 | 55 | 21 |
| Health region | | | | | |
| Northern Norway Regional Health Authority, n = 17 | 5,3 (3,6) | 29 | 6 | 29 | 18 |
| Central Norway Regional Health Authority, n = 20 | 18,0 (36,6) | 20 | 10 | 60 | 30 |
| Western Norway Regional Health Authority, n = 20 | 5,9 (3,5) | 45 | 0 | 65 | 20 |
| South-Eastern Norway Regional Health Authority, n = 62 | 9,8 (17,5) | 32 | 16 | 47 | 13 |
| Type of outpatient clinic | | | | | |
| General psychiatric team/outpatient clinic, n = 68 | 4,8 (3,0) | 43 | 9 | 55 | 21 |
| General psychiatric outpatient clinic including substance abuse team, n = 16 | 4,6 (2,4) | 38 | 13 | 69 | 19 |
| Substance abuse team/outpatient clinic, n = 35 | 20,5 (17,5) | 9 | 14 | 40 | 14 |

¹ Man-years by other professions per doctor man-year

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 $^{^{2} \}le 3$ other man-years per doctor man-year

³ Routines for indirect medical examination of all patients upon admission and/or in an interdisciplinary treatment meeting

A high figure means a low density of doctors. This method of estimation was used since this is the way in which the Norwegian Medical Association reports density of doctors (12). The Norwegian Medical Association finds that a sufficient staffing at the regional psychiatric centres amounts to three professionals per psychiatrist. I have chosen to define high density of doctors in outpatient clinics as three or fewer other professional man-years per doctor man-year, since specialty registrars will be able to identify somatic disorders to the same extent as senior consultants. However, this will correspond to a lower staffing by senior consultants than is recommended by the Norwegian Medical Association.

Three outpatient clinics for substance abuse reported that they currently had no doctor employed and were excluded from the analysis. One further outpatient clinic for substance abuse employed a doctor who was also working in the inpatient department, and the proportion could therefore not be estimated. This clinic was also excluded.

The study was submitted to the Regional Committee for Medical and Health Research Ethics, which concluded that no approval was necessary on their part.

Results

The response rate amounted to 90 % (123 out of 136 outpatient clinics), with the highest rate in South-Eastern Norway Regional Health Authority at 95 % (63/66) and Central Norway Regional Health Authority at 95 % (20/21), Northern Norway Regional Health Authority at 86 % (18/21) and Western Norway Regional Health Authority at 79 % (22/28). Among the general psychiatry outpatient clinics, the response rate amounted to 86 % (68/78), while the response rate among the outpatient clinics for substance abuse was 98 % (39/40).

Doctor density

Among the 119 outpatient clinics included, the number of other professional man-years (psychologists and staff with university-college training) per doctor man-year ranged from 1.3–140 (median 5.0; average 9.4, SD 17.5)

Altogether 38 (32%) of the clinics reported to have a doctor density of three or fewer other professional man-years for each doctor man-year (high doctor density).

The doctor density in the various health regions and the different types of clinics are presented in Table 2.

Medical assessment

Six (5%) of the clinics reported that all patients were examined by a doctor during the course of their treatment. Another 63 (53%)

of the clinics reported that all patients were assessed indirectly by a doctor upon admission and/or by an interdisciplinary team/treatment meeting (Table 2).

Routine blood samples

Altogether 23 (19%) of the clinics reported to routinely collect blood samples at the initiation of treatment (Table 2).

Discussion

These results present a snapshot, but nevertheless indicate that there are major variations in the doctor density in outpatient clinics for general psychiatry and for substance abuse, and that the doctor density is lowest in the outpatient clinics for substance abuse. Furthermore, the figures indicate certain differences between the regions, but the figures are minor and there are major variations within the individual health regions. The questions may have been interpreted differently, and there is a possibility that the person who responded to the email may not have been fully informed about the staffing. This notwithstanding, the same tendency can be seen in the figures from the Directorate of Health (SAMDATA) (11), which confirm that there is still a long way to go before the goal established by the Norwegian Medical Association of having three other professional man-years for each psychiatrist has been achieved (12).

Although 69 (58%) of the clinics maintained routines for direct or indirect medical assessment of all patients, only six (5%) of them had routines ensuring that all patients come to see a doctor. In indirect assessments - i.e. that the doctor is present when the patient is admitted or in team meetings when the patient's condition is discussed - it is obviously more difficult to establish an overview of the patient's complete medical history, although it can be noted whether a GP has assessed the state of the patient's health. A recently published article from Nord-Trøndelag county found that somatic health information was completely absent from 101 out of 155 referrals to a clinic for substance abuse (14). There are surprisingly small differences between the clinics that have a high doctor density and the other ones, although there is a tendency for more patients to be examined by a doctor in those clinics that have a high doctor density.

Routine collection of blood samples from patients initiating their treatment in outpatient clinics for general psychiatry or for substance abuse helps ensure a minimum somatic assessment. Blood samples can never provide exhaustive information on somatic health (15), but may reveal whether the mental symptoms are caused or exacerbated by somatic conditions such as meta-

bolic problems (3), vitamin B₁₂ and folic acid deficiency (4) or primary hyperparathyroidism (5). By devoting attention to somatic conditions at the start of outpatient treatment, an organic genesis of the symptoms can be excluded to a greater degree. Only 23 (19%) of the outpatient clinics reported to have established routines for collection of blood samples. Nor were there any major differences between clinics that had a high doctor density and the remaining clinics

Even though blood samples are not routinely collected, the doctors at the outpatient clinics may have established routines to exclude somatic disorders. It is nevertheless possible that many of the country's outpatient clinics for general psychiatry and substance abuse are treating patients that ought to have had somatic follow-up instead and/or fail to recuperate because of a complicating somatic disorder that has gone undetected.

The results may indicate that a number of the outpatient clinics for general psychiatry and for substance abuse around the country are failing to comply with the DPS manual's (10) requirement for medical examination of patients in order to obtain a thorough assessment that will lead to appropriate treatment. The low prevalence of systematic medical examinations ought to indicate that a comprehensive examination be made to identify the disorders from which these patients suffer and the extent to which they are being treated satisfactorily.

This study has a number of weaknesses. Since the figures have not been corrected for the population basis in the regions served by the outpatient clinics, nor for the number of patients who are in active treatment, the estimated doctor density will not indicate the adequacy of the staffing situation in general, but only reveal the relative distribution of doctors versus other groups of professions. Nor does it provide any information on the quality of the work they perform. The study could have been better planned, the clinics could have been provided with response categories to tick instead of openended questions, and the compliance with routines in practice is uncertain.

The strength of the study lies in its nationwide coverage and high response rate, which may have come about because the email was perceived as easy to respond to and the issues involved as relevant.

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