DETECTION AND MANAGEMENT OF DEPRESSION IN SLOVENE FAMILY PRACTICE. A CASE VIGNETTE STUDY

UGOTAVLJANJE IN ZDRAVLJENJE DEPRESIJE V SLOVENSKI DRUŽINSKI MEDICINI. VINJETA S SIMULACIJO PRIMERA

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Abstract

Objective: *Slovenia is a country with a very high suicide rate, and depression is one of the predisposing factors leading to it. Many studies have shown that depression tends to go unrecognised and undertreated in family medicine. Little is known about the management of depression in Slovene family practice.*
Method: *A nation-wide study using a case vignette was undertaken to determine the strategies adopted by family physicians in the management of depression, and the factors that influence appropriate decision making. A total of 173 family physicians from a national list of 778 physicians working in family practice were approached to take part in the study.*
Results: *A response rate of 75.4% was achieved. Over 90% of Slovene family physicians recognised a mental health problem in the simulated patient. However, only 61% of them chose appropriate treatment in line with the set criteria. Interestingly, the prescribing strategies are more similar to the American than to the British data.*
Conclusion: *Slovene family physicians are very good at recognising a mental health problem, but less so in selecting the appropriate treatment strategies, which leaves a lot of room for improvement.*

Key words: family practice, depression, treatment, questionnaires, Slovenia

Izvirni znanstveni članek
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Izvleček

Namen: *Slovenija ima visoko stopnjo umrljivosti zaradi samomorov, pri čemer je depresija lahko eden vzročnih dejavnikov. Številne raziskave ugotavljajo, da depresivne bolnike v splošnih ambulantah pogosto spregledamo in jih ne zdravimo ustrezno.*
Metode: *Na naključnem vzorcu slovenskih zdravnikov družinske medicine smo preverili ukrepanje ob depresivnem bolniku in odločitve glede zdravljenja. Preverili smo tudi dejavnike, ki vplivajo na razlike. Uporabili smo vinjeto s primerom bolnice. K sodelovanju v raziskavi smo povabili naključen vzorec 173 zdravnikov splošne medicine izmed 778 zdravnikov, kolikor jih je bilo v bazi Zavoda za zdravstveno zavarovanje Slovenije.*
Rezultati: *Odgovorilo je 75,4% anketiranih zdravnikov. Več kot 90% slovenskih zdravnikov je prepoznalo duševno motnjo pri simuliranem bolniku. Vendar se je pa le 61% zdravnikov odločilo za pravilno ukrepanje. Slog predpisovanja antidepresivov je bolj podoben ameriškim kot britanskim zdravnikom.*
Sklepi: *Slovenski družinski zdravniki so zelo uspešni pri prepoznavanju duševne motnje, a dosti manj pri izbiri ustreznega zdravljenja, kar daje veliko možnosti za izboljšave v prihodnje.*

Ključne besede: družinska medicina, depresija, zdravljenje, ankete, Slovenija

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Introduction

Depression is a common health problem in the population and a considerable burden for the society. The point prevalence of depressive symptoms is estimated at 13-20% and the prevalence of depressive illness at 2-5% (1). The prevalence of depression among people aged over 65 in the general population is 15% (2). Depression is also a frequent cause of office visits. It has been estimated that 5-10% of the population consult family physicians because of underlying depressive illness in one year (1), and up to 25% of people aged over 65 years (2).

Unrecognised and untreated depression is associated with increased suicide rates, and adds to the burden of morbidity associated with physical conditions such as cancer, ischemic heart disease and arthritis (3-5). Thanks to recent advances in therapy, many depressive patients can be effectively managed by their family physicians (6-8). Continuity of care in family practice presents a good opportunity for the detection and effective treatment of depressed patients (9, 10). In spite of that many depressed patients probably still go unrecognised, untreated or inadequately treated (6, 11, 12). Howe found that only 44% of the depressed patients were appropriately diagnosed in general practice (13). Kessler and co-workers reported that only 36% of depressed patients were recognised by the family physicians (14).

The observed variation in the management of depression in family practice poses additional problems (15, 16). Routine mortality statistics show that suicide rates in Slovenia are among the highest in Europe, and that mental health services in general face many difficulties in meeting the challenge posed by the mental health needs of the population (17, 18). These findings and other data suggest that depression is one of the challenging problems, which is inadequately addressed in primary care (19). We undertook a national survey to assess the detection and management of depression by family physicians (20).

Material and Methods

Sample

A cross-sectional study was conducted on a representative sample of Slovene family physicians. A random sample of 198 family physicians from the national list of 778 (25.5%) physicians working in family practice were asked to participate: 16 were not available because they had changed their careers, six were retired and three were on a maternity leave. The remaining 173 participants were either approached by telephone by one of the researchers (JC) (100 participants), or personally by tutors affiliated to the Department of Family Medicine, University of Ljubljana (73 participants). The purpose of the study was explained to them, and only two refused to participate. The age and gender of the participants, the type of practice (public service versus private practice) and the regional distribution of the 171 practices were matched with the national data. The sample did not differ from the national data.

Questionnaire

The questionnaire had two sections:

- Questions about the characteristics of the physician and his/her practice (demographic characteristics, working hours per week, hours of CME yearly, number of inhabitants served by the office, training, years in the practice, type of practice (solo or group practice), number of patients on the list, number of patients seen daily, number of home visits weekly, number of phone calls daily, use of appointment system, and availability of the psychiatric services)
- A case vignette describing an elderly woman suffering from depression, which was pre-tested in a pilot study and checked by three referee psychiatrists, was included in the questionnaire (see Appendix). The participants were asked to respond to the following yes/no and consecutive open-ended questions on disease management:

1. Would you refer the patient to a specialist? (y/n) If yes, to which one?
2. Would you prescribe medicine(s)? If yes, which one(s)?
3. Would you give the patient any counselling/advice? If yes, what advice?
4. Would you make an appointment arrangement for a follow-up visit in your office? If yes, in how many days?

Statistical Analysis

The data were entered into the computer and analysed using SPSS for Windows software. Descriptive statistics were calculated. The Student t-test and chi square test were used according to the type of variables (where needed, Fisher's Exact Test was calculated).

The following decisions were required for the treatment

to be considered adequate, i.e. appropriate measure:
- Choosing an antidepressant and/or referring the patient to the psychiatrist
- Scheduling a follow-up appointment
- Adding an anxiolytic drug to the antidepressant was regarded as justified but not mandatory

Those, who did not follow these decisions, were regarded as providing inappropriate care or failing to recognise depression.

For group comparisons, the participating family physicians were assigned to categories according to the size of their patient list (cut point 1,500 persons on the list,i.e. the average list size in Slovenia) and part/full time working pattern.

Results

We received 129 (75.4%) out of the 171 completed questionnaires. The analysis of non-respondents (42%) did not show any significant differences in age, gender, regional distribution or training of the participating family physicians. Eighty (46.6%) respondents were males, the mean age was 44.9 years; 55 (42.6%) participants had completed training, the mean time elapsed since training was 11 years. The participants spent on average eight days a year on Continuing Medical Education; the average time in practice was 16 years; the majority, i.e. 109 (63.8%) shared their premises in a group practice. The average working time was 39 hours per week, and an average of 45 patients were seen in the office daily. Doctors reported making an average of nine patient-related phone calls per day, and five home visits per week. The average list size was 1,866 patients. Participation in out of hours service for an average of 15 hours per week (on-call service included) was reported by 123 (72.1%) respondents; 79 (46.5%) practised an appointment system; 118 (68.8%) claimed that their patients had to wait more than a week for an appointment with a psychiatrist.

Management decisions

Twenty-six (20.2%) family physicians decided to refer their patient to a psychiatrist after the first contact, yet the majority started their own therapy (Table 1).A drug therapy was prescribed by 117 (90.6%) family physicians. A wide variety of therapeutic approaches were used. Thirty (25.9%) physicians prescribed one of the following combinations: 19 (16.4%) prescribed antidepressants and anxiolytics, five (4.3%) a combination of antidepressants and hypnotics, and six (5.2%) a combination of anxiolytics and hypnotics, while 87 (74.1%) gave an antidepressant as a single prescription. Only 12 (9.4%) of the participating physicians did not prescribe any medication at all. All family physicians gave advice to their patients; they most commonly encouraged them to re-establish normal social contacts, and increase leisure-time activity to involve more family visits and country walks. The majority of family physicians (114; 88.4%) scheduled a follow-up visit in two weeks' time on average, at the earliest after three days, and at the latest after two months; the rest of them advised the patient to attend when feeling the necessity to come. A total of 118 (91.5%) participating family physicians seemed to have recognised the nature of the patient's

Table 1. *Drugs prescribed for the depressed woman from the case vignette. As a quarter of the doctors prescribed more than one drug N is greater than 129.*
Tabela 1. *Zdravila, ki so jih zdravniki predpisali depresivni bolnici, predstavljeni v vinjeti. Četrtina zdravnikov je predpisala več zdravil, zato je N večji od 129.*

Drugs prescribed / Predpisana zdravila	Name (n) / Ime	***N***
Antidepressants / Antidepresivi	*fluoxetine (42), sertaline (8), fluvoxamine (1), tianeptine (4), moclobemide (1), maprotiline (6), amitriptyline (1), doxepin (1), trazodone (1)*	65
Anxyolitics / Anksiolitiki	*alprazolam (44), bromazepam (17), medazepam (3), diazepam (2), lorazepam (2), prazepam (1), oxazepam (1)*	70
Hypnotics / Hipnotiki	*zoldipem (14), flurazepam (3), nitrazepam (1),*	18
Others / Drugi	*sulpiride (2), perazine (1), St. John's wort (1), tramadol (2), diclofenac (1), meloxicam (1), etidronate (1), Ca-C 500 (1), heparin gel (1)*	10

mental problem. The right decision was made in 79 (61.2%) of the cases.

Family physicians' characteristics which correlate with their decision-making

The following correlations were found:

- ❒ Family physicians working full time prescribed antidepressants more often than family physicians working on a part-time basis (p=0.01), and were more likely to make a correct diagnosis (p=0.02).
- ❒ Family physicians working more out of hours favoured antidepressant treatment (p=0.03).
- ❒ Family physicians with patient lists exceeding 1,500 persons prescribed a drug therapy more often than family physicians with less than 1,500 persons on the list (p=0.03). Family physicians with patient lists exceeding 1,500 persons were also less likely to take inappropriate decisions concerning depression management (p=0.05).
- ❒ Family physicians in towns with more than 10,000 inhabitants (p=0.04) take inappropriate measures less often
- ❒ Family physicians who prescribed drug treatment more frequently were on average six years younger than those who did not prescribe it (p= 0.03).
- ❒ Family physicians who did not prescribe drugs recommended a follow-up visit on average four days earlier than those who did prescribe a drug therapy (p=0.09).

Discussion

Data on the process of outpatient care are difficult to collect from everyday practice. This is especially true for psychosocial problems, such as depression. Decision-making processes are almost impossible to track down from medical records, and direct observations by videotaping or use of simulated patients have become a gold standard for audit. However, these methods are time-consuming, expensive and cannot be used on a large scale. In nation-wide studies case vignettes are the method of choice for a limited insight into the decision-making and for quality assessment (21). Case vignettes offer standardised "patients" for whom the diagnosis and the treatment strategies are known. The method has proven equally effective as that of case simulation (21, 22) and the approach has been applied to research of depression in general practice (15, 23). Even though the vignette scenario may not reflect an everyday situation encountered by the participating physicians in the primary care setting, the observation of Rethans and Saebu that performance in real practice is consistent with the written case scenarios (24), as well as the results of a comparison of videotaped consultations and written scenarios by Braspenning and Sergeant (25), have reassured us that our results are indeed valid. Nevertheless, the interpretation of the data must be undertaken with caution, since the actual situation might be even worse (e.g. the time pressure factor is excluded).

The main strength of the study is its high response rate and the representativeness of the sample.To our knowledge, this is also the first study using a case vignettes scenario for assessing primary care physicians' performance in mental health in Slovenia, and is one of a very few of that type (25).

In our study the recognition rates for mental health problems (91.5%) and recognition rates for depression (61.2%) in general practice were relatively high compared to the findings of Howe, who found that only 44% of the depressed were diagnosed for depression in general practice (13), or compared to the results of Kessler and co-workers who found only 36% of cases detected (14). Although the physicians were not informed about the kind of patients/diseases involved in the study when invited to participate, the result might suggest a bias in the methodology, since the physicians were aware of the simulated situation.

It is well recognised that the spectrum of depression in primary care may be different from that seen in specialist psychiatry (12), and our case vignette has tried to simulate this difference (14). Nevertheless, the high rates of inappropriate prescribing of anxiolytic drugs as a single therapy might reflect the fact that the patient was recognised as having a mild depression, in which case the relief of symptoms is not so urgent (26). It can be assumed that the intenttion to treat was based on the severity of the depression evaluated by the physician, as found by (27) Dorwick and Buchan.

One fifth of the physicians decided to refer the patient to the psychiatrist, which is not in line with the recommendations that primary care patients with mild depression should be treated with antidepressants (28-30).

Follow-up instituted in our study by the participating physicians can help them adjust treatment regimes to the assessed severity of the depression, which allows us to believe that at some point in future antidepressants might be prescribed or patient referred

to the psychiatrist (27, 28, 31). A series of follow-up visits indicates a continuing interest in the patient which has a therapeutic value in its own right. Outcomes can be improved by using some of the psychological strategies of family physicians which have proven beneficial in the treatment of depression, either as a single method or in combination with antidepressants (8).

Another important finding of our study is the shift in the prescribing habits of family physicians from classic tricyclic antidepressants to new SSRI antidepressants, providing valuable information about early adoption of new therapeutic strategies. This offers a good opportunity for planning changes in depression management patterns used by family physicians. Nearly 90% of the prescribed antidepressants were from the group of new-generation antidepressant drugs, which are associated with fewer side effects, better tolerability and are less likely to be lethal. It seems that the knowledge of the therapeutic possibilities of the new drugs is very high and that it is closer to the American (32) than to the British prescribing patterns (33).

It is difficult to explain why family physicians in towns reported fewer inappropriate measures, and more detailed research is needed to clarify this finding. Family physicians in urban settings are more often organised in groups, which may influence their decision making. Another explanation may be that doctors practising in rural areas know the families better, and place more emphasis on non-drug therapies, such as the provision of psychological support.

It is difficult to explain why younger family physicians were more likely to prescribe drug treatment. We can hypothesise that older doctors trust more the above mentioned non-drug therapies.

The participating family physicians were relatively good at diagnosing depression in the case vignette. However, the evidence from routine statistical data suggests that depression is underestimated and undertreated in Slovenia. We believe that this is an important area for quality improvement. A causal relationship cannot be proved, yet we believe that these results are important to physicians who seek to improve their decision-making, and wish to promote self-evaluation and decrease the rate of non-optimal treatment decisions. For the same reason, the results provide valuable information to physicians' organisations and insurance companies seeking to offer further professional advice to physicians. Clinical practice guidelines on the management of depression have to be formulated, but these must be accompanied by effective strategies for implementation.

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Appendix

A 79-year-old unmarried, retired teacher visits you in your office. She lives alone in her own house, and raises a few hens. Ten years ago she underwent a radical left-side mastectomy for cancer. All follow-up examinations were normal and showed no progression of the disease. She suffers from mild osteoarthritis of the knees. Eight months ago she fell and is now afraid of leaving her house without assistance. The local Caritas association, where she had been very actively involved until this event, helps her with daily activities. She complains about fear, depressed mood and lack of joy because of constant worries. At her last visit, one month ago, she complained of sleeplessness, and was prescribed 5mg diazepam pills to be taken before sleep. She took the drugs only once, because of side-effects of nausea. She asks for some pills for the nerves. Physical examination revealed no abnormalities. Apart from diclofenac pills taken when the pain in her knees gets worse, she takes no other medication.