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Brief Report / Kısa Araştırma

Factors Affecting Prescribtion of Antidepressant Medications by Family Physicians in Istanbul Province

[1]Abdullah Yildirim,
[2]Oya Guclu Gonullu,
[1]Nezih Eradamlar, [3]Murat Erkiran

[1]Psychiatrist, Bakirkoy Mazhar Osman Psychiatric Hospital, 12th Psychiatry Unit, Istanbul - Turkey
[2]Psychiatrist, Bakirkoy Mazhar Osman Psychiatric Hospital, Secondary Outpatient Treatment Unit, Istanbul - Turkey
[3]Assoc. Prof. Dr., Bakirkoy Mazhar Osman Psychiatric Hospital, 9th Psychiatry Unit, Istanbul - Turkey

ABSTRACT

Factors affecting prescribtion of antidepressant medications by family physicians in Istanbul province

Objective: In the family physician system, depression and anxiety disorders are frequently encountered and antidepressant medications are often prescribed in recent years. Therefore, we aimed to investigate the factors affecting the prescription of antidepressants by family physicians.

Methods: In our study, 120 family physicians working at six districts in Istanbul were contacted and the data were collected by administering a 30-item questionnaire prepared by the investigators.

Results: Eighty point eight percent of the participating family physicians reported that they had sufficient education and practice for diagnosing depression. Fourty seven point five percent of them found their education inadequate for the treatment of patients. Only 1.5% of them were able to define all of the symptoms of depression. Eighty nine point two percent pointed out that they needed regular training about the use of antidepressants in treatment. We found that 81.7% of the physicians preferred prescribing the same antidepressant molecule as their primary option. Sixty six point seven percent stated that they believed the antidepressants could cause dependency and 72.2% believed that a large number of patients would recover without any medication.

Conclusion: With the introduction of family physician practice across the country as of the end of 2010, we entered a new era in terms of the management of psychiatric disorders in primary care. We can suggest that new measures and arrangements are needed to improve the knowledge and attitudes of family physicians about the diagnosis and treatment of psychiatric disorders.

Key words: Antidepressant, depression, family physician

ÖZET

İstanbul ili genelinde görev yapan aile hekimlerinin antidepresan reçetelemesini etkileyen faktörler

Amaç: Aile hekimliği uygulamalarında, sıklıkla karşılaşılan ruhsal bozuklukların depresyon ve anksiyete bozuklukları olduğu ve bunların sağaltımında kullanılan antidepresanların son yıllarda çok sık reçetelendiği bilinmektedir. Buradan hareketle, aile hekimlerinin antidepresan reçetelemesini etkileyen faktörlerin tespit edilmesi amaçlanmıştır.

Yöntem: Çalışmamızda, İstanbul ili genelinde altı ayrı bölgede görev yapan 120 aile hekimine ulaşılarak, çalışmacılar tarafından hazırlanmış 30 sorudan oluşan anket formunun uygulanması ile veriler toplanmıştır.

Bulgular: Araştırmaya katılan aile hekimlerinin %80.8'i depresyon tanısı koymak için yeterli bilgi ve deneyime sahip olduklarını bildirmiştir. Hastaların tedavisi ile ilgili bilgilerini yetersiz bulanların oranı ise %47.5 olarak belirlenmiştir. Hekimlerin %1.5'i belirtilerin tamamını tanımlayabilmiştir. Yüzde seksen dokuz nokta ikisi antidepresanların tedavide kullanımı ile ilgili düzenli eğitime ihtiyaç duyduklarını belirtmişlerdir. Hekimlerin %81.7'sinin ilk tercih ettikleri antidepresan molekülünün aynı olduğu belirlenmiştir. Aile hekimlerinin %66.7'si antidepresan olarak kullanılan ilaçların bağımlılık yapabileceklerine, %72.2'si hastaların büyük bir kısmının antidepresan tedavisiz düzeleceklerine inandıklarını belirtmişlerdir.

Sonuç: İki bin on yılı sonu itibariyle ülke genelinde uygulanan aile hekimliği sistemi ile birlikte, birinci basamakta sunulan ruh sağlığı hizmetlerinde de yeni bir döneme girilmiştir. Birinci basamakta görev yapan aile hekimlerinin ruhsal bozuklukların tanısı ve sağaltımı ile ilgili yetersiz bilgi düzeyi ve olumsuz tutumlarının dikkat çekici olması, bu konuda tedbirler ve düzenlemelerin gerekliliğini göstermektedir.

Anahtar kelimeler: Antidepresanlar, depresyon, aile hekimliği

Address reprint requests to / Yazışma adresi:
Psychiatrist Oya Guclu Gonullu,
Bakirkoy Mazhar Osman Psychiatric Hospital,
Secondary Outpatient Treatment Unit,
Istanbul - Turkey

E-mail address / Elektronik posta adresi:
oyaguclug@yahoo.com

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INTRODUCTION

According to the results of the Mental Health Profile of Turkey study made in 1988 with 16.550 people from 3 settlement areas in 5 demographic regions of Turkey, namely, the Middle, South, West, North and East Anatolian regions, 39.2% of these people applied to a psychiatry specialist to receive services for mental health, 33.1% of them to other branch specialists, 20.7% to general practitioners who are engaged in primary care, 3.6% to clergymen and 3.4% to others. 51% of those with a mental disease receive their medication from other specialist physicians than a psychiatrist. The percentage of those who receive treatment from primary care physicians is 18% (1).

The healthcare reform works with emphasis on primary care have gained intensity in the last 20 years (2). Today, a considerable portion of the primary healthcare services is assumed by the family physician system that is practiced throughout the country (3). According to the Current Situation of Family Physicians Table for December 2012 in the official website of the Family Physicians Monitoring and Assessment Directorate of the Ministry of Health, Turkish Public Health Agency, there are 6733 family health centers (FHC) in our country and 21037 family physicians are currently working.

A document named Primary Care Mental Health was issued in 2008 with the collaboration of the WHO and WONCA. It is emphasized in this document that the treatment of mental diseases, frequency of which is increasing in all countries, will yield the best results if it is done in a setting close to the person's home and community at a stage as early as possible and with a systematic approach (4). It is also stressed that because the prevalence of mental diseases in all countries rates significantly high when compared to the patients being treated, the contribution of the primary care to mental health services would provide serious contributions in closing the treatment gap by reaching this patient group that is not being treated (5). It is stated that as mental health services in primary care become more widespread, it will be easier to fight with discrimination and stigmatization, which remains as the biggest obstacle before the treatment of mental diseases.

It is known that the mental illnesses frequently seen in family medicine practices include depression, anxiety disorders and somatization disorder and antidepressants are used to treat all these disorders. There may be a number of factors in effectively treating these disorders that require prescription of antidepressants. The factors that affect prescription of antidepressants can be identified and it can be shown that this has direct associations with the efficacy of the mental health services rendered by family physicians in primary care. The associations identified may contribute to the improvement and development of the treatment service being provided.

Looking at the Mental Health Action Plan prepared in 2011 by the Ministry of Health, we see that in order to be able to sustain the services for mental diseases with increased frequency, integration was planned into the family medicine model that was put into practice as of 2010 across the country and it was targeted that home healthcare services public mental health centers, substance addiction community-based treatment centers, youth houses and community centers that are planned to be widespread in the future work in coordination with the family medicines. It was pointed out in the same action plan that recently there was an increase in the use of psychotropic drugs to the extent that it could not be explained by the prevalence of diseases that require the use of psychotropic drugs and when those who prescribe psychotropic drugs were looked at, the practitioner physicians were the ones who mostly prescribed psychotropic drugs.

Coming to 2012, there was not a marked change in the number of antidepressants prescribed by psychiatry and neurology specialists, whereas the increase in the number of antidepressants prescribed by family physicians was remarkable (6). All these data show that the increase in the number of prescribed antidepressants after the family medicine system entered the agenda of the country was conspicuous and the factors affecting the prescription of antidepressants by family physicians should be explored in more detail.

In view of the above information, our objective in this study was to identify the factors affecting the

prescription of antidepressants by family physicians who provide a large portion of the primary healthcare services and to obtain results that would contribute to the improvement and development of the treatment services related to mental health provided in primary healthcare.

METHODS

The study population consisted of practitioner and specialist family physicians who work for FHCs of the Ministry of Health in the provincial center of Istanbul. When 120 family physicians who could be contacted from 3540 family physicians working in 891 FHCs in six different regions were informed between April and July 2012 at face-to-face interviews using a questionnaire prepared by the investigators to meet the study objective, all of them approved to take part in the study.

Scales

The questionnaire contained questions about the participants' demographic characteristics, details on their daily clinical practices, their level of knowledge, experience and attitude regarding diagnosis of depression and antidepressant therapy, and the factors affecting their choice and use of antidepressants. Additionally, the 10 items in the Montgomery-Asberg depression rating scale were included in the choices in a question and 10 of the disorders for which antidepressants can be used were given as items in another question, and they were asked to answer after stating that more than one choice can be marked in these two questions. To identify the antidepressant molecule they used most frequently, an open-end question was asked. In order to make it easier for the physicians to remember with respect to this question, they were given a written list of antidepressant molecules with their generic names together with the questionnaire. The physicians were provided with brief information about the survey questions before each administration of the questionnaire and they were asked to fill out the questionnaire after reading it themselves.

Statistical Analysis

When evaluating the results obtained in the study, the SPSS 20 for Windows package program was used for statistical analyses. When evaluating the study data, descriptive statistical methods (mean, standard deviation, frequency) were used. The Chi-Square test was used for comparison of qualitative data and the Fisher Exact test when the expected frequencies could not be met. Significance was set at $p<0.01$.

RESULTS

Demographic Results

Looking at the breakdown of the physicians participating in the survey by their age intervals, we see that 30.0% of them were 20-29 years of age, 35.2% were 30-39, 26.7% were 40-49 and 8.3% were 50 and older. 52.5% of the participating physicians were female and 47.5% male.

Ten of the 120 physicians who took part in the survey were seen to have specialized in family medicine and the remaining 110 physicians participated in family medicine certification trainings and started their family medicine duties thereafter. Our study did not include any family physicians who were specialized in other branches and started their family medicine duties after having participated in family medicine certification trainings in the same way. Eighty of the 110 family physicians participating in the study who had not received any specialization education did not find sufficient the training they had received on antidepressant usage during their psychiatry internship in the faculty of medicine. Only two of the 10 physicians who specialized in family medicine stated that they found the education they received sufficient.

Results Relating to The Diagnosis of Depression

While 80.8% of the family physicians thought that they had sufficient knowledge and experience for diagnosing depression, 19.2% of them found themselves incapable of it. The percentage of those who found their

knowledge and experience sufficient with respect to the treatment of the patients they diagnosed with depression was 52.5%, whereas 47.5% saw themselves incapable of treatment. 35.0% of the 120 family physicians who took part in the study stated that they had not received any training on depression and antidepressants previously and 89.2% said that they needed regular training on the use of antidepressants.

Thirty point eight percent of the physicians stated that they did not explore the underlying factors in the patients they diagnosed with depression, 29.2% of them that they started antidepressant therapy directly and referred the patient to the next upper center for investigation of underlying factors and 40.0% that they explored the underlying factors in primary care conditions before the treatment.

Results Relating to Antidepressant Therapy

Fifty four point two percent of the physicians who took part in the survey stated that they themselves started treating the patients they diagnosed with depression for the first time, 20.0% of them that they directed the patients to a psychiatrist before starting the treatment and 25.8% that they started the treatment and directed the patients to a psychiatrist for checking. Fifty eight point three percent of the family physicians who took part in our study stated that they spared less than 10 minutes for the interviews with their patients who came in with depressive complaints, 22.5% of them in the interval of 10-19 minutes and 16.7% in the interval of 20-29 minutes. Fourty two point five percent of the family physicians who took part in the study stated that they prescribed antidepressants up to 3 patients daily, 44.2% of them up to 6 patients, 9.2% up to 9 patients and 4.1% of them 10 and more patients a day on the average.

Ninty one point seven percent of the family physicians stated that they provided information to their patients for whom they started antidepressant for the first time, 3.3% of them that they did not provide information. The percentage of the family physicians who preferred the choice that they did not have sufficient knowledge on antidepressants and their side effects was 5.3%.

When we look at the sources the family physicians who took part in our study used mostly when they needed with respect to antidepressant usage, the internet was in the first place with 60.0%, followed by vademecum with 24.2%. Ten point eight percent of family physicians stated that they obtained information from a psychiatrist and 1.7% from their family physician colleagues. The percentage of physicians who stated that they obtained information from pharmaceutical representatives was 3.3%.

Thirty three point three percent of family physicians think that pharmaceutical representatives are fully effective in the selection of the antidepressant molecule and 57.5% that they are effective even though partially. Six point seven percent of the 120 family physicians did not agree with this view and 3.3% of them remained impartial.

Eighty one point seven percent of the family physicians who took part in the study prescribe the escitalopram molecule, 11.6% of them the sertraline molecule, 5.0% the fluoxetine molecule and 2 of the remaining 120 family physicians a molecule other than these three. All of the family physicians who took part in our study know at least 4 symptoms. Only 18 of the family physicians knew about the entire 10 symptoms. There were 30 family physicians who knew about 6 symptoms, 25 who knew about 7 symptoms, 18 who knew about 8 symptoms and 11 who knew about 9 symptoms.

None of the family physicians marked all of the ten antidepressant prescription indications that were given in choices. From the 120 family physicians, those who knew about 5 and more indications were 54 persons in total. Fifty family physicians knew about 4 indications and 16 of them knew about only 3 indications. Eighty six point seven percent of the family physicians who took part in our study think that the antidepressant therapy should be discontinued as soon as the symptoms of depression disappear. Only 13.3% of them think that the antidepressant therapy should be continued for some time longer. Besides this, 66.7% of the family physicians believe that the drugs used as antidepressants cause addiction and 33.3% that they do not cause addiction.

Thirty seven point five percent of the family

physicians who took part in our study questioned suicide ideation in their patients they diagnosed with depression, whereas 62.5% of them said that they did not question suicide ideation in their patients they diagnosed with depression. Seventy one point seven percent of the family physicians did not find right to directly question suicide ideation in the patients treated for depression and 28.3% of them think that suicide ideation should be questioned directly.

Five point eight percent of the family physicians who took part in our study think that it is absolutely unnecessary to use antidepressants even if a patient with a chronic disease is diagnosed with depression and 59.2% of them think that it is partially unnecessary. The percentage of those who think that this is not true is 32.5% and 2.5% of them stated that they did not know. The physicians who think depression will not be fully cured despite the antidepressant therapy are 86.7% of all the family physicians and 13.3% of them did not agree with this opinion. Seventy two point two percent of the family physicians think that a significant portion of the patients diagnosed with depression will recover even if they do not receive any antidepressant therapy. Twenty six pint seventy three percent of them do not agree with this view. Ninty percent of the 120 family physicians who took part in our study think that depression will heal by itself when factors such as economic difficulties and family problems are resolved.

DISCUSSION

With the completion of the transition to the family medicine system in our country by the end of 2010, major changes have occurred in the primary healthcare services. There are limited number of studies related to the primary healthcare services after 2010. As far as we know, after 2010, the year of radical changes, there was not any study dealing with the factors affecting prescription of antidepressants by the family physicians other than reports presenting statistical information on the sales of antidepressant drugs required regularly more by pharmaceutical companies and therefore presenting the amounts of prescribed antidepressants.

When we look at the time prior to 2010, we see that descriptive studies where the knowledge and attitudes and training needs of the physicians working in primary care concerning depression and antidepressant therapy were tried to be identified have been conducted with the help of questionnaires consisting of questions prepared towards the objective as in our study. However, it is seen in almost all of these studies that the surveys were not carried out face-to-face by the investigators who prepared the questionnaires, the questionnaires were usually sent to physicians by post or they were administered by persons other than investigators (7,8). In our study, the surveys were carried out by the investigator who prepared the questionnaire at the FHCs where the family physicians who were included in the study worked by way of face-to-face interviews. The physicians answered the entire questions in the questionnaire. Detailed information about all of the questions was provided before administering the questionnaire and the aim of the study was conveyed to each participant separately.

We see that the percentages are close to each other in the gender breakdown of the family physicians who participated in our study. Although the proportion of the family physicians over 40 years of age is 35.0%, the number of physicians in the 20-29 age interval and that of those in the 30-39 age interval are very close to each other. The proportion of the specialized family physicians who took part in our study to the family physicians who did not specialize is 0.09 and this proportion is around 0.08 in the family physicians who work throughout Istanbul in 2012.

In our study, the proportion of the family physicians who think that the training provided to them was not sufficient is remarkable with 72.7%. In many studies investigating the knowledge and attitudes of the physicians working in primary care regarding antidepressants, their needs for training and how often they received training have been questioned; unlike these, we questioned the adequacy of the training that the family physicians received during their psychiatry internship in the faculty of medicine in our study (9).

Besides the fact that theoretical information has not been conveyed effectively and adequately, we can stress on the practical side that family medicine and

psychiatry departments should make planning and work together. It seems important to present the primary healthcare services under a single topic in a holistic way during the education of students. It has been shown that when medical students receive field training or education in the first year of the faculty, this affects the decision of working in that area positively and encourages the students in the subject of primary healthcare services (10).

In a comprehensive study where the undergraduate medical education of a large number of medical faculties across the country was evaluated, when education supervisors of psychiatry departments were asked to what extent a practitioner physician should know about psychiatric disorders after their graduation, they stated that they should "diagnose and refer" at a rate of 70% for depression and 60% for anxiety disorders and they thought negatively about the prescription of antidepressants by the primary care physicians (10). However, the family physicians are required to diagnose and treat depression and anxiety disorders at FHCs or refer the patients if necessary in the practice guide prepared by the Ministry of Health for family physicians (11). Since the academicians who convey the basic information and experience to family physicians during their psychiatry internship think differently about the diagnosis, treatment and referral of depression, it is apparent that institutions should make planning together regarding education.

While 80.8% of the family physicians who took part in our study think that they have sufficient knowledge and experience to diagnose depression, the number of family physicians who did not see themselves capable of doing this was 23. The proportion of the family physicians who saw themselves capable of treating the patients they diagnosed with depression was 52.5%. Those who found themselves incapable of treatment come to the fore with a proportion of 47.5%. Other studies have also reported that a significant portion of the physicians working in the primary care know the symptoms of depression at least partially, but they have difficulty in diagnosing (12,13). It has been shown that those physicians who stated that they would assume the treatment themselves administered inappropriate treatment to 52% of the patients and insufficient treatment to 8% of them (14). The results of previous studies seem to be in line with our study (15,16). If physicians think they can diagnose but cannot treat as it appears, this may be associated with the fact that their knowledge in knowing the diseases in the spectrum of depression is superficial.

Although almost all physicians report that they need continuous training on issues concerning depression as a disease that comes in the fourth place worldwide among the diseases causing disability (17) and that is estimated to rise to the second place among the diseases causing disability in the forecasts for 2020 (18) and the use of antidepressants, it is rather surprising that it did not appear among the first ten topics that the participants wanted to be dealt with during their continuing professional development activities in a descriptive study made in 2010 (14). It can be said that identifying the reasons for this in studies to be carried out will contribute to the planning for improving mental health services.

When we look at the information sources the family physicians preferred with respect to antidepressant usage, we see that the internet was the most frequent with 60.0%, followed by vademecum with 24.2% and psychiatrist colleagues with 10.8%. While the rate of preferring pharmaceutical representatives was 3.3%, it is remarkable that the rate of preferring their family physician colleagues was only 1.7%. When we think about the reason why family physicians do not benefit from their colleagues next door to obtain information, what comes to mind first is that they worry about the reliability of such information.

It was shown in a descriptive study conducted recently to determine the needs of physicians for professional development and learning that physicians used the internet frequently as a source of information. When the use of any group of medicine, not the information source used in general terms, is asked, one would expect that representatives will appear at a very low rate. We know that 81.7% of the physicians who took part in our study prefer the escitalopram molecule. However, the result that representatives were influential in prescription of antidepressants by 90.8% of the physicians for their patients and in selecting the molecules

they prescribe can be said to reflect the reality more.

It is obvious that physicians would not prefer pharmaceutical representatives for their questions and problems in clinical practice. Nevertheless, through their pharmaceutical representatives, pharmaceutical companies seem to fill the gap that stems from possible information and experience deficit with respect to the use of antidepressant drugs by using some written and visual materials. We can say that there is a need for training planning for family physicians on the use of antidepressant drugs, which is updated continuously.

It was found that since 2008 the number of prescriptions for antidepressants issued by family physicians have exceeded the number of prescriptions for antidepressants issued by psychiatrists in primary care and is still increasing (3,6). Besides the financial burden the increase in the use of antidepressants will bring for our country, the deficiencies in informing patients at all stages of usage, close monitoring of the side effects, adjusting the effective dose and considering drug interactions seem important. As this will intensify the already existing negative opinions about psychiatric diseases and treatments, the problems continuing for years particularly in primary care will become more complicated. Therefore, we can say that planning of a continuous training on antidepressant usage that will cover all family physicians, that will be compulsory if necessary and most importantly that will be renewed in short intervals and will test what the participants have learned is an urgent need for our country. Alongside this, imposing restrictions on the promotion of the products classified as antidepressants through pharmaceutical representatives in primary care may also be considered.

While 37.52% of the family physicians questioned their patients they suspected of having depression for suicide ideation, 62.5% of them did not question them for suicide ideation. Besides this, 71.72% of the family physicians think that direct questioning of suicide ideation is wrong. According the data of the Mental Health Branch of Istanbul Provincial Health Directorate, 513 people were caught to attempt suicide in Istanbul in 2006 and the number increased every year reaching to 2988 people in 2010 (19). Considering this rapid increase in suicide attempt, one of the training topics that should be updated continuously for the family physicians in primary care can be suicide.

Only 18 family physicians could recognize all of the 10 symptoms of depression. This result is similar to the results of previous studies (13,14,20). It was shown in a study that physicians who were not psychiatrists made use of their previous experiences not their knowledge of the diagnosis criteria when diagnosing depression (13). Although the family physicians who work in primary care stated that they were confident when diagnosing depression, we think that they do not have adequate knowledge of the symptoms of depression. Sixty six point seven percent of the family physicians who took part in our study think that antidepressant drugs are addictive. The physicians who think that the use of antidepressants is not necessary if a patient with a chronic disease has also depression correspond to two thirds of all physicians. One hundred four of the 120 family physicians think that depression will not be fully cured despite the antidepressant therapy. The family physicians who believe that a considerable portion of the patients diagnosed with depression will recover even if they do not receive antidepressant treatment comprise 73.3% of all family physicians. Similarly, there were only 12 family physicians who did not think that depression would regress by itself as factors such as economic difficulties and family problems improve. One hundred four of the 120 family physicians think that the antidepressant therapy can be discontinued right after the symptoms of depression disappear. As in our study, other studies have also shown that family physicians have various incorrect knowledge and negative attitudes with respect to depression and antidepressant treatments (8,13,21-23). In this context, we can say that part of the training should include programs to correct such wrong knowledge and replace the negative attitudes.

Although the results we obtained in our study resemble partially those of the descriptive studies conducted before 2010, unlike their results, we observed that almost all of the family physicians prescribed the same antidepressant drug. We think that the product promotion works of pharmaceutical companies in primary healthcare services is one of the important

factors that influences this situation.

It appeared that the family physicians working in primary care also had inadequate knowledge on the diagnosis of depression and use of antidepressants. Besides the presence of a need for continuous training, we think the deficiencies in theoretical knowledge and clinical practice can be eliminated with collective works of the psychiatry and aide branches, which are standardized for the entire faculties of medicine.

The information source used by a considerable portion of family physicians concerning antidepressant therapy seems to be the internet. We think that the continous training practices that remain to be a need may be facilitated and broadened by using the internet services.

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