

REVIEW ARTICLE

Depression in the Elderly: Limits and Challenges - a Nursing Perspective

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ABSTRACT

Introduction: There are many difficulties encountered when diagnosing depression in its early stages in the elderly. The role of the GP is vital for prompt diagnosis.

Aim: The aim of this paper is to provide a critical citation and discussion of the issues involved when diagnosing depression of the elderly in the community.

Method: For this purpose, a systematic literature review of Greek and international databases were performed seeking references on the obstacles encountered when diagnosing depression.

Results: Analysis revealed four major themes under which the papers fell: i) General difficulties in diagnosing depression, ii) The limitations GPs have when they diagnose depression, iii) The limits patients place on GPs during the diagnostic procedure and iv) The limits GPs and patients set on each other when depression is being considered

Conclusions: The findings show that GPs are confronted with numerous detractors which may lead to misdiagnosis especially when depression is mild or moderate. Yet, early recognition can lead to effective treatment. It is suggested that nurses treating hospitalised patients be alerted to the early warning signs of depression in their patients. In order to support GPs and to make things easier for the patient, nurses should be encouraged to use their observation skills during their greater exposure time with the patient and to advise the patient to discuss these with their GP once discharged so that effective treatment can be initiated if necessary.

Key Words: depression, diagnosis, elderly, GPs and limits.

Men ought to know what from the brain, and from the brain only, arise our pleasures, joys, laughter and jests, as well as our sorrows, pains, grief and fears. Through it, in particular, we think, see, hear ...

HIPPOCRATES

INTRODUCTION

The term "depression" is still somewhat ill-defined covering a range of phenomena from a normal emotion - a natural response to loss or disappointment - to an

accompanying symptom common in a variety of physical conditions, up to a clinical psychiatric disorder. The term depression has been so widely used to describe so many different states that it is in danger of losing its

meaning. Consequently, when considering variations in the diagnosis of depression it is necessary to discuss the problem of definition and classification. Attempts to classify depression have been numerous and the whole area has been described as "contemporary confusion" (Henke et al., 2008; Iosifescu, 2007)

Depressive symptoms occur not only in major depressive disorders as defined by DSM-III-R criteria, but also in association with other psychiatric disorders in association with some physical disorders (including organic brain disease) and as a side effect of certain medications. Studies which use different diagnostic criteria and procedures will suggest different prevalence rates. Barrera et al. (2007) reviewed twelve studies of affective disorder in general hospital inpatients and found that six different definitions have been used and prevalence rates ranged from 13% to 61%. Furthermore, the highest prevalence rates occurred in studies where a one-stage diagnostic procedure such as the General Health Questionnaire for defining affective disorders was used.

Studies, in which a two-stage diagnostic procedure was used, showed lower prevalence rates (13%-18%). In most of these studies, minor affective disorders outnumber the more severe depressive disorders and it is the relative inclusion-exclusion of these minor disorders which could explain much of the wide variation in reported prevalence rates. However, this paper focuses on the problem of detection of depression among elderly primary care attendee by their General Practitioners (GPs) and a spherical examination will be used in order to reach a viable conclusion (Harpole et al., 2005; Bruce et al., 2004).

In order to do this, the problem will be approached in the light of general difficulties in diagnosing depression, then more specifically, through the limitations facing GPs and patients alike.

AIMS

The main of this paper is to tackle the ambiguous notion of depression in the elderly. The difficulties GPs' face when diagnosing depression in this age group will be also analyzed and presented in a concise manner.

METHODS

A systematic literature search was performed in Greek and international databases such as IATROTEC, PubMed, Cochrane Reviews and CINHAL using the following search terms: depression, diagnosis, elderly,

GPs and limits. Another parameter set was language and time; only papers in Greek or English which were published within the last decade were selected. Although the Greek literature on the subject was scarce, the international search yielded a massive 853 papers. Many were in peer reviewed nursing journals, although the majority was found in medical journals. Application of the "and", "or" sub-fixes, in combination with the search terms decreased the relevant papers substantially. After careful perusal of selected abstracts, 51 were finally included for analysis.

RESULTS-DISCUSSION

Selected papers fell into four broad areas which after close perusal were labelled:

- General difficulties in diagnosing depression
- The limitations GPs have when they diagnose depression
- The limits patients place on GPs during the diagnostic procedure
- The limits GPs and patients set on each other when depression is being considered

Further sub-categories under each of the above areas were created.

GENERAL DIFFICULTIES IN DIAGNOSING DEPRESSION

i) Lack of diagnostic aids

According to Callahan (2001), less is known about normal psychology than normal physiology, and it could therefore be said that this is why it is harder to distinguish between normal and pathological states in patients with emotional or mental disturbances.

Physical disease is, in most cases, quite visible, with clearly marked symptoms. Physicians have a wide range of objective tests, from an ordinary X-ray to the sophisticated Positron Emission Tomography, at their disposal which helps them to reach an accurate diagnosis.

Schuyler (2000) argues that psychological disturbance is often less visible than physical illness. Unfortunately, as Wells et al. (2000) comment, the diagnosis of depression in general practice poses a number of difficulties, as it is a psychological diagnosis and, to date, it cannot be confirmed by the use of elaborate technological devices or laboratory tests. Although no specific diagnostic test is available, rating

scales can be useful in screening for depression in the elderly patient.

ii) Somatization of depressive symptoms

Depression, in association with physical illness in the elderly, occurs frequently but it is not always recognized by the physician. According to Stromberg et al. (2008) the prevalence of depression among elderly medical inpatients has varied between 10% and 45%. Burroughs et al., (2006) comment on the diagnosis of depression, stating that it can be difficult to be diagnosed especially in the elderly with physical co-morbidity, because of the masking of depressive symptoms by somatic complaints or the presumption that symptoms are attributable to the concurrent physical illness. Particular care should therefore be taken to distinguish clinical depression from symptoms of depression which are not persistent and severe, but are a reaction to a serious illness. Such symptoms might only require supportive care.

However, recognizing cases of depression among the physically ill elderly poses a further difficulty. According to Hickie et al. (2004), depression may be present covertly, especially with psychosomatic symptoms or with hypochondriasis.

Somatization and varying degrees of hypochondriasis are common in the elderly and may provide the GP with the only clues to depression. In one survey carried out by Hopko et al. (2008), 73% of cancer patients were diagnosed with major depression while many patients displayed an anxious preoccupation with their bodily functioning.

In the elderly, true illness and bodily dysfunction may form the focus for the development of such a somatic preoccupation.

Through the process of translation of affects into bodily symptoms depression may be disguised so that the affects are not openly felt and physical suffering is experienced instead (Hyde et al., 2005).

iii) Diagnostic confusion between depression and dementia

Usually, the absence of confusion is the most important distinction between depression and dementia. However, confusion and depression are found together in depressive pseudodementia, where depression and dementia co-exist.

Van Hout et al. (2007) argued that depression in the elderly is difficult to distinguish from dementia because both may present similar features as for example, a marked cognitive deficit.

Distinguishing between cognitive impairment due to depression and cognitive impairment due to dementia is very important as the former may be reversible. In an attempt to find out how accurate GPs were in recognizing dementia, Mercy et al. (2008) asked the GPs of three group practices in Cambridge to rate the likelihood of dementia for each of their elderly patients. At the same time, cases of dementia were identified by research psychiatrists who initially used the Mini-Mental State Examination (MMSE).

Those who scored 23 or less were assessed again in more detail by using the Cambridge Mental Disorders of the Elderly Examination (CAMDEX). Of the 2,889 elderly people listed in the age-sex registers, 2,616 were screened, giving a contact rate of 91%. GPs correctly identified dementia as at least a possibility in 121 of the 208 cases found, but nevertheless they mistakenly rated several patients suffering from depression, as demented.

iv) The reluctance of GPs to apply diagnostic labels

The term depression covers a wide range of phenomena, from a normal state of mood, to a diagnosed illness. However, there have been numerous attempts to classify depression, with the "Diagnostic and statistical manual of mental disorders" (DSM-III R), of the American Psychiatric Association being widely accepted. However, according to Terluin et al., (2002) there still is a lack of confidence in present systems of classification and this may explain why GPs remain reluctant to apply diagnostic labels in this field of care.

In this context, Zimmerman et al., (2004) comments that the classifications of subtypes of depression in old age are important to the psychiatrist, but are not of great interest or value to the Geriatrician or the GP, since such classifications are neither useful in suggesting effective therapies for different subtypes, nor in suggesting varying prognoses for them.

THE LIMITATIONS GPs HAVE WHEN THEY DIAGNOSE DEPRESSION

By definition, a GP's responsibility is to look after the client's general physical and mental wellbeing.

In actual practice though, and especially in the elderly, GPs tend to be more interested in medical problems, and less attentive to their patients' mental complaints.

i) Educational barriers

Looking at current GPs' training curriculum, one might easily identify an emphasis on medicine rather on psychiatry and even when trainee GPs experience psychiatry, it is routinely in a hospital setting and the labels they apply there may be inappropriate in primary care (Moitabai, 2002). Research in Australia also suggests that trainee GPs should receive some psychiatric teaching under the tutelage of the increasing numbers of psychiatrists who work within a primary care setting (Pfaff et al., 2009).

ii) GPs' ability to detect depression: an international perspective

Many studies in different countries have attempted to quantify the ability of the GPs' to detect depression by comparing their assessment and diagnosis to the diagnosis based on the cut-off score of a psychometric scale.

These studies produced a wide range of results but these can be explained by differences in medical education or perhaps varying standards of health care between countries.

Pfaff & Almeida (2005) compared Australian GPs' diagnosis of depression with one obtained through the Centre for Epidemiological Studies-Depression Scale (CES-D).

In a sample of 916 consecutive patients, 60 years of age and older, the results showed that there was a large number of patients who scored high in the "depressed" category on the CES-D scale, but were not regarded as depressed by their GPs.

In another Australian study, McCabe et al., (2009) used focus groups to assess the ability of health care professionals to identify depression and, in a separate test, to cite more than four of its symptoms. The results account for the low recognition rate for depression and suggest that greater knowledge of the symptoms and signs of depression may help to rectify this under-recognition. However, the authors recognized the fact that although the sample of 10 GPs was satisfactory, it was drawn from a limited geographical area.

Therefore, their findings would need confirmation from a greater study.

Earlier research from the United States showed similar findings. Thomas et al. (2001) assessed 179 low-income women attending public primary care clinics and assessed the knowledge Physicians had of depressive symptoms. They found that there was a lack of important information which is prerequisite for a proper diagnosis of depression. Furthermore, the study showed that the CES-D appears to be inadequate for routine screening in such populations. Studies by Asarnow et al. (2005) and Mathet et al. (2003) also argue that clinically significant depressive symptoms of most 'family practice' patients go undetected. Yet, studies in Europe tend to present findings which range from a tautology to the ones mentioned above to a complete disagreement.

With regards to the U.K., several studies have reported that depression, as well as other psychiatric disorders tend to go undetected in many medical patients. Diagnosis of depression by the physician is often difficult and can be particularly problematic in elderly persons (Watts et al. 2002).

Nevertheless, Hull et al. (2005) who studied the prevalence of depression and anxiety in Asian patients attending 139 GP clinics in South London found that concordance of culture or ethnicity between doctors and patients affected the prescribing rates for antidepressant and anxiolytic medications in these general practice populations. Although GPs missed the diagnosis of only 9% of patients suffering depression the most striking finding of this study was that although GPs had relatively little difficulty in recognizing depression, they seldom treated it with antidepressants or referred their patients to specialists.

Research from Spain yields similar findings. Olivera et al. (2008) screened 293 consecutive GP attendees, 65+ years, through a battery of tests, i.e. the Mini-Mental State Examination, Clock Drawing Test, Verbal Fluency, Informant Questionnaire (detection of cognitive impairment), Yesavage Geriatric Depression Scale, Goldberg Anxiety and Depression Scale, and Geriatric Mental State Schedule. They found that the detection rates of the GPs was low but when Family Doctors were trained in psycho-geriatric screening instruments, detection and sensitivity in the recognition of these important health problems increased.

iii) Time constraints and workload

Capriotti (2006) states that in many areas of the country the number of nursing and residential homes is growing beyond the capacity of local GPs to provide adequate primary care. Alegrva et al. (2008) argue that GPs do not always have the necessary time to visit their patients who live in nursing or residential homes. Time constraints also limit the embarking of the multidisciplinary case conferences (as held in hospitals) which are regarded as the most comprehensive way to review a patient's needs.

Asarnow et al. (2005) argued that one important difficulty that limits a holistic assessment of the elderly patient's needs was the GPs' tendency to spend most of their time performing physical examinations and obtaining histories. Current research, and also common experience, shows that patients spent 5-6 minutes on average with their GP. Therefore, it is difficult for doctors to listen carefully to all of their patients' concerns.

iv) GPs and Ageism

Critics have charged that 'ageism' or age discrimination is responsible where there is poor quality of mental health care or where there is low utilisation of mental health services for the elderly (Murray et al. 2006). Helmes & Duggan (2001) examined the ability of 189 GPs in the greater Perth area, to detect depression in elderly patients (64 years and over) who visited their practises.

The patients were interviewed and assessed using the Zung's Self Rating Depression scale and also by Kahn and Goldfarb's Mental status Questionnaire. Patients who scored low and those with high scores were then assessed by their physicians who noticed some psychiatric symptoms in 21 of the 32 high-symptom subjects, but only 4 were diagnosed as depressed.

The authors addressed the physicians' failure to detect mild to moderate depression, as "disturbing" and attributed this failure to inadequate psychiatric training rather than active discrimination. Nevertheless, the authors state that the fact that only 4 subjects had actually been given a diagnosis while psychiatric symptoms were identified in 21 patients, could indicate the belief that such symptoms are a normal consequence

of ageing, or that treatment attempts for psychiatric problems in older individuals are unnecessary or ineffective.

THE LIMITS PATIENTS PLACE ON GPs DURING THE DIAGNOSTIC PROCEDURE

i) Patients with disguised complaints

Elderly individuals may unknowingly present psychiatric problems to their physicians during routine check-ups, in the form of vague somatic complaints. The notion of presenting psychiatric problems in this form, often described dramatically by the patient, is the main symptom of a somatoform disorder (Hegel et al. 2005).

Although it has not been proven by research to what degree of consciousness the patient is when he or she presents 'unexplained' physical complaints to the physician, there is strong evidence to suggest that elderly patients overwhelmingly prefer their GPs care to that of mental health professionals. They further believe that their GP is the most effective health care practitioner (Wells et al. 2005).

There are several discreet somatoform disorders with hysteria or somatization disorder, which mostly affect women. The most common ones are hypochondriasis which is equally common in men and women; conversion disorder and somatoform pain disorder (Howell et al. 2008).

The core symptom of all the above disorders is that the patient has physical complaints which occur in the absence of identifiable physical pathology. As Iosifescu et al. (2004) point out, these common disorders are seen by primary-care physicians and other specialists, such as neurologists and cardiologists, rather than psychiatrists. This statement has been substantiated by research. Statistical analysis in these studies proved that GPs over-reported depression although there is no clear evidence that this was due to their inadequacy in interpreting the so-called 'normal ageing processes'.

When talking about infants, we have developed rules and measurements, with which we standardise for example the growth of the skull in conjunction with months and years. But when it comes to the elderly, there are no standard measurements of how for example how wrinkled their skin should be, or how fast they should be able to run.

Some researchers have complained that many GPs cannot interpret the normal ageing process correctly. But, before making such accusations we should explore the ageing process in depth and perhaps try to categorize and define degrees and steps of that process. Only then would appropriate research reveal how adequate or not GPs were in interpreting ageing. As a nurse, one is aware that in some countries, doctors do seem to give less attention to their elder patients which seems to be due to a general cultural stance against their elders. So this problem should be first tackled at a wider societal level.

ii) Interpretation of the ageing process

The ancient Greeks used to say that "*ageing does not come alone; it carries disaster within it*". Even today, this pessimistic view is widespread and the physical and psychological changes that happen because normal process of getting older, are often viewed as "negative" or even "disastrous" changes. Firstly, there are changes in the physical appearance like, for example, the wrinkling of the skin, altered facial architecture and the inclined body posture.

There are also changes in the five senses such as diminished vision, hearing or taste sensation. Finally, there are a number of psycho-social changes including slower psychomotor performance, altered sleep patterns and mild memory loss.

Though these changes are common in the elderly, they may influence our perceptions of elderly people and result in a tendency to consider them depressed (Sleath & Shih, 2003). In some cases these very same changes may contribute to an appearance of depression and in other cases to the development of it. And this seems to be the crux of the matter.

Because of the complexity of the changes and their unknown origins and causes, one can never be sure if a change is due to depression or to the normal ageing process.

Studies by Lyness et al. (2006) and Lyness (2008) argue that some GPs are unable to interpret the normal ageing process of declining health and energy easily. The evidence for this is that in these studies many persons who recorded a normal score in a scale measuring depression were diagnosed as clinically depressed by these GPs.

iii) Patient's reluctance to specify depression

Research in the USA has shown that the vast majority of people who suffer from depression are not stating it to be the reason for their visit, or not mentioning being depression when they visit their GPs (Luppa et al. 2008; Rabins et al. 2000; Schwenk et al. 1998). Therefore, GPs must either inquire routinely about depressive symptoms or rely on information to signal that such an inquiry is warranted.

It has been suggested however, that the administration of self-reported screening questionnaires to patients might improve the ability of the GP to detect depression. Coyne & de Jonge (2009) tried to explore this issue further. A study was carried out whereby ratings of depression by GPs were correlated with scores from the Centred for Epidemiological Studies - Depression (CES-D) questionnaire and also with telephone interview diagnoses of depression which were based on the criteria for major depressive disorder, cited in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IIIIR).

The results indicated that although the sensitivity of self-report questionnaires was high, their specificity was low to moderate in this population of 266 patients.

In other words, the instruments used were detecting even minor situational or transient depression but they did not significantly benefit the GP in setting a differential diagnosis between depression and distress.

Overall, the study showed that there is a high prevalence of depression and that patients are unlikely to specify depression as their presenting problem. Therefore, GPs should look for signs of distress and depressive disorders in all patients. It is also recommended that a relatively simple approach to the detection of depression would be to inquire about depressive symptoms in a semi-structured fashion which would also be based on formal criteria for depression.

Finally, as Parker & Hyett, (2009) comment, an accurate diagnosis of depression depends almost entirely on information about the patients' emotional status and history, rather than on physical findings and observations by the physician.

THE LIMITS GPs AND PATIENTS SET ON EACH OTHER WHEN DEPRESSION IS BEING CONSIDERED

i) GPs' and Patients' 'Conspiracy'

Rothera et al. (2002) suggested that in many cases, 'ageism' biases can provide a framework where a 'silent conspiracy' between patients and GPs is constructed.

The ultimate purpose of this unspoken agreement is to deny the importance of symptoms like memory loss or confusion which are being attributed to normal consequence of growing older. Perhaps fear of institutionalisation or discrimination is the main reason why these symptoms are under-reported or, when reported, are not recognised as possible depressive or other disorders.

Although, there is no direct research which explores this issue, Coyne & de Jonge's (2009) work suggests that GPs and patients may actually enter into a conspiracy in which psychological issues are addressed, but not as a legitimate basis for diagnosis. Their study also suggested that GPs are attentive to distress in their patients but within a biomedical bias which determines the health-care-seeking behaviour of patients and the decision making of physicians.

Most studies that compared GPs' perceptions of depressed clients with the outcomes of a scale or a questionnaire suggested that GPs are very 'sensitive' in detecting depression in their elderly patients.

However, the fact that GPs tended to diagnose depression where the scale did not, might reflect the GPs' ability to pick up mild or early depression (Cuijpers et al., 2009; Lotrakul & Saipanish, 2009).

Van Marwijk et al. (2008) claimed that, patients who were diagnosed as depressed by their GPs, but not by researchers, were more likely to become depressed over the next nine months in a way that would be also diagnosable by research.

Therefore, an argument could be put forward to say that GPs and patients are reluctant to admit depression especially in its very early stages. Action should be taken from the initial phases, because many psychiatric disorders are reversible when recognised and treated promptly. This early action would also prevent the risk of deterioration into a more chronic condition with costly personal and social consequences.

ii) GPs' and patients' rapport

There is a limit to the number of patients GPs can look after but due to this, GPs are able to get to know their patients well, especially those that visit their surgeries regularly.

GPs often get to know not only their patient's medical condition but also their family and social circumstances. Perhaps this is a main reason why a GP's surgery is one place where many individuals feel able to present themselves with or without an appointment whenever they feel 'unwell', depressed or anxious (Clarke et al. 2008).

Patients who have a rapport with their GP and feel secure at their local surgery might be reluctant to visit a psychiatric outpatient clinic, perceiving it to be a place somehow 'distant and frightening', which implies that you are obviously 'mad'. The stigma in some countries is more prevalent than in others who have worked towards changing public perception of mental disorders. Having a rapport with a GP is always essential but unfortunately where there is a well established relationship of trust and even affection GPs may be more reluctant to refer a patient with depression to a specialist.

Conversely, some GPs might think that early depression in the elderly will either remit spontaneously or be untreatable and even believe that 'labelling' a patient and prescribing medication for this condition may do more harm than good.

In addition, treatment may not be feasible within a GP's surgery due to time, financial constraints or the patient's unwillingness to accept a biopsychosocial reinterpretation of physical complaints. Finally, referral to psychologist or psychiatrist may not be an option despite many psychological disorders being outside the realm of a GP's competence or responsibility (Trivedi et al. 2007).

iii) GPs and patients informing each other

The bulk of studies assessing the GPs' ability to detect depression in their elderly clients follow a pattern where the GPs' assessment is compared to one obtained by monitoring patients using a standardized scale for measuring depression. However, Baik et al. (2008), in their study of 8 American GPs and their detection rate

for depression in the elderly, followed an in-depth approach. Initially they compared GPs' and the scale's ratings for depression. This was followed by interviews with the GPs in order to explore issues such as difficulties in diagnosing depression and management problems encountered.

They were also asked the percentage of people over 70 in their practice who they thought were depressed. This approach provided an in-depth view about the way GPs diagnose depression and the answers suggested that if the patient talked to the GP about feeling depressed, sad or irritable, depression was more readily diagnosed.

This partially explains why GPs do not detect depression in all the cases, where the Diagnostic Interview for Depression does. The Diagnostic Interview is a straight-forward procedure where the sequence of questions and answers is inevitable. What is happening, however, when GPs are talking with their patients? GPs seldom explicitly enquire about depressive symptoms. On the contrary, they rely on the patients to raise them.

The above finding and its sequential argument can not answer fully the disagreement between the GPs' and a standard instrument's ability to detect depression. However, a number of questions need to be asked. Are GPs consciously waiting for the patient to raise the issue of depressed mood? Are they perhaps subconsciously wishing that such a point would not be raised at all? Are patients expecting their GP to 'read' their mind and discover the mild or moderate depression that they are trying to hide?

CONCLUSIONS

Primary care physicians have a vital role to play in identifying depression in their elderly patients. Diagnosis might be difficult, because symptoms are atypical and frequently include psychomotor agitation, somatic symptoms and complaints of memory loss.

Patients with illnesses, such as cancer, post myocardial infarction, stroke, Parkinson's disease and early Alzheimer's disease are particularly vulnerable to depression.

The difficulty in detecting depression in elderly patients in a local practice lies in the GP being alert initially to subtle signs of depression. Furthermore, there are educational barriers, time constraints due to workload and the patients might present symptoms in the form of vague somatic complaints or be reluctant to specify and admit their current condition.

In some cases, GPs and patients may fall into a 'conspiracy' where, due to a biomedical bias, depression is left unrecognized and untreated.

Also, depression in the elderly may not be confronted due to misinterpretation of the natural ageing process or to 'ageism' bias that many societies still hold. Due to this bias, depression might just be attributed to the 'growing really old' notion.

Future research regarding recognition of depression in their elderly patients should take into account GPs' knowledge, beliefs and biases with regard to depression, together with the patients' attitudes and experiences of depression. It is time now for the appropriate path to prevent, detect and treat depression to be set by all parties concerned i.e. the health care team and the patient.

Another way of tackling this problem is to utilize the observation abilities of nurses with hospitalized patients. If nurses are taught to recognize the early signs of depression such as spells of weepiness, withdrawal or weight disequilibrium they could suggest to the patient that these signs should be mentioned to their GP. By empowering nurses to a more informative role, patients and GPs would benefit alike.

REFERENCES

- Alegrva M., Chatterji P., Wells K., Cao Z., Chen C., Takeuchi D., Jackson J., Meng X. (2008) Disparity in depression treatment among racial and ethnic minority populations in the United States *Psychiatr Serv.* 59(11):1264-1272.
- Asarnow J., Jaycox L., Duan N., LaBorde A., Rea M., Murray P., Anderson M., Landon C., Tang L., Wells K. (2005) Effectiveness of a quality improvement intervention for adolescent depression in primary care clinics: a randomized controlled trial. *JAMA* 293(3):311-319
- Barrera A., Torres L., Munoz R. (2007) Prevention of depression: the state of the science at the beginning of the 21st century. *Int Rev Psychiatry.* 19(6):655-670.
- Baik S., Bowers B., Oakley L., Susman J. (2008) What comprises clinical experience in recognizing depression?: the primary care clinician's perspective. *J Am Board Fam Med.* 21(3):200-210.
- Bruce M., Ten Have T., Reynolds C., Katz I., Schulberg H., Mulsant B., Brown G., McAvay G., Pearsonh J., Alexopoulos G. (2004) Reducing suicidal ideation and depressive symptoms in depressed older primary care

- patients: a randomized controlled trial. *JAMA*. 291(9):1081-91.
- Burroughs H., Lovell K., Morley M., Baldwin R., Burns A., Chew-Graham C. (2006) "Justifiable depression"; how primary care professionals and patients view late-life depression? A qualitative study. *Fam Pract*. 23(3):369-377.
- Callahan C. (2001) Quality improvement research on late life depression in primary care. *Med Care*. 39(8):772-84.
- Capriotti T. (2006) Update on depression and antidepressant medications. *Medsurg Nurs*. 15(4):241-6, 222.
- Clarke D., Piterman L., Byrne C., Austin D. (2008) Somatic symptoms, hypochondriasis and psychological distress: a study of somatisation in Australian general practice. *Med J Aust*. 189(10):560-564.
- Cole A., Lee P., Hughes D., Deegan P., Waldek S., Lachmann R. (2007) Depression in adults with Fabry disease: a common and under-diagnosed problem. *J Inher Metab Dis*. 30(6):943-951.
- Coyne J., de Jonge P. (2009) Should African Americans be over treated for depression the same as whites are? *Am Heart J*. 157(5):31-36
- Cuijpers P., van Straten A., van Schaik A., Anderson G. (2009) Psychological treatment of depression in primary care: a meta-analysis. *Br J Gen Pract*. 59(559):51-60.
- Harpole L., Williams J., Plsen M., Stechuchak K., Oddone E., Callahan C., Katon W., Lin E., Grypma L., Unotzer J. (2005) Improving depression outcomes in older adults with comorbid medical illness. *Gen Hosp Psychiatry*. 27(1):4-12.
- Hegel M., Unotzer J., Tang L., Arian P., Katon W., Noli P., Williams J., Lin E. (2005) Impact of comorbid panic and posttraumatic stress disorder on outcomes of collaborative care for late-life depression in primary care. *Am J Geriatr Psychiatry*. 13(1):48-58.
- Helmes E., Duggan G. (2001) Assessment of depression in older adult males by general practitioners. Ageism, physical problems and treatment. *Aust Fam Physician*. 30(3):291-294.
- Henke R., Chou A., Chanin J., Zides A., Scholle S. (2008) Physician attitude toward depression care; Implications for implementation of quality improvement initiatives. *Implement Sci*. 30(3):40-46.
- Hickie I., Pirkis J., Blashki G., Groom G., Davenport T. (2004) General practitioners' response to depression and anxiety in the Australian community: a preliminary analysis. *Med J Aust*. 4;181(7 Suppl):S15-20.
- Hopko D., Bell J., Armento M., Robertson S., Hunt M., Wolf N., Mullane C. (2008) The phenomenology and screening of clinical depression in cancer patients. *J Psychosoc. Oncol*. 26(1):31-51.
- Howell C., Turnbull D., Beilby J., Marshall C., Briggs N., Newbury W. (2008) Preventing relapse of depression in primary care: a pilot study of the "Keeping the blues away" program. *Med J Aust*. 188(12 Suppl):S138-141.
- Hyde J., Evans J., Sharp D., Croudace T., Harrison G., Lewis G., Araya R. (2005) Deciding who gets treatment for depression and anxiety; a study of consecutive GP attenders. *Br J Gen Pract*. 55(520):846-853.
- Hull S., Aquino P., Cotter S. (2005) Explaining variation in antidepressant prescribing rates in east London: a cross sectional study. *Fam Pract* 22(1):37-42.
- Iosifescu D. (2007) Treating depression in the medically ill. *Psychiatr Clin North Am*. 30(1):77-90
- Iosifescu D., Bankier B., Fava M. (2004) Impact of medical comorbid disease on antidepressant treatment of major depressive disorder. *Curr Psychiatry Rep*. 6(3):193-201.
- Lotrakul M., Saipanish R. (2009) How do general practitioners in Thailand diagnose and treat patients presenting with anxiety and depression? *Psychiatry Clin Neurosci*. 63(1):37-42.
- Lyness J., Heo M., Datto C., Ten Have T., Katz I., Drayer R., Reynolds C., Alexopoulos G., Bruce M. (2006) Outcomes of minor and subsyndromal depression among elderly patients in primary care settings. *Ann Intern Med*. 144(7):496-504.
- Lyness J. (2008) Naturalistic outcomes of minor and subsyndromal depression in older primary care patients. *Int J Geriatr psychiatry*. 23(8):773-781.
- Luppa M., Heinrich S., Angermeyer M., Kfing H., Riedel-Heller S. (2008) Healthcare costs associated with recognized and unrecognized depression in old age. *Int Psychogeriatr*. 20(6):1219-29
- Mathet F., Martin-Guehl C., Maurice-Tison S., Bouvard M. (2005) Prevalence of depressive disorders in children and adolescents attending primary care. A survey with the Aquitaine Sentinelle Network] *Encephale*. 29(5):391-400.
- McCabe M., Davison T., Mellor D., George K. (2009) Barriers to care for depressed older people: perceptions of aged care among medical professionals. *Int J Aging Hum Dev*. 68(1):53-64.
- Mercy L., Hodges J., Dawson K., Barker R., Brayne C. (2008) Incidence of early onset dementia in Cambridgeshire, United Kingdom. *Neurology*. 4;71(19):1496-1499.
- Moitabai R. (2002) Diagnosing depression and prescribing antidepressants by primary care physicians: the impact

- of practice style variations *Ment Health Serv Res.* 4(2):109-118.
- Murray J., Banerjee S., Byng R., Tylee A., Bhugra D., Macdonald A. (2006) Primary care professionals' perceptions of depression in older people: a qualitative study. *Soc Sci Med.* 63(5):1363-1373.
- Olivera J., Benabarre S., Lorente T., Rodriguez M., Pelegrin C., Calvo J., Lerris J., Idanez A., arnal S. (2008) Prevalence of psychiatric symptoms and mental disorders detected in primary care in an elderly Spanish population. The PSICOTARD Study: preliminary findings. *Int J Geriatr Psychiatry.* 23(9):915-921.
- Parker G., Hyett M. (2009) Management of depression by general practitioners: impact of physician gender. *Aust N Z Psychiatry.* 43(4):355-359.
- Pfaff J., Almeida O. (2005) A cross sectional analysis of factors that influence the detection depression in older primary care patients. *Aust N Z J Psychiatry.* 39(4):262-265.
- Pfaff J., Draper B., Pirkis J., Stocks N., Snowdon J., Sim M., Byrne G., Lautenschlager N., Flicker L., Kerse N., Goldney R., Almeida O. (2009) Medical morbidity and severity of depression in a large primary care sample of older Australians: the DEPS-GP project. *Med J* 190(7):S75-80.
- Rabins P., Black B., Roca R., German P., McGuire M., Robbins B., Rye R., Brant L., (2000) Effectiveness of a nurse-based outreach program for identifying and treating psychiatric illness in the elderly. *JAMA* 283(21):2802-2809.
- Rothera I., Jones R., Gordon C. (2002) An examination of the attitudes and practice of general practitioners in the diagnosis and treatment of depression in older age. *Int J Geriatr Psychiatry.* 17(4):354-358.
- Schwenk T., Klinkman M., Coyne J. (1998) Depression in the family physician's office: what the psychiatrist needs to know: the Michigan Depression Project *J Clin psychiatry.* 59 Suppl 20:94-100.
- Schuyler D. (2000) Depression comes in many disguises to the providers of primary care: recognition and management. *J S Med Assoc.* 96(6):267-75.
- Sleath B., Shih Y. (2003) Sociological influences on antidepressant prescribing *Soc Sci Med.* 56(6):1335-1344.
- Stromberg R., Wernerling E., Aberg-Wistedt A., Furhoff A., Johansson S., Backlund L. (2008) Screening and diagnosing depression in women visiting Gps' drop in clinic in Primary Health Care. *BMC Fam Pract.* 13(9):34-38.
- Terluin B., van Hout H., van Marwijk H., Ader H., van der Meer K., de Haan M., van Dyck R. (2002) Reliability and validity of the assessment of depression in general practice: the Short Depression Interview (SDI). *Gen Hosp Psychiatry.* 24(6):396-405.
- Trivedi M., Lin E., Katon W. (2007) Consensus recommendations for improving adherence, self-management, and outcomes in patients with depression. *CNS Spectr.* 12(8 Suppl 13):1-27.
- Thomas J., Jones G., Scarinci I., Mehan D., Brantley P. (2001) The utility of the CES-D as a depression screening measure among low-income women attending primary care clinics. *The Center for Epidemiologic Studies-Depression. Int J Psychiatry Med.* 31(1):25-40.
- Van Hout H., Vernooij-Dassen M., Stalman W. (2007) Diagnosing dementia with confidence by GPs. *Fam Pract.* 24(6):616-621.
- Van Marwijk H., Ader H., de Haan M., Beekman A. (2008) Primary care management of major depression in patients aged ≥ 55 years: outcome of a randomized clinical trial. *Br J Gen Pract.* 58(555):680-686.
- Watts S., Bhutani G., Stout I., Ducker G., Cleator P., McGarry J., Day M. (2002) Mental health in older adult recipients of primary care services: is depression the key issue? Identification, treatment and the general practitioner. *Int J Geriatr Psychiatry.* 17(5):427-437
- Wells K., Sherbourne C., Schoenbaum M., Duan N., Meredith L., Utotzer J., Miranda J., Carney M., Rubenstein L. (2000) Impact of disseminating quality improvement programs for depression in managed primary care: a randomized controlled trial. *JAMA.* 283(2):212-20
- Wells K., Sherbourne C., Duan N., Utotzer J., Miranda J., Schoenbaum M., Ettner S., Meredith L., Rubenstein L. (2005) Quality improvement for depression in primary care: do patients with subthreshold depression benefit in the long run. *Am J Psychiatry.* 162(6):1149-57.
- Zimmerman M., Sheeran T., Young D. (2004) The Diagnostic Inventory for Depression: a self-report scale to diagnose DSM-IV major depressive disorder. *J Clin Psychol.* 6(1):87-110.