Improving the Role of Nursing in the Treatment of Depression in Primary Care in Spain

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PURPOSE. *We describe a multicomponent program for the systematic evaluation and treatment of depression in primary care.*

CONCLUSION. *Primary-care nurses trained in clinical and therapeutic aspects of depression play a central role in care management, patient education, treatment adherence, and clinical monitoring.*

PRACTICE IMPLICATIONS. *Diverse interventions, including organizational changes and the enhancement of the role of nurses, have been effective in improving depression outcomes in primary-care settings.*

Search terms: *Depression, depression in primary care, nursing role, organizational changes and depression treatment, role of nursing in treating depression in Spain*

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The most common mental health disorders, of which depression is the most significant, are mainly treated at primary healthcare facilities (World Health Organization, 2001). At this level of health care, however, major shortcomings have been observed in the detection, diagnosis, treatment, and monitoring of depressed patients (Wittchen, Holsboer, & Jacobi, 2001). In a recent study, major depression was observed in 14.3% of primary healthcare patients (Aragonès, Piñol, Labad, Masdéu, et al., 2004). In one third of these cases, depression was not detected by the primary-care doctor (Aragones, Piñol, Labad, Folch, & Melich, 2004). This often occurs when patients do not openly express any psychological discomfort and direct their complaints toward physical symptoms (Aragonès, Labad, Piñol, Lucena, & Alonso, 2005). Moreover, when depression was detected, it was no guarantee that the patient would receive suitable treatment: only one third of patients with depression received treatment, and even in patients with the severest depression the treatment rate was below 50% (Aragones, Piñol, Labad, Folch, et al., 2004). High rates of noncompliance and early abandonment of antidepressant therapy were generally observed. As clinical monitoring of the depressed patient is often inadequate, the opportunity to modify ineffective treatments or encourage adherence to treatment is lost. Outcomes obtained in the treatment of depression are, therefore, lower than might be expected given the potential effectiveness of available treatments.

To improve the clinical outcomes of depressed patients, healthcare procedures must also improve

(Von Korff & Goldberg, 2001). At the same time, procedures for treating depression must be organized along similar lines to those for treating chronic illnesses (Wagner, Austin, & Von Korff, 1996). Strategies that integrate and reinforce the role of nursing (Katon, Von Korff, Lin, & Simon, 2001) and are aimed at the large percentage of patients who are treated exclusively in primary-care facilities are the most efficient in improving both the healthcare process and clinical outcomes (Gilbody, Whitty, Grimshaw, & Thomas, 2003).

The World Health Organization recognizes that holistic nursing must play a key role in the care of mental health patients in primary facilities (Saxena, 2007). It also recognizes that the role of nursing in mental health care is still not sufficiently developed. In primary health care in Spain, nurses have historically played a central role in the care of chronic illnesses such as diabetes and arterial hypertension but their systematic and structured involvement in mental health issues has largely been anecdotal.

In this paper, we describe the general characteristics of a model for the integral management of depression in primary care. Although this model involves the whole primary-care team, it is basically carried out by members of the nursing staff.

The Interventions for Depression Improvement Model

The INterventions for Depression Improvement (INDI) model is a multicomponent model for treating depression and includes interventions of a clinical, training-based, organizational, and health educational nature. Most of these interventions are not original, and similar interventions for managing depression by nurses have already been described. Our aim is to integrate and adapt these interventions, which are assumed to be effective and can reasonably be applied in primary-care facilities of the Spanish healthcare service. The program targets three professional categories: primary-care doctors, primary-care nurses, and the interface between primary care and psychiatry.

In the INDI model, depression is treated fundamentally within primary health care. General practitioners are responsible for detecting and diagnosing depressive disorders in their patients, establishing a therapeutic plan, and, when necessary, making appropriate adjustments to the therapeutic plan (e.g., changing the antidepressive treatment, consulting a psychiatrist, or requesting a referral). Doctors will receive training in the form of an initial 8-hr course aimed at improving and updating their skills and knowledge in the diagnosis of depression, evaluation of risk of suicide, and clinical treatment and monitoring of depression. The therapeutic aspects of the course are based on recommendations contained in the National Institute for Clinical Excellence guide for depression (2004). The training emphasizes the healthcare procedure, the active and systematic clinical monitoring of depressed patients, the therapeutic aims (short-term remission and long-term avoidance of relapse), and the management options when these aims are not achieved. The INDI model includes a continuous training plan with sessions of 2–4 hr every quarter.

Doctors have access to the *Toolkit for Managing Depression in Primary Care*, which includes chapters on the detection and diagnosis of depression; use of the Patient Health Questionnaire (PHQ-9) as a tool for diagnosing and monitoring depression symptoms; the risk of suicide; how to draft a therapeutic plan (including a treatment algorithm to assist the doctor in prescribing and decision-making with regard to antidepressive treatment); procedures for coordinating and liaising with the psychiatric services; the role of nursing; nurse–doctor coordination procedures; and the healthcare education of the patient (Aragonès, 2007).

One aim of the program is to ensure the continuity of the healthcare process that begins in primary health care and may require specialist intervention (e.g., in the case of resistant depression or chronic depression, or in the indication of psychotherapy or complex pharmacological management). Organizational strategies that stress the need for an integrated healthcare process from primary healthcare to specialist care have led to

a more effective treatment of depression (Bower & Gilbody, 2005). The INDI model establishes mechanisms for affecting this functional integration between primary care and specialist care. There is a rapid mechanism for cross-consultation, preferably via telephone or computer, between the primary healthcare doctor and the relevant psychiatrist. Referrals are always preceded by cross-consultation with the psychiatrist in order to agree on the recommendation and the need for referral. The recommendation and the aims of the referral are explained to the patient so that expectations are realistic and there is continuity in the health care provided. Following referral and patient assessment, the psychiatrist and the general practitioner may agree on a therapeutic plan at the primary-care level. On the other hand, the psychiatrist may take responsibility for the patient's treatment utilizing the support of primary-care facilities in the therapeutic process (clinical follow-up, adherence to treatment, psychoeducation, etc.). To achieve short-term remission and prevent long-term relapse, psychiatrists will be given information about the healthcare process and the therapeutic options for treating depressions that are resistant to treatment.

The Role of Nursing in the INDI Model

The program includes generalist nurses from participating primary-care centers that provide health care to depressed patients. Nurses play a key role in the INDI model, coordinating and integrating the whole healthcare management process to ensure continuity throughout the healthcare process, between the various personnel (doctors, nurses, psychiatrists, family members, social workers, psychologists, etc.), and with any clinical care for frequent physical comorbidity (cardiovascular diseases, diabetes, chronic pain, etc.) (Aragonès, Piñol, & Labad, 2007). In developing our INDI model, we have integrated the model's procedures into normal nursing tasks, as occurs in the treatment of other prevalent chronic diseases such as diabetes and chronic obstructive pulmonary diseases. We have also tried to ensure that depression is regarded as a competence of nursing rather than an additional task.

Training

Participating nurses need no prior specialization in mental health. The INDI model provides training and instruction through an annual 8-hr course that covers clinical aspects of depression, antidepressant treatment, secondary effects and the treatment of such effects, the importance of adhering to treatment and methods to ensure adherence, and warning signs in the evolution of depression, etc. It also envisages periodic training activities to consolidate, refresh, and update the skills and knowledge acquired.

Toolkit for Managing Depression

Participating nurses will have access to a *Toolkit for Managing Depression in Primary Care* (Aragonès, 2007). This contains generic chapters on the diagnosis, evaluation, and treatment of depression (including secondary effects and how to treat the secondary effects of antidepressants), plus a specific chapter on activities inherent to nursing (see Table 1).

Organization of Nursing Care for the Depressed Patient

The program will establish a minimum number of patient visits and a frequency for them. At the initial stage, visits will take place 1 week after the patient is included in the program and then monthly until remission of the depressive episode. At the continuation and maintenance stage, contact will be every 2 or 3 months. However, the plan of follow-up visits will be individualized, adapting to the characteristics of the patient and the evolution of the depression. The visits will have a structured content where the patient will be educated about the illness and its treatment, including "self-help" activities and health advice (see Table 2).

Table 1. Index to Chapter 7. *Toolkit for Managing Depression in Primary Care*

Chapter 7. The Role of the Nurse in the Treatment of Depression

Integral evaluation and nursing intervention plan
Evaluation and support of therapeutic compliance
- Obstacles to the treatment
- Problem solving
- Positive support
- Monitoring progress
- Healthcare education with regard to the treatment

Monitoring the tolerance and response to the treatment
- PHQ-9. Monitoring the response to treatment
- Communicating the information. Monitoring sheet.

Therapeutic education of the depressed patient
Coordination
- What can the doctor expect from the nurse?

For example, the nurse:
- will provide patients and their families with information on depression, its pharmacological treatment and strategies for dealing with it;
- will emphasize the importance of adhering to the therapeutic plan prescribed by the doctor: pharmacological treatment, appointments, etc.;
- will identify obstacles to the therapeutic plan and will help patients to find appropriate solutions.

- What should the doctor not expect from the nurse?

For example, the nurse . . .
- will not provide psychotherapy. Psychoeducation or advice on how to deal with difficulties are not psychotherapy;
- will not prescribe nor take decisions on pharmacological treatment.

Structured content of the nursing surgery
Schedule of visits

Note. From Aragonès, E. (Ed.) (2007) *Manual per al Maneig de la Depressió en Atenció Primària.* Reus, Spain: ICS. Adapted with permission of the editor.

Appointments with the nurse will alternate with and complement appointments with the general practitioner. There will be close collaboration between the two professionals. This is relatively easy because in Spain primary care is usually organized within each center by teams consisting of one doctor and one nurse attending to the same group of patients. They usually work in separate but adjacent surgeries and use the same clinical histories.

Evaluation and Nursing Intervention Plan: The Therapeutic Relationship

The nurse will initially evaluate the patient using the Henderson model. This defines the role of nursing as helping patients perform activities that will contribute to their health and recovery, thus promoting independence and autonomy. This requires a thorough evaluation of the patient's physical needs. For depressed patients, particular attention is paid to their psychological and social needs in order to establish an intervention plan with specific objectives (Henderson, 1978). The nursing intervention plan involves the gathering of information for detecting problems; the analysis and interpretation of information expressed as nursing diagnoses, treatment plans, and activities for meeting the needs detected; definitions of the objectives and interventions; and an evaluation of the results (see Table 3).

Assessing and formulating nursing diagnoses and designing caring plans as described in the INDI model are not specific procedures in this program: these are the responsibilities of nurses for all primary-care patients, particularly those with chronic diseases. The INDI model focuses on the diagnoses and interventions that are most closely related to depression.

The therapeutic relationship is an interpersonal communication tool between the nurse and the patient and is the basis for nurse case management (Yamashita, Forchuk, & Mound, 2005). Nurses intervene according to the needs of their patients, using the knowledge, aptitudes, and skills inherent to their profession. This relationship allows those receiving help to accept and deal with their situations and identify their needs. It also encourages self-help and relational skills. The interview is inseparable from the relationship, allowing the professional to evaluate and identify the needs

Table 2. Structured Content of Nursing Visits to Monitor the Depressed Patient

Structured Content of the Nursing Role
First medical visit
• Diagnosis, treatment prescription. "Key" educational messages. Information on the role of the nurse in supporting the depressed patient.
• Appointment for the first nursing visit and appointment for the next medical visit.
Initial nursing visit (within 1 week)
• Nursing evaluation and treatment plan.
• Check prescription of the antidepressant: has it been purchased? Is it being taken? Any adverse effects?
• Healthcare education materials: Does the patient understand it? Any questions?
• Self-help: aims? small steps? materials?
• Complete monitoring sheet.
• Appointment for next visit.
Optional visit(s) (or telephone contact) if difficulties are detected
• Medication, obstacles.
Nursing visit at 4–5 weeks. Evaluation of the initial response.
• PHQ-9 (evaluation of the initial response).
• Psychoeducation, self-help, treatment plan, adherence to the treatment.
• Complete monitoring sheet.
Nursing visit at 8–9 weeks and subsequently at intervals of 4 weeks until remission. Monitoring the response to treatment.
• PHQ-9: remission? If there is remission, the continuation phase will commence.
• Psychoeducation, self-help, treatment plan, adherence, secondary effects.
• Complete monitoring sheet.
Nursing visit 4–8 weeks after remission. Monitoring remission.
• PHQ-9.
• Importance of continuation treatment (6 months) in order to prevent relapse and the risk of chronification of the depression. Important: do not abandon the treatment even if the patient is in remission.
• Psychoeducation, self-help, treatment plan, adherence, secondary effects.
• Complete monitoring sheet.
Subsequent nursing visits at intervals of 2–3 months. Continuation and maintenance stage.
• PHQ-9: remission?
• Psychoeducation, self-help, treatment plan, adherence, secondary effects.
• Importance of continuation treatment (6 months) in order to prevent relapse and, whenever recommended, maintenance treatment in order to prevent recurrence and chronification of the depression (>1 year).

of the patient. The nursing interview is characterized by active listening (a receptive attitude), positive consideration (accepting patients as they are), respect (accepting that patients are capable of making their own decisions), and empathy.

Systematic Clinical Monitoring

The PHQ-9 (Diez-Quevedo, Rangil, Sanchez-Planell, Kroenke, & Spitzer, 2001; Kroenke, Spitzer, & Williams, 2001) is a self-administered questionnaire with nine items that explore the presence and magnitude of depressive symptoms plus one item that explores the impact of the depression on the general functioning of the patient. It is useful for the diagnosis and for quantifying the initial severity of a depressive episode. It is also useful for monitoring the evolution of the depressive episode and evaluating response to treatment.

The INDI model promotes the systematic clinical monitoring of the depressive episode through the

Table 3. Example of Two Nursing Diagnostic Approaches Related to Depression, the Nursing Treatment They May Generate, and the Indicators for Evaluation

Diagnoses	Results/indicators	Intervention	Activities (nursing treatment)
Ineffective confrontation	Confronts problems Seeks information on the illness and its treatment Uses the social support available Uses effective self-improvement strategies Explains improvement in psychological welfare	Increase confrontation	• Evaluate patient understanding of the illness process • Evaluate alternative responses to the situation • Encourage situations that promote patient autonomy • Study with the patient previous models in the treatment of vital problems • Introduce the patient to people or groups who have successfully come through the same experience • Encourage the patient to express feelings, perceptions, and fears • Help the patient solve problems in a constructive way • Help the patient clarify erroneous concepts
Noncompliance of the treatment	Compliant conduct Confidence in the healthcare professional with regard to the information obtained Expresses a desire to follow the prescribed guidelines Therapeutic conduct: illness or injury Complies with the recommended therapeutic regime Balance between treatment, exercise, work, leisure, rest, and nutrition	Agreement with the patient Education: process of the illness	• Establish the treatment aims with the patient • Help the patient identify circumstances that may impede fulfillment of the objectives • Help the patient identify even the smallest successes • Evaluate the patient's knowledge of the depressive illness • Describe the common signs and symptoms of the illness • Explain the changes in lifestyle that may be necessary in order to avoid future complications and/or monitoring the process of the illness • Explain the basis of the monitoring/therapy/treatment recommendations • Explain to the patient measures to prevent/minimize the secondary effects

PHQ-9, which is administered on each nursing visit. The scores are transferred to a monitoring sheet and used by the doctor to make suitable therapeutic decisions according to the evolution of the depressive symptoms.

Antidepressant Treatment

Nonadherence is a frequent phenomenon that compromises the effectiveness of antidepressant treatment (Olfson, Marcus, Tedeschi, & Wan, 2006). Various interventions of a psychoeducational nature may lead to improvements in compliance to the therapeutic plan (Antai-Otong, 2006; Griffiths, Fernandez, Mostacchi, & Evans, 2004; Pampallona, Bollini, Tibaldi, Kupelnick, & Munizza, 2002).

In the INDI model, we have developed a structured intervention that is applied by nurses to improve adherence to the treatment prescribed by the doctor.

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The role of the nurse in the treatment of depression includes evaluating and supporting adherence to the therapeutic plan, treating secondary effects, evaluating response to treatment, and routine coordination and communication with primary healthcare doctors and perhaps with the psychiatrist. During the first visit, the nurse will evaluate whether the patient has been able to initiate treatment, identify difficulties or obstacles to compliance, and help resolve any problems. Patients who do not attend the first visit will be contacted by telephone.

If difficulties in adhering to the treatment are detected, extra visits or telephone calls will be programmed. In subsequent visits the nurse will evaluate evolution and response to treatment, identify any secondary effects, and update the treatment plan.

Psychoeducation

Evidence suggests that education and counseling have a positive influence on the clinical results of depression (King et al., 2000). In the INDI model, healthcare education is the joint responsibility of the doctor and the nurse, although special emphasis is placed on the role of the nurse (Saarmann, Daugherty, & Riegel, 2000). Nurses have access to support materials in the form of a printed booklet and a DVD specially developed for the INDI project to educate the depressed patient and his or her family.

To help patients overcome the stigma and prejudice that are often associated with depression, the support materials include information about depression itself and emphasize the prevalence and pathological nature of the illness. They provide realistic information about the treatment and its expectations and stress the importance of therapeutic compliance. Practical advice is given on the various self-help strategies, particularly with regard to adherence to treatment, social and family relationships, unjustified self-criticism, self-esteem, and problem solving (Gellatly et al., 2007). A balanced diet and regular physical exercise are advocated as contributing factors for improving one's state of mind (North, McCullagh, & Tran, 1990).

Family Involvement

Having a family member with depression affects the functioning of the whole family. The nurse must recognize the negative impact of depression on the family unit and plan interventions aimed at reducing it.

Given the positive impact provided by the support of family and friends on the evolution of depression (Nasser & Overholser, 2005), the nurse should encourage the family to become an active agent in the therapeutic process. The nurse should also offer advice and guidance on the role of the family in the treatment process, what the family can do to help the patient, and what behaviors and attitudes should be avoided.

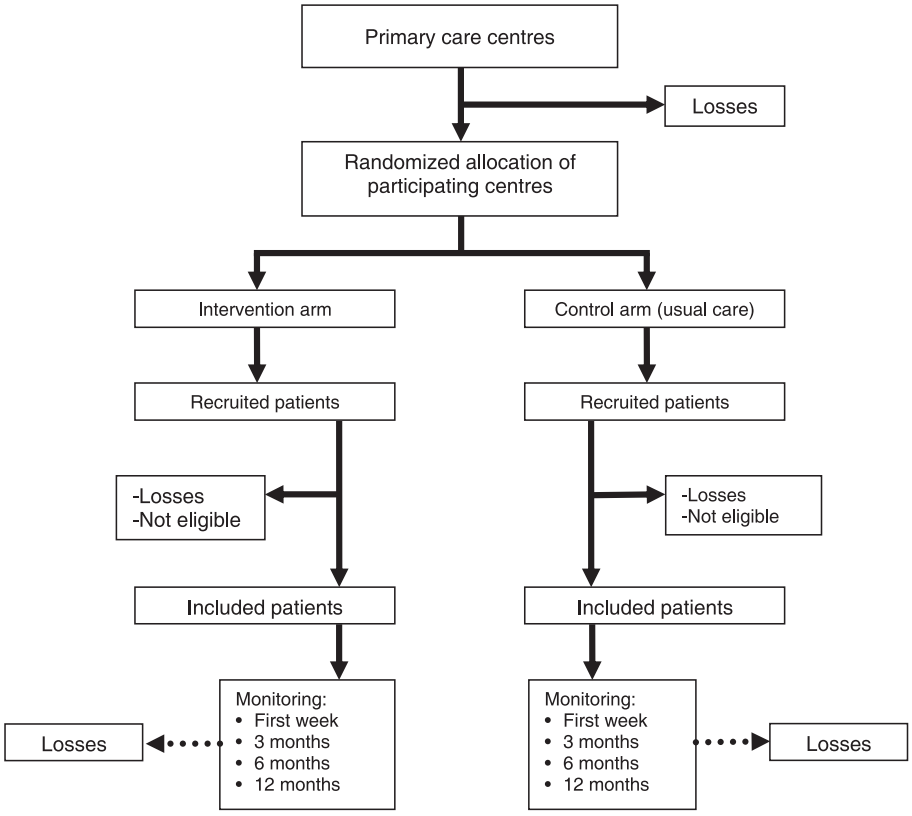
The Clinical Trial

When we developed the INDI care model for treating depression in primary health care, we hypothesized that it would produce better clinical results than those of current treatments. As yet, however, the intervention has not been evaluated. To check the veracity of the hypothesis and obtain scientific evidence on the effectiveness of the program, we have designed and implemented a controlled clinical trial, the research protocol of which was published recently (Aragonès, Caballero, et al., 2007) (see Figure 1).

The 20 primary healthcare centers of the Tarragona-Reus Primary Care Area (Catalan Health Institute) are participating in the trial and have been randomly assigned to two alternative arms: a treatment arm, in which the INDI model is applied; and a control arm, in which the depression is treated as usual with the available resources and without limitation.

The doctors participating in the study request the participation of patients 18 years of age or older who have been diagnosed for a major depression episode (American Psychiatric Association, 2000) and for whom the commencement of antidepressant treatment is indicated. Patients with psychotic or bipolar disorders, patients with alcohol or drug dependence, and patients who are pregnant or breastfeeding will be

Figure 1. Proceedings of the Controlled Clinical Trial. Flowchart: Randomization of Centers, and Sampling and Monitoring of Patients



excluded. The total sample will comprise 400 patients, half of whom will be recruited from the treatment centers and half from the control centers.

Data on the evolution of patients in the sample will be collected and monitored up to 1 year after inclusion (a baseline interview during the first week and at 3, 6, and 12 months) using standardized questionnaires conducted in a telephone interview with an independent certified interviewer. The interviewer will be unaware of which group the patient belongs to (blind interview).

The main variables evaluated are the severity of the depressive symptoms and the response and remission rates of the depressive episode. Other variables measured include the patient's quality of life, compliance with treatment, use of healthcare resources, satisfaction with care received, and financial costs.

Discussion

Scientific research shows that the effectiveness of treating depression in primary health care could be improved by adopting new strategies, particularly of an organizational nature (Gilbody et al., 2003; Gunn, Diggens, Hegarty, & Blashki, 2006; Neumeyer-Gromen,

Lampert, Stark, & Kallischnigg, 2004). The main limitation of the available evidence is that the studies are almost exclusively from the United States and are mainly from managed care–based organizations. This raises the question of whether strategies that are effective in the American health system could be similarly effective in the Spanish public health system, given the differences in sociocultural aspects and organization of health care. The aims of the INDI project are to create a program for treating depression in primary health care that can be easily applied to the Spanish healthcare system and to evaluate the benefits that could result from applying such a program.

The INDI model comprises an integrated package of several measures (organization for the systematic and structured treatment of depression, case management, professional training, clinical guidelines, a treatment algorithm, patient counseling and psychoeducation, etc.). We have borne in mind that it is to be applied in healthcare practice under "real" conditions so that if the results of the evaluation are favorable, it can easily be disseminated and applied on a broad scale. Application of the program does not require extraordinary resources: the main aim of the organizational measures is to optimize the use of those already available.

As the INDI model is a complex package with multiple components, it is difficult to establish the contribution of each individual component to the overall efficiency of the treatment. However, greater effectiveness has been demonstrated in complex models than in simple measures (e.g., the medical training of professionals or access to clinical guidelines), whose results have been less significant (Gilbody et al., 2003).

The INDI is a structured care model. However, the inherent complexity of its various interventions and the possibility (contemplated in the design of the program) that the application may be adapted to local and individual circumstances means that there may be difficulties in standardizing the interventions. Flexibility, which in "real" practice is an advantage, may make the dissemination of a standardized procedure difficult (Hawe, Shiell, & Riley, 2004).

We are currently conducting a clinical study to evaluate the effectiveness of this model and to improve the results that can be obtained in depressed patients. A clinical trial is a controlled situation, and professionals may be more motivated to participate in such a controlled situation than in "real" situations. The potential benefits, particularly if they are modest, may not be reproducible if the model is finally generalized to a context other than that of a research project.

Another weakness of the INDI model is that the interventions are carried out according to a therapeutic plan based on antidepressant pharmacological treatment that does not consider psychotherapy as a major therapeutic option despite the fact that it is fully recommended as the first option in certain types of depression (National Institute for Clinical Excellence, 2004). This is because in "real" healthcare practice in the Spanish health system, psychotherapy is a rather inaccessible resource. Although we could have included it in the "artificial" context of a research project, it would have been difficult to extend later to everyday practice.

Implications for Nursing Practice

One of the most novel aspects in our field is the development of the role of nurses in the systematic and structured management of depression in primary health care. We believe that this role should be carried out by generalist primary healthcare nurses because this favors the coordination of healthcare activities with primary healthcare doctors, avoids the artificial dichotomy between the physical and psychological needs of the patient, and treats their depression and their comorbid medical problems (when needed) in an integrated way. Relying on nurses on the staff of the participating primary healthcare centers rather than on external case managers is also a way of optimizing available resources.

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