Reconceptualizing Medication Management: Implications for Training and Clinical Practice

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Training of psychiatry residents in psychotherapy typically begins with an assessment of the patient followed by selection and delivery of an appropriate therapeutic intervention. All stages are supervised strategically with concurrent weekly case-focused supervision and didactic instruction in how to deliver the intervention. Careful attention is given to the technique, the therapeutic relationship, ways to address impasses that emerge, progress, and termination. This attention to technique often continues beyond residency training in the form of peer supervision, regular consultation, and sometimes additional formal training (eg, via programs at psychoanalytic institutes).

Contrast this with training in pharmacotherapy. Once the diagnosis has been made, supervision and didactics focus on the choice of medication, its biologic properties and effects, and the initial titration. Supervision of the case then takes a back seat. If the patient does not respond as expected, discussions occur about the next medication change, and once that decision is made, supervision of the case again takes a back seat. This approach is replicated in continuing medical education (CME). Updates on psychopharmacology tend to focus on attributes of the drugs and their use in disorders. What is striking is the relative lack of attention to how pharmacotherapy is delivered—the technique, the therapeutic relationship, the essential tasks of clinical visits, impasses, progress, and termination.

Why is this? Is the delivery process in pharmacotherapy any less important than in psychotherapy?

The Importance of "Nonspecific Factors" in Pharmacotherapy

Pharmacotherapy is a central, if not primary, competency for today's psychiatrist. National trends suggest that office-based psychiatrists are providing less psychotherapy and more medication management.[1] Regardless of one's practice profile, suboptimal performance in pharmacotherapy can result in decreased clinical response and even substantial harm to patients.[2] Applying the essential elements of pharmacotherapy beyond the selection of a medication has become critical in light of the repeated finding that 70% of the patient response to depression care is attributed to nonspecific factors.[3] While placebo effects, spontaneous change, and variance related to design issues may account for some of the response, clinical management (ie, the aspects of pharmacotherapy beyond the selection and prescription of the medication) appears to be the major contributing factor. In the NIMH Treatment of Depression Collaborative Research Program that compared interpersonal psychotherapy, cognitive-behavioral therapy, and imipramine, the strength of the therapeutic alliance accounted for more variance in the treatment outcome (21%) than did the treatment method itself (1%).[4]

These findings have been replicated in primary care studies. Augmenting routine primary care with collaborative care (including case management and patient education) has been shown to significantly improve patient response, with medication adherence and therapeutic alliance as two likely mediating variables.[5] In primary care, case management provides the essential elements of pharmacotherapy often not provided in a brief visit.

Given these and other findings, graduate medical education (GME), CME, maintenance of certification (MOC), and credentialing processes should focus attention on the acquisition and assessment of the entire pharmacotherapy skill set.

Quality Improvement and Competency-Based Education: Drivers of Change

Intense pressures to improve the quality of health care have emerged from a number of sources, including the patient safety movement (eg, Institute for Healthcare Improvement), the Institute of Medicine,[2] and regulatory bodies such as the Joint Commission and the Centers for Medicare and Medicaid Services. At the same time, the Accreditation Council for Graduate Medical Education (ACGME) has adopted educational outcome measures as an accreditation tool through an initiative referred to as the Outcome Project.[6] Finally, certification and recertification are becoming increasingly focused on demonstrated competence rather than exposure to content such as CME hours.[7] These developments have linked outcomes-based education with patient safety[6] and now require us to develop tools to promote and assess competence in pharmacotherapy.

Defining the Essential Tasks of Pharmacotherapy

To reconceptualize pharmacotherapy in the context of these quality- and competency-based education imperatives, we must define the essential tasks and associated skills of a medication management visit. A number of sources of expertise can be consulted, including standard psychopharmacology textbooks[8,9] and the psychiatric core competencies relevant to pharmacotherapy that have been established by the American Board of Psychiatry and Neurology[10] and the ACGME's Psychiatry Residency Review Committee. In addition, "medication management" has been defined in protocols for major research studies including the NIMH Collaborative Study on Depression[11] and the late-life depression studies at the University of Pittsburgh.[12,13]

While systematic research is needed to validate the essential tasks of a medication management visit, a number of items seem essential. These tasks, listed in Table 1, are central to training in pharmacotherapy. Curricula, whether in GME, CME, or MOC, must facilitate the acquisition and refinement of these skills.

Defining the essential tasks will also help determine how best to incorporate effective psychosocial interventions (eg, behavioral activation) into pharmacotherapy.[14]

Implications for Training: GME and Beyond

The pharmacotherapy curricula of the future should combine specialized didactics with performance assessment.

Didactics. As with didactics on psychotherapy technique, the essential tasks of pharmacotherapy deserve specialized didactics. Choosing validated symptom scales and incorporating them into routine practice represents one important topic. Several aspects of adherence and substance use should be addressed: (1) prevalence and association with less-than-expected response; (2) effective screening methods, including techniques such as "normalization" and "shame attenuation"; and (3) how to incorporate evidence-based management strategies (eg, motivational interviewing) into a medication visit. The didactic program should also focus on how to monitor and manage adverse effects. Additional critical topics include how to implement collaborative care principles, systematically approach less-than-expected response, engage patients and their families in treatment planning, and develop a therapeutic alliance within the frame of pharmacotherapy. These sessions should be interactive and skills oriented and use techniques shown to enhance learning (eg, activation of prior knowledge, self-assessment, opportunities to practice).

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Table 1. Essential Elements of a Pharmacotherapy Session

1. Assesses response with **focused interval history** (with target symptoms) **and validated symptom scales**
2. Assesses **adherence, adverse effects, and substance use**
3. Approaches the differential for less-than-expected response systematically
4. **Modifies** the treatment plan with evidence-based changes, including pharmacologic, behavioral (eg, sleep hygiene), supportive, family, and psychotherapeutic interventions
5. Addresses problems with adherence, adverse effects, and substance
6. Provides **support and reassurance**
7. Conveys **hope and optimism**
8. **Educates** patient about diagnosis, prognosis, treatment, and/or adverse effects
9. **Engages** the patient in treatment planning
10. **Collaborates** with other members of the treatment team and family members
11. Gives **practical advice (eg, behavioral activation such as exercise)**

A comprehensive program will, of course, also include learning about the other dimensions of pharmacotherapy, including psychopharmacology and clinical decision making.

Performance assessment. With the emerging focus on competence and quality as the outcomes of interest, the development of performance assessment instruments and strategies represents a crucial frontier for innovation. Such assessment programs must reliably determine clinical competence and provide feedback that promotes learning. These programs of the future will employ multiple strategies in order to measure all the important dimensions of pharmacotherapy, including knowledge, skill at performing the essential tasks, clinical decision making, patient care outcomes, interpersonal communication, practice-based learning and improvement, professionalism, and systems-based practice.

Direct (in vivo or video) observation has emerged as a primary method to assess the clinical interaction between patient and clinician. In fact, the very same video cameras used to tape psychotherapy sessions for supervision purposes can also be deployed in the service of pharmacotherapy training. Effective direct observation assessment programs possess several essential features: (1) direct, structured observation by a faculty member, supervisor, or peer; (2) evaluation of the observed performance relative to a reference standard, in this case the essential tasks of pharmacotherapy; (3) nonjudgmental communication of the perceived performance gaps and strengths to the learner with specificity, timeliness, and focus on modifiable behaviors; and (4) documentation of the learner's performance immediately after an observation.[15–19] Written feedback has been shown to augment verbal feedback and enhance learning.[20,21] A recent study[22] described the development of a direct observation assessment tool for pharmacotherapy and reported positive results on its feasibility and utility.

A number of additional assessment methodologies exist that can be adapted to pharmacotherapy in order to evaluate other performance dimensions.[23] These tools include chart review (eg, to measure adherence to guidelines for measurement-based care or monitoring for adverse effects), simulation (eg, to assess skill at assessing risk for violence), multisource feedback to obtain the patient's and team members' perspectives on the clinician's professionalism and interpersonal communication, chart-stimulated recall to assess clinical reasoning, and patient outcomes (eg, Patient Health Questionnaire-9 scores). These assessment programs will be equally relevant to the entire continuum of learning from GME through CME and certification to retirement.

Conclusion

Many powerful forces are converging: the patient safety and quality improvement movements, maintenance of certification, the adoption by the ACGME and perhaps CME of a competency-based framework, and an emphasis on measurement-based care. These movements and initiatives share a common focus on demonstrated competence and outcomes and are forcing fundamental changes in how we ensure quality. This focus differs from our prior paradigms, which emphasized structural (eg, nurse-to-bed ratio) and process (eg, 6 months of inpatient psychiatry or CME hours) measures. For pharmacotherapy, these changes represent an opportunity to reassert the importance of the dimensions of clinical management (beyond medication selection and prescription-writing) that have such a significant impact on our patients. They are also an opportunity to leverage the competence-based framework so that we improve the quality of care that we deliver and that our patients receive.

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