## **Family Practice Forum**

## The Biopsychosocial Model and Family Medicine

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In a recent Family Practice Forum, Smilkstein<sup>1</sup> writes as follows:

In a recent paper, Engle [sic] asked the rhetorical question, "Who are to be the teachers of the biopsychosocial model?" Psychiatrists were the mentors he chose for the model he has championed.

Although the recommendation of this distinguished professor of internal medicine and psychiatry could have been predicted, I was disappointed that my former University of Rochester Medical School professor had failed to offer a share of the teaching of the biopsychosocial model to family medicine.

In directing the teaching responsibilities to psychiatry, Engle, who has recently retired, was in a sense offering an inheritance gift to his discipline.

This so misrepresents what I wrote in that paper<sup>2</sup> and what I have stood for throughout my professional career that a response is required.

First, since I have been presented as having a bias toward psychiatry, it needs to be made clear that my training and personal identity is that of an internist with special interest in its psychosomatic and psychosocial aspects. I have had no formal psychiatric training and have never had a psychiatric practice. I have tried to achieve the level of competence in psychiatry that any competent physician should have. My teaching has been

mainly in clinical settings and with students, residents, and trainees destined for careers other than psychiatry. The Rochester postresidency program in behavioral and psychosocial medicine has aimed to develop teachers who can exemplify the biopsychosocial approach in their own disciplines. Its faculty includes eight psychosocially qualified internists, two obstetrician-gynecologists, four psychiatrists, and three behavioral scientists. Among the current trainees aspiring to roles as teachers are two internists, one family physician, and one obstetrician-gynecologist. That hardly suggests a decision to make psychiatrists the sole mentors for the biopsychosocial model.

My paper was based on remarks originally made to audiences composed largely of psychiatrists.\* Its fundamental aim was to dispute any claim by psychiatrists to an exclusive right to teach the psychosocial part of the model. To do so in effect refutes the model itself. Rather, their role and responsibility must be to help develop general-systems-oriented teachers who can function autonomously as exemplars of the biopsychosocial model in their own disciplines.

I went on to confront my psychiatrist audience

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<sup>\*</sup>Panel on liaison psychiatrists as teachers, American Psychosomatic Society, March 26, 1980; Keynote Address, The National Conference on Teaching the Psychiatric Aspects of Medical Practice, May 10, 1980; the M. Ralph Kaufman Memorial Lecture, Mount Sinai School of Medicine, September 25, 1980.

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Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of moderate to severe depression associated with moderate to

Contraindications: Known hypersensitivity to benzodiazepines or tricyclic antidepressants. Do not use with monoamine oxidase (MAO) inhibitors or within 14 days following discontinuation of MAO inhibitors since hyperpyretic crises, severe convulsions and deaths have occurred with concomitant use; then initiate cautiously, gradually increasing dosage until optimal response is achieved. Contraindicated during acute recovery phase following myocardial infarction.

Warnings: Use with great care in patients with history of urinary retention or angle-

Warnings: Use with great care in patients with history of urinary retention of drigicclosure glaucoma. Severe constipation may occur in patients taking tricyclic antidepressants and anticholinergic-type drugs. Closely supervise cardiovascular patients. (Arrhythmias, sinus tachycardia and prolongation of conduction time reported with use of tricyclic antidepressants, especially high doses. Myocardial infarction and stroke reported with use of this class of drugs.) Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving).

Usage in Pregnancy: Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Since physical and psychological dependence to chlordiazepoxide have been reported rarely, use caution in administering Limbitrol to addiction-prone individuals or those who might increase dosage; withdrawal symptoms following discontinuation of either component alone have been reported (nausea, headache and malaise for amitriptyline; symptoms [including convulsions] similar to those of barbiturate withdrawal for chlordiazepoxide).

Precautions: Use with caution in patients with a history of seizures, in hyperthyroid patients or those on thyroid medication, and in patients with impaired renal or hepatic function. Because of the possibility of suicide in depressed patients, do not permit easy access to large quantities in these patients. Periodic liver function tests and blood counts are recommended during prolonged treatment. Amitriptyline component may block action of guanethidine or similar antihypertensives. Concomitant use with other psychotropic drugs has not been evaluated: sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to essential treatment. See Warnings for precoutions about pregnancy. Limbitrol should not be taken during the nursing period. Not recommended in children under 12. In the elderly and debilitated, limit to smallest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects.

Adverse Reactions: Most frequently reported are those associated with either component alone: drowsiness, dry mouth, constipation, blurred vision, dizziness and bloating. Less frequently occurring reactions include vivid dreams, impotence, tremor, confusion and nasal congestion. Many depressive symptoms including anorexia, fatigue, weakness, restlessness and lethargy have been reported as side effects of both Limbitrol and amitriptyline. Granulocytopenia, jaundice and hepatic dysfunction have been observed rarely.

The following list includes adverse reactions not reported with Limbitrol but requiring consideration because they have been reported with one or both components or closely related drugs:

Cardiovascular: Hypotension, hypertension, tachycardia, palpitations, myocardial infarction, arrhythmias, heart block, stroke.

Psychiatric: Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania and increased or decreased libido.

Neurologic: Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns. Anticholinergic: Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract.

Allergic: Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus.

Hematologic: Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia.

Gastrointestinal Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tonque.

Endocrine: Testicular swelling and gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female and elevation and lowering of blood sugar levels.

Other: Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling.

Overdosage: Immediately hospitalize patient suspected of having taken an overdose. Treatment is symptomatic and supportive. I.V. administration of 1 to 3 mg physostigmine salicylate has been reported to reverse the symptoms of amitriptyline poisoning. See complete product information for manifestation and treatment. Dosage: Individualize according to symptom severity and patient response. Reduce to smallest effective dosage when satisfactory response is obtained. Larger portion of daily dose may be taken at bedtime. Single h.s. dose may suffice for some patients. Lower dosages are recommended for the elderly. Limbitrol 10-25, initial dosage of three to four tablets daily in divided doses, increased up to six tablets or decreased to two tablets daily as required. Limbitrol 5-12.5, initial dosage of three to four tablets daily in divided doses, for patients who do not tolerate higher doses.

How Supplied: White, film-coated tablets, each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) and blue, film-coated tablets, each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt)—bottles of 100 and 500; Tel-E-Dose® packages of 100;

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## BIOPSYCHOSOCIAL MODEL

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with some of their own inherent deficiencies as teachers of the biopsychosocial model. As products of the same narrow biomedical educational system as other physicians, many are just as prone to separate the psychosocial from the biological. In the process they tend to equate psychiatric with psychosocial, thereby perpetuating the dualist, reductionist position that these are domains separate from the rest of medical science.

Further, many psychiatrists do not adequately appreciate the fact that expertise in the psychosocial, as encountered in psychiatric practice, is by no means transferable to the rest of medicine. While there are psychosocial dimensions common to all aspects of medical practice and health care, the particular set of psychosocial knowledge and skills appropriate for autonomous functioning is not the same for the psychiatrist as it is for the family physician or the plastic surgeon or the ophthalmologist. Each set has its unique features. By this fact alone the psychiatrist can never fully qualify as the sole teacher of the biopsychosocial model for physicians in other clinical disciplines.

To resolve that dilemma, I invoked a pedagogic principle that is difficult to dispute:<sup>2</sup>

Effective education involves many processes, not the least of which is having role models with whom the learner can identify, a process especially crucial for the development of one's professional identity. One learns how to do by doing with others who already are expert at doing what one wants to do and experienced in being what one wants to be. One can learn much from other specialists, but autonomous functioning and a professional identity in a particular specialty can come only from working intimately with others in the same specialty.

I then went on to define in generic terms the desirable qualifications for the new teachers:

Clearly they must be physicians whose scientific model is biopsychosocial and who exemplify in their everyday work expertise in the psychosocial dimensions of their particular arena of practice. . . . What should be the role and responsibility of psychiatry for their education? In addition to its traditional role in basic psychiatric and psychosocial education, psychiatry must also identify and cultivate potential biopsychosocial "mutants" in other fields, that is, physicians who for whatever reason have themselves come to recognize the deficiencies of the

biomedical model and their need for a better understanding of the psychological and social aspects of medicine. Typically these people turn to psychiatrists for further education. The proper role of psychiatry . . . is to nurture and support them in their struggle to establish a new professional identity in their own field [\*] until they in turn can become role models for others.

By these criteria all first-generation, generalsystems-oriented teachers in family medicine are "mutants." I suspect most obtained their initial basic education and orientation from psychiatrists and behavioral scientists before they went on to become autonomous biopsychosocially qualified teachers and role models in their own disciplines.

Finally, what underlies the charge that I overemphasize the role of psychiatry to the neglect of family medicine, a complaint coming not from Smilkstein alone?<sup>3</sup> Presented as a challenge to psychiatrists, my paper was not intended to elaborate on the real or potential contributions from the other disciplines. Nonetheless, when addressing the practical issue of the role of psychiatry in cultivating the biopsychosocial model in our medical schools today, I did at least by implication give family medicine a relatively lesser role when I wrote:<sup>2</sup>

Psychiatrists, along with other behavioral scientists, continue to be in the best position to familiarize students and young physicians with the psychosocial knowledge basic for all of medicine.

and

For the present psychiatrists must also assume the major responsibility for qualifying other physicians to identify and master the psychosocial dimensions peculiar to their respective fields of practice.

The important qualifier is that this refers to teaching resources today and for the near future. All medical schools have departments of psychiatry; that is not yet true of family medicine. Virtually all medical students have curricular time with psychiatry, many in the preclinical as well as clinical year; not so for family medicine. Psychiatrists, particularly liaison psychiatrists, work with resi-

dents and trainees in many specialties, including family medicine. Family medicine does not have corresponding access to residents and trainees from other programs. Until biopsychosocially qualified educators are widely distributed among the clinical and preclinical disciplines of our medical schools, psychiatrists will have to continue to play the major role in bringing the biopsychosocial model to medical students and residents. Hence my plea to psychiatrists that they look to the qualifications of their own faculty and that they concentrate on cultivating "mutants."

Family medicine, working closely with psychiatrists and behavioral scientists, has already developed its own cadre of "mutants." The growth and popularity of family medicine as a new clinical discipline among young physicians has in good part resulted from the fact that it is inherently more patient and person oriented. Thus it appeals to a group for whom the biomedical model proves wanting, a group more receptive to the more inclusive general systems approach. That was also psychiatry's appeal, especially during these past three decades. Both have access to a new generation. Max Planck, the eminent physicist, once wrote, "A new scientific truth does not triumph by convincing its opponents and making them see the light, but rather because its opponents eventually die, and a new generation grows up that is familiar with it."4

For this new generation, family medicine will do well, as Smilkstein proposes, to emphasize the biopsychosocial approach as central to its basic philosophy. Let us hope that not as many in family medicine will follow those in psychiatry for whom biopsychosocial is more a political slogan than a new scientific paradigm. It was the politicizing of the model by some psychiatrists that provoked my remarks in the first place.

## References

<sup>\*</sup>Emphasis in the original manuscript that was eliminated in the final version.

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3.</sup> Letters to the Editor: The biopsychosocial model in medical education. N Engl J Med 307:760, 1982
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