OBG MANAGEMENT

Words to the wise: 4 secrets of successful pharmacotherapy

Put these all to good use: the placebo effect, conditioned responses, the power of suggestion, and participatory pharmacotherapy

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The therapeutic success of any medication depends on the interaction between its specific biochemical effects and nonspecific factors.[1] Therefore, clinical trial designers may view the placebo effect as undesirable, but it can be a valuable response that improves outcomes in medical practice. As Freud stated: "Expectation colored by hope and faith is an effective force with which we have to reckon … in all our attempts at treatment and cure."[2]

This article describes how experienced clinicians make use of the placebo effect and three other powerful, nonspecific elements of successful pharmacotherapy.

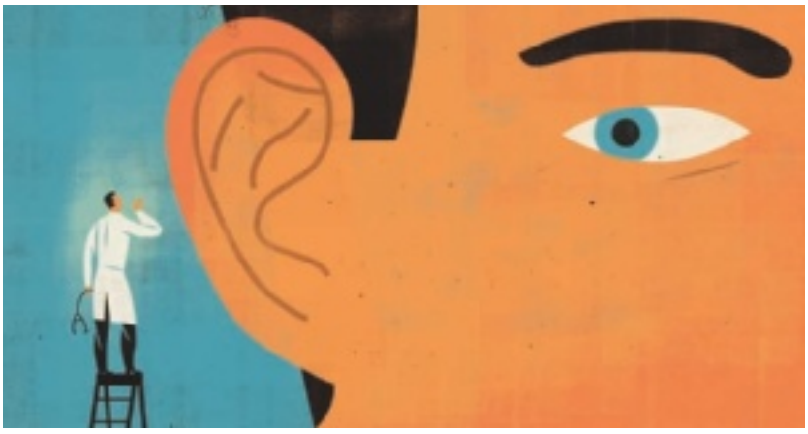
The placebo effect

Any effect attributable to a pill or potion that does not originate from its specific pharmaceutical properties is known as the placebo effect.[3] Its clinical value has been trivialized, in part because of misconceptions (**TABLE 1**, page 42). For example, the placebo effect is commonly believed to be short-lived; in fact, it can last a long time.[4]

In practice, our goal is to enhance the placebo effect to maximize a desirable therapeutic outcome (**TABLE 2**, page 42).[5] Therefore, before I prescribe a medication, I tell my patient that I have selected a particular medication because I have had good results with it in many other patients and I believe it will work well for her, too.

Too often, physicians feel pessimistic about a medication's potential therapeutic result, and communicate that pessimism. What the patient hears is: "There's nothing else I can do for you; why not try this medication, even though I don't believe it's going to work." This may create a negative

IN THIS ARTICLE



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FAST TRACK

The placebo effect can occur as soon as a patient starts a medication

placebo effect[6]—termed the “nocebo” effect—which gives the patient a negative expectation about the treatment’s outcome. The patient internalizes the physician’s statement and belief, and lives out this negative expectation.

CASE 1

Predicting positive results

Mrs. A. J. is a 38-year-old mother of two. She has symptoms of anxiety and depression, crying spells, poor appetite, and insomnia.

After taking a detailed history and examination, I recommend treatment with a combination of counseling and the antidepressant mirtazapine. I tell Mrs. A. J. that this medication has very good potential to help her recover. I also inform her that improved sleep and appetite may well be the first effects she’ll experience—even accompanied by restored hope and optimism. I then give her an appointment for the following week.

When Mrs. A. J. comes for the follow-up appointment, she reports improvement in appetite, sleep, and mood—as predicted.

Even though studies of antidepressants rarely show mood improvement within the first 7 days, it is not unusual to hear patients report feeling less depressed within days after they start a new antidepressant. The drug’s specific chemical effects on the brain may not be sufficient to explain this phenomenon; the explanation for such improvement probably lies in nonspecific effects, such as the patient expecting that this medication will make her feel better. The placebo effect can occur as soon as a patient starts a medication. Experienced clinicians understand the placebo effect’s power and harness it for their patients.

Conditioned responses

Many biologic responses can be associated with visual, auditory, tactile, olfactory, and gustatory stimuli. Nonconditioned physiologic responses paired with conditioned stimuli induce the same biologic effects as a drug. Evidence supporting this phenomenon includes successful conditioning of the immune system.[7–10] Conditioned responses—as demonstrated in glycemia regulation[10] and with psychopharmacology[11]—also can enhance the desirable results of pharmacotherapy.

CASE 2

A soothing drink

Ms. L. G. is a 24-year-old single college student who complains of irritability, short temper, and anxiety associated with obsessive worries about her health and her studies. Her symptoms become significantly worse before her menstrual period. Repeated diagnostic workups and pelvic examinations by her ObGyn have all been unremarkable.

At the beginning of this visit, Ms. L. G. is short of breath and looks anxious and worried. The nurse offers her a cup of tea; she asks for water instead, and is asked to bring it into the consultation-therapy room.

After a comprehensive interview and

TABLE 1 Correcting misconceptions about the placebo effect[4]

Misconception	What the evidence shows
Placebo effects are short-lived	The placebo effect has been documented to last for a long time
Only complaints of psychological origin respond to placebo	Changes after placebo have been documented for most symptoms, including those originating from somatic disease
Placebo responders and nonresponders are distinctly different	There is no difference between placebo responders and nonresponders
The placebo effect is only about one third of the total therapeutic effect	The placebo effect can be as much as 100% of the total therapeutic effect
Only about one third of the population responds to placebo	The placebo response is context-dependent, and may include more than 90% of the patient population

TABLE 2 Strategies to enhance the placebo effect[5]

Develop a sustained therapeutic partnership with the patient
Listen effectively and verify that she feels listened to
Provide comprehensible explanations of health problems therapeutically tailored to her needs and personality style
Show empathy, care, and concern for her as a person
Enhance her sense of control and mastery over her predicament

FAST TRACK

In practice, most clinicians give unintentional suggestions by how and what they communicate to the patient

mental status examination, I recommend treatment with a combination of cognitive behavior therapy (CBT) and medication. Considering Ms. L. G.'s history of treatment with other medications, we agree to start treatment with sertraline. We review the potential benefits and therapeutic expectations of alleviating her symptoms of anxiety and obsessive worries. She is also told that she can expect an improvement in mood.

I then give her a sample of 50-mg sertraline and ask her to take it right there in the office, sipping from the glass of water. As she swallows, I compliment her on her wise decision to start treatment. She thanks me for being attentive to her needs. She is instructed to call me in 1 week, even if she feels better, and report changes in her condition.

Seven days later, Ms. L. G. calls to report significant improvement in her symptoms. She reports no side effects.

Often, patients come to my office feeling thirsty. My staff or I offer them a glass of water or a cup of tea. As patients sip, they swallow and incorporate the liquid into their body. At the same time, I use verbal interventions to make them feel listened to and understood. They internalize this emotional experience in connection with swallowing the liquid.

Later, when swallowing the new medication as instructed, the patient again experiences the positive therapeutic effect that was internalized in the physician's office.

The power of suggestion

It has been shown that the power of suggestion can positively—or negatively—affect treatment outcome.[12,13] In practice, most clinicians give unintentional suggestions by how and what they communicate to the patient.

We make predictions about the patient's disease in terms of progress, severity of symptoms, and expected treatment outcomes, including possible side effects. The patient consciously and subconsciously internalizes these predictions, and then exhibits the outcome predicted by the medical expert. This is compatible with Watzlawick's principle that the prediction of an event may lead to events fulfilling the prediction.[14] In practice, be aware

CONTINUED ON PAGE 45

of the power in your words and body language and learn to use them wisely to enhance the positive outcome of pharmacotherapy.

CASE 3

Predicting improvement

Mrs. J. C., 48 years old, has had premenstrual dysphoric disorder (PMDD) and fibromyalgia for many years. She describes to me how specialists have tried to alleviate her depression and chronic pain. Follow-up questioning reveals that, whenever she received a new prescription, the physician would alert her to all the possible side effects and instruct her to call the office if she developed a problem with the new medication.

Invariably, Mrs. J. C. would call as instructed and describe side effects she developed with the new medication. Often, the physician would discontinue the medication, depriving her of benefits she might have obtained later.

My approach is different. Although I answer all of Mrs. J. C.'s questions about potential side effects, I also emphasize this prescription's potential benefits—improved sleep, appetite, thoughts, and mood. I tell her she may experience improved sleep before improved mood. I then make a request: "Promise to call me by Tuesday next week, even if you begin to feel better?"

When Mrs. J. C. calls to report her status, she mentions that she is sleeping better and has begun to feel better during the day.

This vignette illustrates the importance of suggesting to the patient a positive outcome of pharmacotherapy associated with a particular action (calling the physician's office to report results). When the patient promised to call, she internalized the suggestion that calling would be associated with feeling better—and that is what happened. Contrast that with saying to her: "Call me if you have a problem with any of these side effects," which gives her a suggestion to report a problem.

The suggestion effect also can be used to reframe a predictable side effect as a positive sign that indicates the beginning of change leading to recovery (see "Using suggestion to reframe initial side effects as positive signs").

Using suggestion to reframe initial side effects as positive signs

Ms. M. K. is 34 years old and unmarried. She suffers chronic tension headaches associated with anxiety, depression, and insomnia. Numerous diagnostic workups have been negative.

After taking a detailed history, I decide to prescribe amitriptyline. I tell Ms. M. K. about this medication's potential benefits and side effects, including the common one of dry mouth, which often occurs before a patient experiences a therapeutic effect. I tell Ms. M .K. that dry mouth will be a sign for her that the medication has begun to work, and the beneficial effect will soon follow. I instruct her to call my office and report when the sensation of dry mouth has begun.

In pharmacotherapy, side effects may appear before patients experience a medication's beneficial or therapeutic effects. Patients' initial experience often determines whether or not they will continue taking a prescribed medication. I know that Ms. M. K. may stop taking amitriptyline—as she has done with other medications—if she has uncomfortable side effects at the outset.

Instructing a patient to expect a specific side effect (such as dry mouth with amitriptyline) and associating it with a future therapeutic benefit sets up a roadmap of expectations: She knows that her experience is compatible with the physician's prediction. For Ms. M. K., I reframed the side effect as a positive sign that recovery has begun, with more positive changes to come.

Participatory pharmacotherapy

Many patients seek ownership in making decisions about their treatment and medications. In participatory pharmacotherapy, patients provide you with data and valuable information—family history, personal medical history, experience with treatment—and inform you about which medications worked best. You invite patients to predict how they see themselves getting better and into recovery.

Based on this information and your knowledge, training, and experience, you and the patient jointly create a treatment plan that includes tailored pharmacotherapy. The next case illustrates the use of participatory pharmacotherapy to enhance treatment.

CASE 4

All in the family

Mrs. B. R., age 52, suffers from diabetic polyneuropathy, with tingling, numbness, and pain in her legs, feet, and hands. These symptoms

TABLE 3 Choosing patients for participatory pharmacotherapy

Good candidates	Exclusionary qualities
Adults	Children, adolescents, and prison inmates
No history of alcoholism or drug addiction	Alcohol dependence or drug addiction
Average or above-average intelligence	Below-average intelligence
Intact cognitive function	Cognitive deficits, such as dementia
Not psychotic	Actively psychotic
Good comprehension of diagnosis and treatment	Poor comprehension of diagnosis and treatment
Therapeutic alliance is present	Therapeutic alliance is absent
Personality style or disorder with a need to be in control of treatment, such as obsessive–compulsive personality	Passive, dependent personality style or disorder (these patients may view a participatory approach as reflecting the physician's lack of confidence)

are associated with anxiety, sadness, and worry. A detailed history reveals that these symptoms persist even though her blood glucose level has been in the target range and she has already achieved her goal of weight control with proper diet and exercise.

Mrs. B. R. then reports to me that her cousin, who has the same diagnosis, recently started to take venlafaxine with very good results. She asks me if we can consider this medication as part of her treatment.

I compliment Mrs. B. R. for her knowledge of her condition and her cousin's treatment results. She responds by elaborating on her readings about venlafaxine on the Web and how convinced she is that this medication will help her as it helped her cousin.

I also reassure Mrs. B. R. that, together, we will make decisions about what medications to use and what to avoid based on her experiences. Her input into this process of choosing the best medications for her is valuable and will also be considered in future situations. She smiles and thanks me for considering her suggestions.

Inviting patients to be partners in diagnosing their illness and formulating a treatment plan improves the likelihood of a successful therapeutic alliance; adherence with prescribed medication; and the best possible outcome of pharmacotherapy.

Not all patients are candidates for participatory pharmacotherapy (**TABLE 3**), but many respond well. Avoid medications that the patient has already found unhelpful, ineffective, or associated with intolerable side effects. If possible, choose medications that the patient associates with a positive experience or expectation, based on family and personal history.

In patients with a defiant-oppositional personality, consider framing the treatment decision as a choice between two equally efficacious medications. This gives the patient the sense of control in choosing her medication, which is jointly monitored.

Related resources
See Dr. Torem's accompanying reading list on page 47

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CONTINUED ON PAGE 47

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