From Persephone to psychiatry: Busting psychopharmacology myths

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Myths describe a legendary story and explain a model of behavior or natural event. For example, the story of Persephone’s abduction by Hades and subsequent return from the Underworld has described the changing of seasons and the cycle of growth and rebirth.

A clinical psychopharmacology practice that may—or may not—be evidence-based also can be considered a myth. We offer principles to help “bust” or prove this type of myth.

Factors to consider

When initially evaluating a specific pharmacologic practice, ask yourself:

- Is this an FDA-approved indication?
- Is this an evidence-based practice?
- Does the medication have a plausible pharmacologic mechanism in the context of its use?
- What is the source of the information that led to this prescribing practice?
- How many different treatments have you tried?
- What is the clinician’s and/or patient’s experience?

Ideally, prescribing practices are steeped in solid evidence. For myriad reasons, data regarding medication use in some psychiatric disorders are sparse. In these cases—or when evidence-based approaches to patient care are inadequate—prescribers can rely on only theoretical postulates and clinical experience.

Clinical experience differs among providers and within a practice, which renders it difficult to operationalize. A knowledge base derives from the accumulated day-to-day work with real world patients and should not be undermined. However, examining the extent to which your practice is related to experience and/or evidence-based information may help to avoid errors in medical decision-making, including:

- availability bias: judging events by the ease to which examples come to mind
- confirmation bias: confirming what you expect to find
- anchoring: not thinking through multiple possibilities
- commission bias: tendency toward action vs inaction.

Re-examining a prescribing practice is not time-consuming. Techniques include:

1. Using a database such as Dynamed (www.ebscohost.com/dynamed) or UpToDate (www.uptodate.com) to obtain summarized information regarding levels of evidence. This can be done easily with the patient in the room.

2. Performing a quick PubMed or MEDLINE search and reviewing the list of journal articles, assessing quantity of information and quality of studies (ie, looking for

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Kontos, polypharmacy

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reputable journals and studies with good research methodology, a large number of subjects, and independent funding).

3. Reviewing abstracts with relevant information, and reading full articles if compelling.

4. Searching specifically for pertinent reviews or meta-analyses. Many databases allow you to filter articles by type. After reading a review, examine the references, and pull articles for further reading if relevant.

‘Busting’ a psychopharmacology myth doesn’t preclude its use. However, in an era when evidence-based medicine is highlighted and treatments are developed on a regular basis, it pays to think twice when prescribing, and to review the literature routinely. When engaging in shared decision making with patients, it is valuable to summarize what exists—or doesn’t—as evidence in literature and differentiate it from clinical experience.

The myth of Persephone describes the cyclical nature of the harvest; crops grow from seeds, mature in sunlight, and are harvested, then recycled during winter to grow again. Similarly, a prescribing practice should be seeded in evidence, cultivated with clinical experience, and habitually re-examined.

Reference