

Chapter 12

Ray: A Man Fearful of Panic Attacks



Ray is a 27-year-old single, white, cisgender, heterosexual man. He sought mental health services due to panic attacks and increasing concern that they would reoccur. This is despite the fact that he has had only four attacks in all, each occurring in the past 6 months. “The attacks are horrible, but now I am even more worried that they will come back.” He has only had panic attacks in his apartment. He notes no precipitant or sensations that might warn of an oncoming attack. “It’s such a mystery—they just come on me—this just makes it harder.” During the attacks he sweats and trembles; he says he feels “like there’s electricity running through me.” He feels faint but only once felt that he was choking. “Only one time did I fear I was going to die... I couldn’t really catch my breath. It was the worst. That’s why I’m here today.” He denies any numbness during or after the attacks, any chest pains, or any fears he is going crazy. “It just takes me over.”

Ray is a computer and network installer and repair technician. He is college-educated. He runs a small business with a college friend, begun 4 years ago. Their business has been successful, and his income is “good enough” and “steady.” He has no legal issues. Still, his concern about more panic attacks is making it harder for him to do on-site service work for customers. “I’m doing the work visits, but I am worrying more and more. I can’t get the fear out of my head.” Despite the attacks, he has done his work appointments. “Recently it has become harder, ‘cause I worry more and more about having an attack, but I still do my job.” He shows only hints of potential agoraphobia.

Ray has had no prior mental health concerns and has had no medical issues, including a physical exam 2 months ago which revealed no cause for concern. He denies changes in mood other than his growing concern about more panic attacks. He denies changes in weight, eating, or sleeping habits. Ray denies any suicidal ideation other than wondering if he’d have been better off dead after his worst attack in which he thought he would die. This ideation did not continue. He has no identified plans for suicide or passive self-harm and seemed truly puzzled when he was asked about this. He notes no family history of mental health issues or undue

anxiety, which makes him feel even more different. His parents run a family florist business that employs his older brother and sister; he says, “I can always work there if I want to.” He likes his sibs and knows he could work in the family business but instead wanted to try his hand at his own business. The family was supportive of his decision but teases him at times about “going his own way.” Ray says it is only teasing: “there is no doubt I’d be there if they really needed me. But they have too many people working for the work they do.” His beloved grandfather died 18 months ago, which was a significant loss of a lifelong caregiver and source of support, but Ray does not see this as related to his panic attacks. Ray has a circle of friends from work and college, with whom he plays softball and “sometimes drinks too much.” He says he used cannabis and tried cocaine in college but denies current use. He has had two relatively long-term sexual relationships with women, including an engagement that did not work out just after college. He wishes he could “find the right girl” but is not worried it will happen.

Ray can identify his own strengths as persistent, “pretty smart,” willing to take risks (such as in starting the business), loyal—always there for my family and friends—having a sense of humor, and being tolerant of different ideas. He sees himself as well supported by family and friends, who have both attributes he likes and enjoys as well as small flaws that bug him at times.

Beyond the panic attacks, which he says, “are only recent,” Ray thinks his limitations are “I’m kind of sloppy,” “I should put more time into learning the technical side of the business, but instead I watch sports on my own or with my friends,” and “my mother says I should be around more.” He does not seem overly self-doubting or unable to view himself and other people in a flexible and balanced manner.

Applying the Six Steps of EBP to the Case

Step 1: Drawing on Client Needs and Circumstances Learned in a Thorough Assessment, Identify Answerable Practice Questions and Related Research Information Needs

Ray fits DSM criteria for a panic disorder. Ray was actively involved in his assessment and appeared to be forthcoming if sometimes a bit puzzled by questions about his family and history. He has had unexpected panic attacks and over a period of about 6 months, and his worry about them has become persistent and intensified. His behavior has not (yet) changed due to the attacks, but this has become a source of some concern for Ray. His panic attacks do not appear related to substance use or medication use. He does not appear to fit criteria for either social or specific phobia, obsessive-compulsive disorder, or post-traumatic stress disorder as alternative source of his symptoms. Ray does not appear to fit the criteria for a personality disorder, nor does he appear to have a medical condition which might be the source of the panic attacks. He reports that he has had a recent physical exam showing no medical concerns.

Ray's life circumstances have not changed significantly in the past few years beyond the death of a beloved grandparent. His overall social and employment functioning appears essentially unchanged over the past few years, though his panic attacks are raising the possibility of future withdrawal which might impact on both areas. He has several sources of support and resilience and very few other challenges.

Panic disorder is associated with increased risk for agoraphobia and for depression. Onset for panic disorder often occurs in young adulthood, specifically during the 20s. It is a low prevalence disorder at 2–3% of the population but common in prevalence for mental health disorders.

In the PICO model, the *Population* is adult males with panic attacks or, more formally, panic disorder. The *Interventions* under consideration are psychotherapies and similar psychosocial interventions as well as medications. *Comparisons* would be between different therapies or psychosocial interventions as well as among medications and combinations of medications and psychosocial therapies. The *Outcomes* would be reducing the frequency of Ray's panic attacks and worries about them, as well as ideally ending the panic attacks.

Step 2: Efficiently Locate Relevant Research Knowledge

A visit to the Cochrane Collaboration web site (www.cochranelibrary.com) reveals at the time of writing seven systematic reviews (SRs) related to panic disorder. All are studies of adults, and five involve medication. Two SRs focus on psychotherapy, alone or in combination with medication. One review examines anxiety and comorbid alcohol abuse, so is not relevant to Ray's needs. Another focuses on repetitive transcranial stimulation but found too little evidence to support any conclusions at this time. These reviews were completed between 2007 and 2018 (the year in which this chapter was written). The reviews note that panic disorder can be treated with pharmacotherapy, with psychotherapy, or with both in combination. However, the systematic review abstracts indicate that the relative merits of combined therapies were previously not well established through research results. Further, the advantages of the different types of therapy might vary over time. That is, while one therapy might be most helpful initially, another might prove more helpful over an extended period of time. Thus, both short- and long-term effectiveness should be appraised.

In regard to psychotherapy, Pompoli et al. (2016) sought to examine if any specific psychotherapy had better effect than did other therapies or control conditions. They found research on eight different psychotherapies: behavioral therapy, cognitive therapy, cognitive-behavioral therapy [CBT], third-wave CBT, psychodynamic therapies, supportive psychotherapy, physiological therapies, and psychoeducation. They included 54 relevant studies in their analysis, 32 of which addressed CBT. They report that “the quality of the evidence for the entire network [of all the studies] was found to be low for all outcomes. The quality of the evidence for CBT vs control,

CBT vs supportive therapy, and CBT vs psychodynamic therapy was low to very low, depending on the outcome. The majority of the included studies were at unclear risk of bias with regard to the randomisation process” (Abstract, main results).

Overall, Pompoli et al. (2016) conclude that:

There is no high-quality, unequivocal evidence to support one psychological therapy over the others for the treatment of panic disorder with or without agoraphobia in adults. However, the results show that CBT—the most extensively studied among the included psychological therapies—was often superior to other therapies, although the effect size was small and the level of precision was often insufficient or clinically irrelevant. In the only two studies available that explored PD [psychodynamic therapy], this treatment showed promising results, although further research is needed in order to better explore the relative efficacy of PD with respect to CBT. Furthermore, PD appeared to be the best tolerated (in terms of [short-term] dropouts) among psychological treatments. (Abstract, author’s conclusions)

In their plain language summary, intended to help clients understand this material, they state that:

The results of the review show that in general talking therapies are more effective than no treatment. There was no strong evidence to support one talking therapy over the others for the treatment of panic disorder with or without agoraphobia in adults. However, there was some low-quality evidence in favour of cognitive behaviour therapy (CBT), psychodynamic therapy and supportive psychotherapy over other talking therapies for short-term remission and short-term reduction in symptoms... (Plain language summary, what does the evidence from this review tell us?)

Psychotherapy for panic disorder is more effective than no treatment, and several forms of therapy may be useful.

In another systematic review, Watanabe, Churchill, and Furukawa (2009) studied treatment combining both psychotherapy and benzodiazepines. They found only three studies meeting their inclusion and quality standards. There was no statistically significant difference between combined use of benzodiazepines and therapy compared to therapy alone during the intervention period (relative risk (RR) for combined therapy 1.25, 95% CI 0.78 to 2.03, $p = 0.35$). Nor was there any difference at the end of intervention (RR 0.78, 95% CI 0.45 to 1.35, $p = 0.37$). Both conclusions were based on two studies involving 166 patients. There was also no statistically significant difference between combined therapy compared to treatment by benzodiazepines alone during the intervention (RR 1.57, 95% CI 0.83 to 2.98, $p = 0.17$) in one study involving 66 patients. There was also no statistically significant difference at the end of treatment (RR 3.39, 95% CI 1.03 to 11.21, $p = 0.05$) or at 7 month follow-up (RR 2.31, 95% CI 0.79 to 6.74, $p = 0.12$).

The relative risk values indicate that medication and therapy did yield somewhat better results than did therapy alone, but statistically these results were not significant (p values were less than 0.05) and may be due to chance alone. The 95% confidence intervals were also large compared to the RR value, suggesting the results may not be consistent with those likely to be found in the larger population.

Watanabe, Churchill, and Furukawa (2009, Plain language summary) state there is a “paucity of high quality evidence investigating the efficacy of psychotherapy

combined with benzodiazepines for panic disorder. Currently, there is inadequate evidence to assess the clinical effects of psychotherapy combined with benzodiazepines for patients who are diagnosed with panic disorder.” Yet this preliminary evidence, to Cochrane Collaboration standards, indicates that *either* behavioral therapy alone *or* in conjunction with benzodiazepines has empirical support for use with panic disorders.

Figure 12.1 displays a forest plot of the comparative effectiveness of behavioral and cognitive-behavioral therapies, with and without benzodiazepine medication, on global anxiety scores at the end of treatment from the Watanabe et al. (2009) SR. Note that the box and whisker plots are largely on the right-hand side of the dividing line. This indicates that the results favor psychotherapy alone. The key to this interpretation is provided at the bottom of the chart (“favors PT” = favors psychotherapy alone). However, each of the box and whisker plots and the summary diamond plots touches the dividing line. This indicates that the advantage of psychotherapy over combined psychotherapy and medication is a relatively small one. Both treatments can be effective as noted in the plain language summary reported above. Note, too, that the plain language summary also incorporates effectiveness on other outcomes, not only reduction in global panic severity at the end of treatment. As stated, Ray might consider either psychotherapy alone or in combination with benzodiazepine.

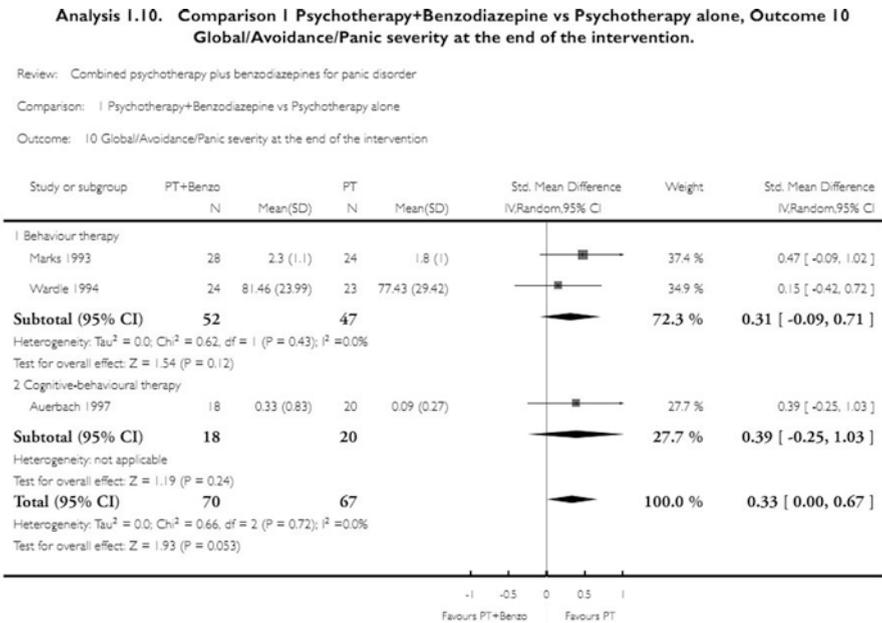


Fig. 12.1 A forest plot comparing the effectiveness of psychotherapy versus psychotherapy plus benzodiazepine medication on panic severity at the end of treatment. (From Watanabe et al., 2009, p. 37)

In a third SR, Bighelli et al. (2018) studied whether antidepressants were more effective in treating panic disorder than was a no treatment control condition. Their review found 49 placebo-controlled studies of antidepressants versus placebo, including 8252 participants. No more detail about the participants is provided in the SR abstract. Bighelli and colleagues state that “the majority of studies were of moderate to low quality due to inconsistency, imprecision and unclear risk of selection and performance bias” (Abstract, main results). They continue, saying,

We found low-quality evidence that revealed a benefit for antidepressants as a group in comparison with placebo in terms of efficacy measured as failure to respond (risk ratio (RR) 0.72, 95% confidence interval (CI) 0.66 to 0.79; participants = 6500; studies = 30). The magnitude of effect corresponds to a number needed to treat for an additional beneficial outcome (NNTB) of 7 (95% CI 6 to 9); that means seven people would need to be treated with antidepressants in order for one to benefit. We observed the same finding when classes of antidepressants were compared with placebo. (Abstract, main results)

Bighelli et al. (2016) also report moderate-quality evidence that antidepressants were slightly less likely to cause treatment dropout than were placebos (NNTB of 27; 95% CI 17 to 105) but also moderate-quality results indicating antidepressants were less well tolerated than were placebos. It appears that antidepressants have clear but modest benefit over placebo in treating panic disorder. Ray might choose an antidepressant medication over benzodiazepines, alone or in combination with psychotherapy.

Three individual studies located on PubMed also appear relevant and pointed to additional treatments for consideration. Having alternatives is important if Ray proved unwilling or uncomfortable with some potential treatments. They also allow Ray to make informed decisions about alternative treatments. Wiborg and Dahl (1996) compared a psychodynamic psychotherapy and antidepressant medication for panic attacks over an extended follow-up period. They cited prior work indicating that panic disorders, treated by medication alone, had variable but potentially very high rates of reoccurrence (20 to 30% at the low estimate, 70 to 90% at the high estimate according to Ballenger (2003)). They sought to reduce relapse rates by combining brief psychodynamic psychotherapy adapted from Davenloo (1978) as well as Strupp and Binder (1985) coupled with medication. The issue of relapse rates would be an important piece of information to communicate to Ray as part of his treatment planning process. Milrod et al. (2007) studied psychodynamic psychotherapy separately and in combination with medication for panic disorders. Berger et al. (2004) studied the effectiveness of antidepressants combined with interpersonal treatment for panic disorder, but in a population of persons with comorbid personality disorders, that did not fit with Ray.

Wiborg and Dahl (1996) studied people diagnosed using the now dated DSM-III criteria for panic disorder. They randomly assigned 20 patients to clomipramine therapy for 9 months and another 20 patients to combined clomipramine with 15 weekly sessions of brief dynamic psychotherapy. Outcomes were measured by patient reports of panic attacks and by the Hamilton Rating Scale for anxiety and the Panic Attack and Anxiety Scale. They followed the patients for numbers of panic attacks and levels of both anxiety and depression at 6, 12, and 18 months after beginning either treatment. The relapse rate was significantly higher after 9 months

for patients treated with medication alone (panic attacks $M = 0.8$, $sd = 0.8$ versus $M = 0.0$, $sd = 0.0$ for the therapy and medication group; effect size $d = 2.07$ for medication alone versus $d = 3.20$ for medication and therapy). There were no significant differences on the Hamilton Anxiety Rating Scale scores between groups. Psychotherapy appears to be helpful in sustaining improvement and avoiding future relapse but not for overall anxiety.

Milrod and colleagues found that across a racially mixed sample, the 26 clients receiving panic-focused psychodynamic psychotherapy completed therapy with significantly lower Panic Disorder Severity Scale scores ($M = 5.1$, $sd = 4.0$ to $M = 9.0$, $sd = 4.6$; $t = 3.30$, $df = 47$, $p = 0.002$; effect size = 0.95; no CIs were reported) than did 13 clients receiving relaxation therapy. However, scores on the Hamilton Anxiety and Hamilton Depression Rating Scales did not differ significantly. One person in the relaxation group worsened significantly and was dropped from the study and offered medication. This is a point worth mentioning as a possible risk to track carefully for Ray and any other person with panic attacks. This study was impressive for its inclusion of racially diverse patients, which might prove very relevant in some clinical situations.

Overall, it appears that the combination of therapy and medication is likely to be effective in treating Ray's panic disorder. There are alternatives for Ray to consider in regard to treatment by psychotherapy alone versus psychotherapy in combination with medication. While this discussion would be between Ray and his prescribing physician, it appears that antidepressants more often generate unpleasant side effects than do anti-anxiety medications. Ray does not appear depressed, so anti-anxiety medications may also fit better with his clinical presentation. On the other hand, anti-anxiety medications have potential for abuse and/or overuse, though Ray does not seem to have a significant history of abuse of substances or medications. Given his panic and level of desperation, however, caution is in order. It would also be a reasonable choice to consider psychotherapy without medication.

Step 3: Critically Appraise the Quality and Applicability of This Knowledge to the Client's Needs and Situation

In terms of psychotherapies, cognitive-behavioral, psychodynamic and supportive therapies have been studied and demonstrate effectiveness with panic disorders. Combining medication with psychotherapy did not improve client outcomes. Notably, cognitive-behavioral therapy (CBT) has been studied more than other psychotherapies. There appear to be strong options for Ray to consider. If Ray is uncomfortable with CBT, there is some evidence in support of brief psychodynamic psychotherapy as an effective treatment for panic disorder, but the evidence base for this recommendation is less well developed than is the evidence base for CBT.

The study samples were not limited to men only, though there is no clear reason to think that these therapies would be contraindicated for Ray based on his age or

gender. With only one exception, the studies examined did not state that they included people of color or other groups for whom socially structured oppressions might influence treatment effects.

Step 4: Actively and Collaboratively Discuss the Research Results with the Client to Determine How Likely Effective Options Fit with the Client's Values, Preferences, and Culture

The clinician used information from the plain languages summaries included in the systematic reviews to bring research information to Ray for consideration. In regard to psychotherapy, the social worker stated that “research results show that talk therapy is more effective than is no treatment. But, there is no strong evidence to support one type of talk therapy over the others. The research results are viewed as low to moderate in quality; with some evidence supporting the benefits of cognitive behavioral therapy (CBT), psychodynamic therapy, and supportive psychotherapy in terms of their short-term results.” In terms of medications, the social workers stated that “a few studies found no additional benefit by combining psychotherapy with an anti-anxiety medication called benzodiazepine—called Xanax or Valium in pharmacies. These drugs are fast acting but may lead to dependence if used over time. A few other studies looked at several different types of antidepressant medications as treatments for panic disorder and found some benefit compared to no treatment. But one study showed some people disliked the side effects of taking antidepressants.” The social worker offered Ray the internet URL links to the Cochrane Systematic reviews if he wanted to look at the research results more closely.

The information appeared clear enough for Ray to follow, but he had questions about some of the caveats in the SR summaries. First, he was surprised that the results were not more clear and compelling. “They sure cover their tails well. The language seems ‘weaselly,’ like they really aren’t sure.” Ray’s comment is, of course, an accurate statement given the research results are low quality and show little difference across therapies. Still, some psychotherapies have been empirically demonstrated to effectively treat panic disorder.

Step 5: Synthesizing the Client's Clinical Needs and Circumstances with the Relevant Research, Finalize a Shared Plan of Intervention Collaboratively with the Client

Ray chose a manualized cognitive-behavioral therapy (Clinical Research Unit for Anxiety Disorders, 2010) after discussion of these alternatives with his clinical social worker. He had only a few questions but had some clear preferences regarding medication. He was not interested in taking medication at first, though he was

happy that medication could be a “backup plan” if therapy alone did not work well enough. He clearly did not like the idea of possible medication side effects of any kind. He understood the general idea of cognitive-behavioral therapy and was open to it. He was open to doing homework outside the therapy sessions. It was clear his outlook on the therapy was positive.

Cognitive-behavioral therapy for panic disorder was immediately available for Ray through his community mental health clinic. The clinic would also make access to a psychiatric consult for medications possible should it become appropriate. Ray said he would consider medication if the therapy alone did not lead to improvement.

Step 6: Implement the Intervention

The main challenge of the treatment planning was the lack of an obvious precipitant. Ray’s concerns were general and difficult for him to pin down as specific cognitions. It took some time for Ray to think of his fear of the next panic attack as a way of thinking that he could address in therapy. Once he caught on to this idea, he was able to combine relaxation techniques and breathing exercises with increasing exposure to thoughts of another panic attack. Each session included monitoring of the number of panic attacks he had had between sessions. The number reduced quickly, as did his concern about having more attacks. Ray also appeared more relaxed in sessions. He concluded therapy after eight sessions over 10 weeks. Eight weeks later he reported having no further panic attacks and much lower worry about them reoccurring.

Given the apparent effectiveness of the treatment, no additional structured evaluation of outcome was undertaken. Ray’s descriptions of the reduction in both number of panic attacks and worries about them were formally documented in his clinic record. His reports on the frequency of his panic attacks over the 10 weeks were also recorded. This would have allowed for a single-case evaluation, but the clarity of his improvement did not make such a formal evaluation model appear necessary. Ray was quite satisfied with his treatment and its results.

References

- Ballenger, J. (2003). Selective serotonin reuptake inhibitors in the treatment of anxiety disorders. In D. Nutt & J. Ballenger (Eds.), *Anxiety disorders* (pp. 339–361). Malden, MA: Blackwell.
- Berger, P., Sachs, G., Amering, M., Holzinger, A., Bankier, B., & Katschnig, H. (2004). Personality disorder and social anxiety predict delayed response in drug and behavioral treatment of panic disorder. *Journal of Affective Disorders, 80*, 75–78.
- Bighelli, I., Castellazzi, M., Cipriani, A., Girlanda, F., Guaiana, G., Koesters, M., et al. (2018). Antidepressants versus placebo for panic disorder in adults. *Cochrane Database of Systematic Reviews, 2018*(4), CD010676.

- Bighelli, I., Trespidi, C., Castellazzi, M., Cipriani, A., Furukawa, T. A., Girlanda, F., et al. (2016). Antidepressants and benzodiazepines for panic disorder in adults. *Cochrane Database of Systematic Reviews*, 2016(9), CD011567.
- Clinical Research Unit for Anxiety Disorders (CRUFAD) of St Vincent's Hospital, Sydney, Australia. (2010). *Anxiety and panic disorder patient treatment manual*. Retrieved from https://crufad.org/wp-content/uploads/2017/01/crufad_Panicmanual.compressed.pdf
- Davenloo, H. (Ed.). (1978). *Basic principles and techniques of short-term dynamic psychotherapy*. New York: Jason Aaronson.
- Milrod, B., Leon, A., Busch, F., Rudden, M., Schwalberg, M., Clarkin, J., et al. (2007). A randomized controlled clinical trial of psychoanalytic psychotherapy for panic disorder. *American Journal of Psychiatry*, 164, 265–272.
- Pompoli, A., Furukawa, T. A., Imai, H., Tajika, A., Efthimiou, O., & Salanti, G. (2016). Psychological therapies for panic disorder with or without agoraphobia in adults: A network meta-analysis. *Cochrane Database of Systematic Reviews*, 2016(4), CD011004.
- Strupp, H., & Binder, J. (1985). *Psychotherapy in a new key*. New York: Basic Books.
- Watanabe, N., Churchill, R., & Furukawa, T. A. (2009). Combined psychotherapy plus benzodiazepines for panic disorder. *Cochrane Database of Systematic Reviews*, 2009(1), CD005335.
- Wiborg, I., & Dahl, A. (1996). Does brief dynamic psychotherapy reduce the relapse rate of panic disorder? *Archives of General Psychiatry*, 53(8), 689–694.