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Complementary Therapies

- I. Definition
 - A. Understand that there is no definition for complementary and alternative therapies (CATs).
 - B. Complementary and alternative therapies are therapies and beliefs that currently are not accepted as part of conventional medicine. Complementary therapies may be considered as those that are used alongside conventional medicine, and alternative therapies as those used instead of conventional medicine.
- II. What are complementary and alternative therapies?
 - A. Be aware that the distinction is unclear between therapies considered to be CATs as opposed to mainstream medicine. Behavioral and cognitive therapy, counseling, and dietary advice are considered mainstream. Transcutaneous electrical nerve stimulation (TENS) and acupuncture are both covered in the chapter on stimulation-produced analgesia and lie partly in each camp.
 - B. Be aware that CATs cover a wide spectrum of interventions that vary greatly in their methods, age, and philosophies. The list of therapies is constantly changing.
 - C. The National Center for Complementary and Alternative Medicine (NCCAM), part of the National Institutes of Health, classifies CATs into five categories:
 1. Alternative medical systems are built upon complete systems of theory and practice. Some are much older than conventional medicine (e.g., traditional Chinese medicine), and others have developed within Western culture (e.g., homeopathic medicine).
 2. Mind-body interventions use techniques designed to enhance the mind's capacity to affect bodily function and symptoms. Some have become mainstream (e.g., cognitive-behavioral therapy), while others are still considered CAM (e.g., mental healing).
 3. Biologically based therapies use substances found in nature, such as herbs, foods, and vitamins. Some supplements are used in conventional medicine.
 4. Manipulative and body-based methods are based on manipulation and/or movement of one or more parts of the body (e.g., osteopathy).
 5. Energy therapies involve the use of energy fields. Biofield therapies affect energy fields that purportedly surround and penetrate the human body (e.g., Reiki and Therapeutic Touch). Bioelectromagnetics-based therapies involve the unconventional use of electromagnetic fields (e.g., magnetic fields).
- III. Where to collect information
 - A. Know where to access information with regard to CATs and understand how to interpret it.
 - B. Know that there are a large number of Internet sites advertising different therapies to which patients have access.
 - C. Remember that Internet sites may inform about what a therapy involves and its philosophy, but few have evidence of benefit beyond that of patient reports or individual opinion. Interpretation of information from Internet sites must be approached with caution because the evidence often fails to stand up to currently accepted levels of scrutiny (Morris and Avorn 2003).

- D. Use an evidence-based approach to assess CATs (Ernst 2001; Moore et al. 2003a) and natural medicines (Jellin 2003).
- E. Understand that patients also have access to this information and may want to discuss it. Maintaining an open mind is important until clear evidence of benefit or otherwise is demonstrated (Ernst et al. 1995).

IV. The size of the CAT market

- A. Be aware of the proportion of the population using CATs. Many patients will have tried or be trying CATs on their own or alongside conventional management (Eisenberg et al. 1998; Millar 2001; Haetzman et al. 2003; Barnes et al. 2004).
- B. Understand that CATs are often used in situations in which conventional medicine fails to provide adequate relief (Weintraub 2003). Common examples include back pain, arthritis, and fibromyalgia. Estimates suggest that millions of visits are made each year for neck and back pain alone (Wolsko et al. 2003).
- C. Be aware that the financial implications of CATs run into billions of dollars, with more being spent out of pocket on CATs than on hospitalizations or physician visits (Eisenberg et al. 1998; Barnes et al. 2004; NCCAM).

V. The evidence base

- A. Know the evidence base for CATs is currently weak or nonexistent despite their common usage (Ernst et al. 1995; Pittler et al. 2000; Moore et al. 2003b).
- B. Know there is limited beneficial evidence for using supplements and herbal remedies for some painful conditions, and that side effects are uncommon and minor (Moore et al. 2003b).
- C. Be aware that despite the difficulties designing good trials, more are being performed with realistic conclusions (Licciardone et al. 2003).
- D. Be aware that claims on Internet sites are often misleading or have unproven health claims (Morris and Avorn 2003). It is important to assess each site critically.
- E. Appreciate the difficulties developing, funding, and performing high-quality studies into CATs. Understand that a research agenda should be developed (Berman and Swyers 1997; Ernst 2004; Smith 2004).
- F. Know that the evidence for homeopathy is generally poor, with the better trials suggesting no benefit (Ernst and Pittler 1998, 2000).
- G. Be aware that women of childbearing age use CATs for obstetric and gynecological reasons. The evidence is inconclusive, and further studies are required (Fugh-Berman and Kronenberg 2003; Smith et al. 2003; Huntley et al. 2004).
- H. Appreciate that increasingly, children are using CATs (Spigelblatt et al. 1994; Kemper and Barnes 2003; Kemper and Gardiner 2003) and that the efficacy of complementary therapies for treating children's pain is unknown as the research base is even weaker than in adults.
- I. Know that musculoskeletal pain is common in older adults and that no specific recommendations can be made about the role of CATs (Weiner and Ernst 2004).

VI. Implications, costs, and side effects

- A. Be aware that the agents used in some complementary therapies are active (e.g., traditional Chinese medicine).
 - 1. The relative doses are not regulated in the same way as pharmaceutically produced drugs.

2. There are interactions between complementary medications and pharmaceutically produced drugs (Ernst 2001; Jellin 2003; Mills et al. 2004).
- B. Patients may be seeing medical practitioners concurrently with CAT therapists. They may not disclose this information.
 - C. Patients may stop or delay conventional treatments that are of proven benefit. Others believe that conventional treatments will not be of benefit (Malik and Gopalan 2003; Moore et al. 2003a; Barnes et al. 2004).
 - D. Remember that conventional medical practitioners, nursing staff, and other allied practitioners have national licensing bodies and training programs often embodied in statute, but that this is not the case for many CATs (Mills and Peacock 1997; Mills and Budd 2000).
 - E. The market for CATs is not regulated formally, and many claims are made in their favor. Clients anticipate successful outcomes based on these claims and are prepared to pay for them.
 - F. Understand that the relationship between doctor and patient may be changing in today's society with the increasing role of the Internet (Tyson 2000).
 - G. Understand the psychological interactions between therapist and client. The therapist-client relationship may have a powerful effect in its own right.
 - H. Be aware of the vulnerability of patients in pain and the approaches of therapies that have weak or no real evidence of benefit.

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