Welcome to the second volume of *Annual Review of CyberTherapy and Telemedicine*. This publication encompasses a state-of-the-art collection of clinical trials for advanced technologies in mental health, rehabilitation, and disabilities. The quality and significance of the excellent work being presented within this volume reaffirms the fact that virtual reality and other advanced technologies can play a significant role in improving healthcare. It is our hope that by producing this publication, we may further strengthen and advance the efforts to enrich healthcare, improve the quality of life of our patients, and benefit from the remarkable technological revolution that is occurring.

For the past ten years virtual environments have been successfully used for the assessment and treatment of a variety of important mental health problems. It is therefore appropriate to ask, "What comes next?" Although four main areas are heavily represented in virtual therapy (anxiety disorders and phobias, eating disorders, neuropsychological assessment and testing, and distraction techniques during painful or unpleasant procedures), several new and exciting pilot studies and case reports suggest that many other applications can be fruitfully addressed through the continued application of rigorous clinical protocols and practice. As data continues to accumulate, an analysis of clinical outcomes and efficacy should become of paramount importance to assure the acceptance of virtual reality and other cybertherapy techniques by the larger community. It is important to carefully evaluate successful standard clinical protocols that may be easily adapted for use in virtual environments. Along with this evaluation, it is important to develop clearly articulated advantages and disadvantages of the various cybertherapy techniques. Continued tracking of available inexpensive and easy-to-use technology is another important consideration for the continued and future growth of cybertherapy. Explorations of virtual environments that allow for the interaction of the patient and therapist are one example of a potentially interesting and worthwhile approach.

I hope you find this volume to be both an exciting and useful addition to your bookshelf.

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Co-Editor-in-Chief
Cybertherapy can be considered the integration of telehealth technologies with the Internet and shared virtual reality. Although cybertherapy is a branch of telehealth, it is differentiated in several important ways: telehealth to date has been largely non-Internet based and has been characterized by point-to-point (e.g., T1) and dial-up (e.g., telephone, ISDN) information exchange.

Cybertherapy, on the other hand, is more accessible due to the integrated use of shared media. Using the Internet and virtual reality tools the therapists may present, from a remote site, a wide variety of stimuli and to measure and monitor a wide variety of responses made by the user.

In general, there are two reasons why cybertherapy is used: either because there is no alternative, or because it is in some sense better than traditional medicine. Up till now the benefits of cybertherapy - due to the variety of its applications and their uneven development - have not always been self-evident.

However, the aim of this publication is to show that the emergence of cybertherapy trials is supporting the cost-effectiveness of applications in certain fields, such as neuroscience, rehabilitation, and clinical psychology. Its key advantage is the possibility of sharing different media and different health care tools in a simple to use and easily accessible interface.

Particular attention will be given to the clinical use of virtual reality technology. An important part of this overview are the clinical results coming from the European Union VEPSY Updated – Telemedicine and Portable Virtual Environments for Clinical Psychology - research project (IST-2000-25323 - http://www.cybertherapy.info). Their study will show in detail that different cybertherapy applications have improved the quality of health care, and will later probably lead to substantial cost savings.

However, cybertherapy is not simply a technology, but a complex technological and relational process. In this sense, clinicians and health care providers that want to successfully exploit these tools need to pay significant attention to clinical issues, technology, ergonomics, human factors, and organizational changes in the structure of the relevant health service.

To spread the diffusion of cybertherapy, further research is needed. Further evaluation of clinical outcomes, organizational effects, benefits to health-care providers and users, and quality assurance is required. It is also very important that professionals in this field share information about their experience and examine the results of evaluations so that suitable development work can be spread up.

In conclusion, the goal of this publication is to provide a forum for demonstrating the processes by which cybertherapy applications can contribute to the delivery of state-of-the-art health services. We hope that the contents of this publication will stimulate more clinicians and technical professionals to find new solutions in order to expand their intervention interests and make better use of the innovative cybertherapy tools.

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Editorials