

The ARCHIVES OF GENERAL PSYCHIATRY is a member of the consortium of AMA journals listed below. The complete text of all AMA journals is available online from Dialog Information Services and Ovid Technologies, Inc.

**The Journal of the American Medical Association (JAMA)**

**Archives of Dermatology**  
**Archives of Facial Plastic Surgery**  
**Archives of General Psychiatry**  
**Archives of Internal Medicine**  
**Archives of Neurology**  
**Archives of Ophthalmology**  
**Archives of Otolaryngology—Head & Neck Surgery**  
**Archives of Pathology & Laboratory Medicine**  
**Archives of Pediatrics & Adolescent Medicine**  
**Archives of Surgery**

The ARCHIVES OF GENERAL PSYCHIATRY (ISSN 0003-990x) is published monthly by the American Medical Association, 515 N State St, Chicago, IL 60610, and is an official publication of the Association. The ARCHIVES OF GENERAL PSYCHIATRY reaches more than 31 000 readers in over 79 countries each month. Periodicals postage rates paid at Chicago, IL, and at additional mailing offices. GST registration number: 12622 5556 RT. Canada Post International Publications Mail (Canadian Distribution) Sales Agreement No. 318633.

Printed in the USA.

**SUBSCRIPTION RATES**—The personal subscription rates for the ARCHIVES OF GENERAL PSYCHIATRY are \$175 for 1 year (12 issues) in the United States and US possessions; \$225 in the Americas; £155 outside the Americas. The institution rates for 1 year are \$325 in the United States; \$425 in the Americas; £275 outside the Americas. Special rates for residents and medical students are available. Address all subscription communications to: Subscriber Services Center, American Medical Association, PO Box 10946, Chicago, IL 60610-0946. Phone: (800) 262-2350. Fax: (312) 464-5831. E-mail: ama-subs@ama-assn.org. For mailing addresses outside the United States and US possessions, see International Subscription Information.

**CHANGE OF ADDRESS**—POSTMASTER, send all address changes to ARCHIVES OF GENERAL PSYCHIATRY, c/o Subscriber Services, American Medical Association, 515 N State St, Chicago, IL 60610. Please notify us of address change at least 6 weeks in advance to ensure uninterrupted service. Include both old and new addresses, a recent mailing label, and new ZIP code. For mailing addresses outside the United States and US possessions, see International Subscription Information.

**SUBSCRIBER SERVICES**—For information about subscribing to any of the AMA publications, change of address, missing issues, or purchasing back issues, please contact Subscriber Services Center, American Medical Association, PO Box 10946, Chicago, IL 60610-0946, or call (800) 262-2350 or (312) 670-SUBS (670-7827) between 8:30 AM and 4:30 PM CST. Fax: (312) 464-5831. E-mail: ama-subs@ama-assn.org. For mailing addresses outside the United States and US possessions, see International Subscription Information.

**INTERNATIONAL SUBSCRIPTION INFORMATION**—Subscriptions outside the United States and US possessions are served according to geographic region. Please address correspondence to the following 2 offices based on delivery address: (1) For delivery in North America, Central America, and South America, contact Subscriber Services, AMA, PO Box 10946, Chicago, IL 60610-0946. Phone: (312) 670-7827. Fax: (312) 464-5831. E-mail: ama-subs@ama-assn.org. (2) For delivery outside the Americas, contact Subscription Department, JAMA & Archives Journals, American Medical Association, Tower House, Sovereign Park, Market Harborough, Leicestershire LE16 9EF, England. Telephone: +44 (0) 1858-438880, Fax: +44 (0) 1858-434958.

**REPRINTS**—Authors place their reprint order at the time the edited typescript is reviewed and should allow 4 to 6 weeks for delivery following publication. Requests for individual reprints should be sent directly to the author at the address shown in the article.

For bulk reprint orders for distribution by commercial organizations, please contact Wanda Bartolotta, 2441 84th St, Brooklyn, NY 11214. Phone: (718) 946-7424. Fax: (718) 946-7372. E-mail: wanda\_bartolotta@ama-assn.org. For reprint orders in limited quantities for distribution by educational organizations and for author reprints, please contact Reprint Coordinator, 515 N State St, Chicago, IL 60610. Phone: (312) 464-4594. Fax: (312) 464-4849.

**PERMISSIONS**—Contact Rhonda Bailey, Permissions Assistant, 515 N State St, Chicago, IL 60610. Phone: (312) 464-2513.

**ADVERTISING PRINCIPLES**—Each advertisement in this issue has been reviewed and complies with the principles governing advertising in AMA scientific publications. A copy of these principles is available on request. The appearance of advertising in AMA publications is not an AMA guarantee or endorsement of the product or the claims made for the product by the manufacturer.

**WORLD WIDE WEB ADDRESS**—<http://www.ama-assn.org>

**GENERAL PSYCHIATRY HOME PAGE**—<http://www.archgenpsychiatry.com>

**Publication Staff**

Offices: 515 N State St, Chicago, IL 60610

**Editorial Processing Department**

**Division Director:** Cheryl Iverson  
**Department Director:** Paula Glitman  
**Copyediting Manager:**  
 Brenda Gregoline  
**Freelance Copyediting Manager:**  
 Diane L. Cannon  
**Freelance Copyediting Coordinators:**  
 Gwen Chaffen  
 Connie Manno  
**Electronic Editing Specialist:**  
 Paul Frank  
**Assistant Electronic Editing Specialist:**  
 Monica Mungle  
**Senior Copy Editor:**  
 Vicky Golden  
**Copy Editors:**  
 Lauren B. Fischer  
 Juana N. Llorens  
 Rachel Novickas  
 Cheryl L. Tobey  
**Editorial Assistant:** Wanda Hill

**Scientific Publications & Multimedia Applications**

**Assistant to the Editor:** Helga Fritz

**Scientific Online Resources**

**Director:** Margaret Winker, MD  
**Electronic Media Department Director:**  
 Michelle Kurzynski  
**Associate Web Editor:** Erin M. Giannini  
**Web Office Manager:** Marla A. Hall  
**Editorial Assistant:** Gemma Wall

**Specialty Journal Division Office**

**Manager, Marketing Services:**  
 Geoffrey A. Flick  
**Assistant to the Publisher:**  
 Christine Hearne

**Circulation & Content Marketing Division**

**Administrative Assistant:**  
 Millette Jackson-Bates

**Circulation Processing Department**

**Director:** Robert Herling  
**Circulation Systems Manager:**  
 Alfred Tomaselli  
**Circulation Specialists:**  
 Reginald Jordan  
 Kathryn Osten

**Circulation Development Department**

**Director:** Bina Oza  
**Circulation Marketing Managers:**  
 Vida Damijonaitis  
 Donna Goldman  
 Michael McGraw  
**Circulation Marketing Specialist:**  
 Sandra Garzon

**Licensing & Permissions Department**

**Director:** Norman Frankel  
**Permissions:** Rhonda Bailey

**Production & Distribution Division**

**Directors:** Karen Adams-Taylor,  
 Paul Gasiecki, Vanessa Hayden  
**Managers:** David Antos, Karen Branham,  
 Debbie Camp, Diane Darnell,  
 Karl Elvin, Betty Frigerio,  
 Terri Hanley, Mary Ellen Johnston,  
 Carole Pizsker, Susan Price,  
 Charl Richey, Carmela Ware  
**Production Assistants:** Kristy Kambanis,  
 Ruth Sprague  
**Production Associates and Specialists**  
**Advertising and Production Services:**  
 LaWanda Brown, Susan Chiara,  
 Mary Anne Donley, Brian McCartney,  
 Sarah Powell, Denise Steinhauer,  
 Ellen Yoshihara  
**Composition:** Rebecca Aiken,  
 Brenda Chandler-Grayer, Amy Evers,  
 Fred Furtner, Mary Ann Kuranda,  
 Sandra Lopez  
**Database & New Media:**  
 Bruce McGregor (indexer),  
 Clifford O. Barrett, Gail Barrett,  
 Regina Brownlee, Rowena F. Dagang,  
 John Marcinek, La'son Diggs Sledge,  
 Angela Smits  
**Distribution:** Linda Alexander,  
 Michelle Robinson  
**Graphics:** Joe Amft, Noel Chaparro,  
 Carolyn Hall, Maria Kowalkowski,  
 Chris Meyer, JoAnne Weiskopf  
**Proofreading:** Daniel James,  
 Teresa H. Omiotek,  
 Mary Kay Tinerella,  
 Barbara Wojtowicz,  
 Agnes A. Zarkadas

**Advertising**

**Director, Advertising Sales:**  
 Peter G. Messina  
**AMA Classified Advertising Department:**  
 Thalia Moss, 800-262-2260.  
**Advertising Office:**  
 J. P. Cahill & Associates,  
 341 S Waiola Ave,  
 La Grange, IL 60525  
 (708) 352-0322.



# ARCHIVES

OF

## GENERAL PSYCHIATRY

JULY 2001

VOLUME 58, NUMBER 7

PAGES 617-712

### ORIGINAL ARTICLES

- Regional Brain Metabolic Changes in Patients With Major Depression Treated With Either Paroxetine or Interpersonal Therapy: Preliminary Findings** 631  
*Arthur L. Brody, MD; Sanjaya Saxena, MD; Paula Stoessel, PhD; Laurie A. Gillies, PhD; Lynn A. Fairbanks, PhD; Shervin Alborzian, BS; Michael E. Phelps, PhD; Sung-Cheng Huang, PhD; Hsiao-Ming Wu, PhD; Matthew L. Ho, BS; Mai K. Ho; Scott C. Au, BS; Karron Maidment, RN; Lewis R. Baxter, Jr, MD*

- Brain Blood Flow Changes in Depressed Patients Treated With Interpersonal Psychotherapy or Venlafaxine Hydrochloride: Preliminary Findings** 641  
*Stephen D. Martin, MBBS, MRCPsych; Elizabeth Martin, RMN, BSc; Santoch S. Rai, MBChB, MRCPsych; Mark A. Richardson, BSc; Robert Royall, BSc, C. Eng, IEE, MIPEM*

### COMMENTARIES

- Functional Brain Circuits in Major Depression and Remission** 649  
*Harold A. Sackeim, PhD*
- Neuroimaging Profiles and the Differential Therapies of Depression** 651  
*Michael E. Thase, MD*

### ORIGINAL ARTICLES

- Alterations in Arginine Vasopressin Neurons in the Suprachiasmatic Nucleus in Depression** 655  
*Jiang-Ning Zhou, MD, PhD; Rixt F. Riemersma; Unga A. Unmehopa, BSc; Witte J. G. Hoogendijk, MD, PhD; Joop J. van Heerikhuize; Michel A. Hofman, PhD; Dick F. Swaab, MD, PhD*

- Prevalence of Psychotic Disorder and Community Level of Psychotic Symptoms: An Urban-Rural Comparison** 663  
*Jim van Os, MD, PhD, MRCPsych; Manon Hanssen, MA; Rob V. Bijl, MA, PhD; Wilma Vollebergh, MA, PhD*

- Relationship Between Positive and Negative Symptoms of Schizophrenia and Schizotypal Symptoms in Nonpsychotic Relatives** 669  
*Ayman Fanous, MD; Charles Gardner, PhD; Dermot Walsh, MB, FRCPI; Kenneth S. Kendler, MD*

- Congenital Malformations, Stillbirths, and Infant Deaths Among Children of Women With Schizophrenia** 674  
*Birgit E. Bennedsen, MD, PhD; Preben B. Mortensen, MD, DrMedSc; Anne V. Olesen, MSc; Tine B. Henriksen, MD, PhD*

American Medical Association

Physicians dedicated to the health of America



Copyright 2001 by the American Medical Association. All rights reserved.  
Reproduction without permission is prohibited.

All articles published, including editorials, letters, and book reviews, represent the opinions of the authors and do not reflect the policy of the American Medical Association, the Editorial Board, or the institution with which the author is affiliated, unless this is clearly specified.

**Catherine D. DeAngelis, MD, MPH**  
Editor in Chief, Scientific Publications  
& Multimedia Applications

**Peter L. Payerli**  
Interim Vice President, Publishing  
Publisher

**Cheryl Iverson**  
Managing Editor

**E. Ratcliffe Anderson, Jr, MD**  
Executive Vice President,  
Chief Executive Officer

**Robert A. Musacchio, PhD**  
Senior Vice President,  
Publishing & Business Services

**Early Coadministration of Clonazepam With Sertraline for Panic Disorder** 681  
*Andrew W. Goddard, MD;*  
*Thomas Brouette, MD;*  
*Ahmad Almai, MD;*  
*Praveen Jetty, MD;*  
*Scott W. Woods, MD;*  
*Dennis Charney, MD*

**An Evaluation of Drug Treatments for Adolescents in 4 US Cities** 689  
*Yih-Ing Hser, PhD;*  
*Christine E. Grella, PhD;*  
*Robert L. Hubbard, PhD;*  
*Shih-Chao Hsieh, MS;*  
*Bennett W. Fletcher, PhD;*  
*Barry S. Brown, PhD;*  
*M. Douglas Anglin, PhD*

**Long-term Effectiveness of Disseminating Quality Improvement for Depression in Primary Care** 696  
*Cathy D. Sherbourne, PhD;*  
*Kenneth B. Wells, MD, MPH;*  
*Naihua Duan, PhD;*  
*Jeanne Miranda, PhD;*  
*Jürgen Unützer, MD, MPH;*  
*Lisa Jaycox, PhD;*  
*Michael Schoenbaum, PhD;*  
*Lisa S. Meredith, PhD;*  
*Lisa V. Rubenstein, MD, MPH*

**LETTER TO THE EDITOR**

**Continuing Treatment With Novel Antipsychotic Drugs Despite Leukopenia or Thrombocytopenia** 706  
*Richard S. Jackson, MD*

**CORRECTION**

**Psychiatric Disorders Among Tortured Bhutanese Refugees in Nepal** 707  
*Mark Van Ommeren, PhD;*  
*Joop T. V. M. de Jong, MD, PhD;*  
*Bhogendra Sharma, MBBS, MSc;*  
*Ivan Komproe, PhD; Suraj B. Thapa, MBBS;*  
*Etzel Cardena, PhD*

**REGULAR DEPARTMENTS**

**This Month in Archives of General Psychiatry** 628

**Classified Advertising** 708

**Index to Advertisers** 712

**Instructions for Authors—**  
**See January 2001 issue, page 98, or visit the Web site at <http://www.archgenpsychiatry.com>.**

**ARCHIVES**  
OF  
**GENERAL PSYCHIATRY**

*Editor:*  
**Jack D. Barchas, MD**  
 Department of Psychiatry  
 Cornell Medical Center  
 525 E 68th St, Box 171  
 New York, NY 10021  
 Phone: (212) 746-3771  
 Fax: (212) 746-3772

*Associate Editor:*  
**Peter M. Marzuk, MD**  
 New York, NY

*Web Site Editor:*  
**Francis S. Lee, MD, PhD**  
 New York, NY

*Editorial Administrator:*  
**Sheena Rumnit**  
 New York, NY

*Editorial Board:*

**Huda Akil, PhD**  
 Ann Arbor, Mich

**Ross J. Baldessarini, MD**  
 Belmont, Mass

**Floyd E. Bloom, MD**  
 La Jolla, Calif

**Malcolm B. Bowers, Jr, MD**  
 New Haven, Conn

**David L. Braff, MD**  
 San Diego, Calif

**William T. Carpenter, Jr, MD**  
 Baltimore, Md

**Joseph T. Coyle, MD**  
 Boston, Mass

**Raymond J. Dolan, MD**  
 London, England

**Felton Earls, MD**  
 Cambridge, Mass

**Glen R. Elliott, PhD, MD**  
 San Francisco, Calif

**Ellen Frank, PhD**  
 Pittsburgh, Pa

**Richard M. Glass, MD**  
 Chicago, Ill

**Frederick K. Goodwin, MD**  
 Bethesda, Md

**Fritz A. Henn, PhD, MD**  
 Mannheim, Germany

**Steven E. Hyman, MD**  
 Bethesda, Md

**Kenneth S. Kendler, MD**  
 Richmond, Va

**Kenneth K. Kidd, PhD**  
 New Haven, Conn

**Donald F. Klein, MD**  
 New York, NY

**Helena Chmura Kraemer, PhD**  
 Stanford, Calif

**David J. Kupfer, MD**  
 Pittsburgh, Pa

**Herbert Y. Meltzer, MD**  
 Nashville, Tenn

**Grayson S. Norquist, MD**  
 Bethesda, Md

**Charles P. O'Brien, MD, PhD**  
 Philadelphia, Pa

**Michael Posner, PhD**  
 New York, NY

**Judith L. Rapoport, MD**  
 Bethesda, Md

**Alan F. Schatzberg, MD**  
 Stanford, Calif

**Goran Sedvall, MD**  
 Stockholm, Sweden

**Gary L. Tischler, MD**  
 New York, NY

**Ming T. Tsuang, MD, PhD**  
 Boston, Mass

**Stanley J. Watson, Jr, PhD, MD**  
 Ann Arbor, Mich

**Myrna M. Weissman, PhD**  
 New York, NY

**Kenneth B. Wells, MD, MPH**  
 Los Angeles, Calif