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January 22, 1973

Mr. Lex Frieden
6138 East 53 Street
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Dear Mr. Frieden:

Enclosed is an advance copy of the January 1973 issue of REHABILITATION LITERATURE in which your article "A Tale of Two Lives" appears. An additional 25 copies are being sent under separate cover for whatever use you wish to make of them.

I want to thank you for the excellent contribution you have made to our journal.

Sincerely,

Earl C. Graham, Director
Education and Information Services
Editor, REHABILITATION LITERATURE

ECG/lvp
Enclosure

REHABILITATION LITERATURE

January, 1973, Volume 34, No. 1
Part II

Annual Index, Volume 33, 1972

Contents

	Page
Complete Articles (Including Articles of Month)	2
Books Reviewed	2
Cumulative Author Index	4

This is a cumulated list of authors for 1972. All numbers identify the entry numbers under which the references appear in *Rehabilitation Literature,* except those preceded by the abbreviation *p.*, in which cases numbers refer to the page where the item is located. References on a specific subject may be found by checking that subject in the *Abstracts* section of each issue.

Key to Issues for 1972

Month	*Pages*	*Entry Numbers*	*Month*	*Pages*	*Entry Numbers*
January	1-32	1-81	July	193-224	438-508
February	33-64	82-148	August	225-256	509-578
March	65-96	149-212	September	257-288	579-646
April	97-128	213-287	October	289-320	647-715
May	129-160	288-363	November	321-352	716-786
June	161-192	364-437	December	353-384	787-855

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The annual index, of authors only, is published as Part 2 of the January issue of the following year.

Contributed articles in *Rehabilitation Literature* are indexed selectively in *Index Medicus, Excerpta Medica: Sect. 19, Psychological Abstracts, Hospital Literature Index, Abstracts for Social Workers, Mental Retardation Abstracts, dsh Abstracts, Current Contents: Education,* and *Current Index to Journals in Education.*

Complete Articles (Including Articles of the Month)

Bachmann, Winnie H. Variables Affecting Postschool Economic Adaptation of Orthopedically Handicapped and Other Health-Impaired Students, p. 98

Bitter, James A. Some Viable Service Delivery Approaches in Rural Rehabilitation, p. 354

Bradley, Betty Hunt. Responses to Action Pictures of Two Groups of Mentally Retarded Subjects (Special Report), p. 362

Brown, George W. How Correctable Is Reading Failure? (Special Article), p. 358

Buttrup, Ellen, as told to May, Elizabeth Eckhardt. The Child Amputee and His Parents (Special Report), p. 139

Denholm, D. H. The Design and Layout of a Rehabilitation Workshop (Special Article), p. 166

Denholm, D. H., and Baker, Richard. Client Evaluation and Physiological Measurement (Special Report), p. 170

Dubner, Harriet W. The Role of the Speech Pathologist in the Early Treatment of the Aphasic Patient (Special Report), p. 330

Duplica, Moya M. The Librarian and the Exceptional Child (Special Article), p. 198

Dyksterhuis, Jerry E. Vocational Rehabilitation of Chronic Obstructive Pulmonary Disease Patients (Special Article), p. 136

Ebra, George, and Toth, John C. Chronic Hemodialysis; Some Psychological and Rehabilitative Considerations, p. 2

Fasteau, Steven. Development of a Community College Program for Physically Handicapped Students (Special Article), p. 267

Ferullo, Robert J. Preparation of Speech Pathologists and Audiologists Within the Cooperative Plan of Education (Special Article), p. 236

Geis, H. Jon. The Problem of Personal Worth in the Physically Disabled Patient, p. 34

Gelfand, Bernard. The Work Evaluation Setting as a Student Learning Laboratory (Special Article), p. 40

Gerber, Sanford E. Biomedical Technology and the Detection of Birth Defects, p. 322

Hellmuth, George A. Teaching Behavioral and Vocational Medicine in a Cardiac Work Classification Unit, p. 162

Humes, Carol, Cook, Don, and Franklin, Keith. Alcoholic Rehabilitation and Prevention Program (Special Article), p. 11

Iversen, Iver A., Silberberg, Norman E., Sermon, Duane T., and Chorn, Erwin J. The HELP Campaign in Minnesota, p. 130

Kunce, Joseph T., Cope, Corrine S., Miller, Douglas E., and Lesowitz, Nathan. Rehabilitation Outcomes and the Public Assistance Recipient (Special Report), p. 204

MacDonald, A. P., Jr. Internal-External Locus of Control Change-Technics (Special Report), p. 44

Montan, Karl. The Swedish Institute for the Handicapped—Its Tasks and Potentiality (Special Article), p. 103

Morse, Joan. Aspiration and Achievement; A Study of One Hundred Patients with Juvenile Rheumatoid Arthritis, p. 290

Pannbacker, Mary. Publications for Families of Adult Aphasics; A Review of the Literature (Special Article), p. 72

Schlesinger, Lawrence E., and Nhan, Nguyen. The Research Role in a Residential Treatment Center, p. 194

Soloff, Asher. The Utilization of Research, p. 66

Trybus, Raymond J., and Lacks, Patricia B. Modification of Vocational Behavior in a Community Agency for Mentally Retarded Adolescents, p. 258.

Van Kirk, Barbara. Operant Therapy Programs for Stuttering Conducted in a Rehabilitation Center (Special Report), p. 107

Walker, Robert. Social Disability of 150 Mental Patients One Month After Hospital Discharge (Special Article), p. 326

Whitehouse, Frederick A. Habilitation Revisited, p. 226

Books

Abeson, Alan, and Blacklow, Julie. Environmental Design; New Relevance for Special Education, p. 142

Alpern, Gerald D., and Boll, Thomas J., eds. Education and Care of Moderately and Severely Retarded Children, with a Curriculum and Activities Guide, 3

Alpiner, Jerome G. Speech and Hearing Disorders in Children, p. 49

Am. Library Assn. Assn. of Hospital and Institution Libraries. Bibliotherapy; Methods and Materials, 364

Am. Med. Assn. Committee on Rating of Mental and Physical Impairment. Guides to the Evaluation of Permanent Impairment, 86

Anderson, Camilla. Society Pays; The High Costs of Minimal Brain Damage in America, 791

Anderson, Robert P. The Child with Learning Disabilities and Guidance, p. 49

Arena, John I., ed. The Child with Learning Disabilities: His Right to Learn; Selected Papers on Learning Disabilities, Eighth Annual Internatl. Conference of the Assn. for Children with Learning Disabilities, March 18-20, 1971, Chicago, Ill., 580

Banus, Barbara Sharpe. The Developmental Therapist: A Prototype of the Pediatric Occupational Therapist, 716

Barnes, Marylou R., and Crutchfield, Carolyn; illus. by James M. Goodman. The Patient at Home; A Manual of Exercise Programs, Self-Help Devices, and Home Care Procedures, 719

Bateman, James E. The Shoulder and Neck, 373

Bauer, Joseph J. Riding for Rehabilitation; A Guide for Handicapped Riders and Their Instructors, 446

Becker, Wesley C. Parents Are Teachers; A Child Management Program, 88

Becker, Wesley C., Engelmann, Siegfried, and Thomas, Don R. Teaching: A Course in Applied Psychology, 93

Bernstein, Owen, and Bernstein, Bebe; photography by Edward Knoll. Teacher's Guide to Work for Independence, a Series of Special Education Photo-Stimuli Aids, 9

Blum, Lawrence P., and Kujoth, Richard K., comps. Job Placement of the Emotionally Disturbed, 515

Blumenfeld, Jane, Thompson, Pearl E., and Vogel, Beverly S. Help Them Grow! A Pictorial Handbook for Parents of Handicapped Children, 219

Bockoven, J. Sanbourne. Moral Treatment in Community Mental Health, 443

Boss, Peter. Explorations Into Child Care, 291

Brown, Christy. The Poems of Christy Brown, p. 15

Brown, Clinton C., and Savage, Charles, eds. The Drug Abuse Controversy, 290

Bucks Co. (Pa.) Schools. The Learning Disabilities Program in Bucks County Schools; A Report of Bucks County Public Schools Intermediate Unit Pilot and Demonstration Programs, 153

Bunch, Wilton H. Modern Management of Myelomeningocele, 718

Bzoch, Kenneth R., and League, Richard. Assessing Language Skills in Infancy; A Handbook for the Multidimensional Analysis of Emergent Language, 149

Calabro, John J., and Wykert, John. The Truth About Arthritis Care, 10

Carp, Frances M., ed. Retirement, 448

Carter, Joan Haselman. Standards of Nursing Care; A Guide for Evaluation, 588

Cobb, Henry V. The Forecast of Fulfillment; A Review of Research on Predictive Assessment of the Adult Retarded for Social and Vocational Adjustment, 582

Connor, Frances P., Wald, Joan R., and Cohen, Michael J., eds. Professional Preparation for Educators of Crippled Children, 220

Crellin, Eileen, Kellmer Pringle, M. L., and West, Patrick. Born Illegitimate; Social and Educational Implications, 288

Cull, John G., and Hardy, Richard E. Vocational Rehabilitation: Profession and Practice, 793

Cull, John G., Jr., and Colvin, Craig R. Contemporary Field Work Practices in Rehabilitation, 440

Curtis, Brian A., Jacobson, Stanley, and Marcus, Elliott M. An Introduction to the Neurosciences, 368

Downey, John A., and Darling, Robert C., eds. Physiological Basis of Rehabilitation Medicine, 369

Dunn, Nell. The Incurable, p. 113

Duttarer, Janet, and Edberg, Elwin. Quadriplegia After Spinal Cord Injury; A Treatment Guide for Physical Therapists, 720

Emerick, L. L., and Hamre, C. E., eds. An Analysis of Stuttering; Selected Readings, 213

Farmer, Frances. Will There Really Be a Morning? An Autobiography, p. 306
Fassler, Joan. The Boy with a Problem, p. 17
Fassler, Joan. Don't Worry, Dear, p. 17
Fassler, Joan. My Grandpa Died Today, p. 17
Fenton, Joseph, and Ayers, Robert E. Rehabilitation Monograph No. 46: Residential Needs of Severely Physically Handicapped Non-Retarded Children and Young Adults in New York State, p. 332
Fitts, William H. The Self Concept and Behavior; Overview and Supplement, p. 337
Fitts, William H. The Self Concept and Performance, p. 337
Fitts, William H. The Self Concept and Psychopathology, p. 337
Ford Foundation. Dealing with Drug Abuse; A Report to the Ford Foundation, 366
Frye, Virginia, and Peters, Martha. Therapeutic Recreation: Its Theory, Philosophy, and Practice, 520
Gardner, William I. Behavior Modification in Mental Retardation: The Education of the Mentally Retarded Adolescent and Adult, 82
Gearheart, B. R., and Vaughan, Tony D., eds. Education of the Exceptional Child; History, Present Practices, and Trends, 649
Gill, I. K. Friends, Not Outcasts; Social Rehabilitation of Leprosy Patients, 514
Goble, R. E. A., and Nichols, P. J. R. Rehabilitation of the Severely Disabled. Vol. 1.: Evaluation of a Disabled Living Unit; Vol. 2.: Management, p. 211
Goodgold, Joseph, and Eberstein, Arthur. Electrodiagnosis of Neuromuscular Diseases, 650
Gowan, John C., and Bruch, Catherine B. The Academically Talented Student and Guidance, p. 49
Gowan, John Curtis, Demos, George D., and Kokaska, Charles J., eds. The Guidance of Exceptional Children; A Book of Readings, 788
Greenberg, Joanne. Rites of Passage, p. 273
Greenfeld, Josh. A Child Called Noah; A Family Journey, p. 369
Grossman, Frances Kaplan. Brothers and Sisters of Retarded Children; An Exploratory Study, p. 109
Group for the Advancement of Psychiatry. Drug Misuse: A Psychiatric View of a Modern Dilemma, 1
Gulliford, Ronald. Special Educational Needs, 222
Hardy, Madeline I. Standards for Educators of Exceptional Children in Canada, 8
Hardy, Richard E., and Cull, John G., eds. and comps. Social and Rehabilitation Services for the Blind, 790
Haring, Norris F., and Phillips, E. Lakin. Analysis and Modification of Classroom Behavior, 438
Heath, Earl J. The Mentally Retarded Student and Guidance, p. 49
Hirst, Cyntha C., and Michaels, Elaine. Developmental Activities for Children in Special Education, 648
Honesty, Henrene. Essentials of Abdominal Ostomy Care, 512
Institute of Rehabilitation Medicine. The Design of a Pre-School Therapeutic Playground: An Outdoor "Learning Laboratory," 647
Internatl. Assn. of Rehab. Facilities. Research Utilization in Rehabilitation Facilities; Proceedings of an International Conference Held June 1-18, 1971, in the U.S.A., 157
Internatl. Soc. for Rehab. of the Disabled. Internatl. Information Centre on Technical Aids. Aids for Children; Technical Aids for Physically Handicapped Children, 579
Internatl. Soc. of Cardiology. Council on Rehab. International Survey on the Psychological Aspects of Heart Disease, 152
Internatl. Symposium of Cerebral Palsy. The Second International Symposium of Cerebral Palsy, Prague, Aug., 1967, 158
Irwin, John V., and Marge, Michael, eds. Principles of Childhood Language Disabilities, 789
Isaacs, Bernard, Livingstone, Maureen, and Neville, Yvonne. Survival of the Unfittest: A Study of Geriatric Patients in Glasgow, 519
Jaques, Marceline E. Rehabilitation Counseling: Scope and Services, p. 49
Joint Comm. on Accreditation of Hospitals, Accreditation Council for Facilities for the Mentally Retarded. Standards for Residential Facilities for the Mentally Retarded, 159
Kanner, Leo. Child Psychiatry, 4th ed., 289
Kaplan, Harold I., and Sadock, Benjamin J., eds. Comprehensive Group Psychotherapy, 84
Karnes, Merle B., Zehrbach, R. Reid, and Jones, Guy R. The Culturally Disadvantaged Student and Guidance, p. 49
Keith, Robert L. Speech and Language Rehabilitation; A Workbook for the Neurologically Impaired, 655
Kephart, Newell C. The Slow Learner in the Classroom, 2d ed., 374
King, Roy D., Raynes, Norma V., and Tizard, Jack. Patterns of Residential Care; Sociological Studies in Institutions for Handicapped Children, 295
Kingdon-Ward, Winifred. Helping the "Stroke" Patient to Speak, 584
Kirk, Samuel A. Educating Exceptional Children, 2d ed., 511
Koppitz, Elizabeth Munsterberg. Children with Learning Disabilities; A Five Year Follow-up Study, 215
Krents, Harold. To Race the Wind; An Autobiography, p. 335
Krusen, Frank H., Kottke, Frederic J., and Ellwood, Paul M., Jr., eds. Handbook of Physical Medicine and Rehabilitation, 218
Kvaraceus, William C. Prevention and Control of Delinquency: The School Counselor's Role, p. 49
LaCrosse, E. Robert, Jr., ed. Early Childhood Education Directory; A Selected Guide to 2000 Preschool Educational Centers, 442
Leedy, Jack J., ed. Compensation in Psychiatric Disability and Rehabilitation, 150
Lemert, Edwin M. Human Deviance, Social Problems, and Social Control, 294
Logue, George. The Late Developing Child, 586
Lord, Joan, comp. Catalogue of Garments for the Handicapped and Disabled, 787
Lowenfeld, Berthold. Our Blind Children; Growing and Learning with Them, 155
McClear, John E. Your Second Voice; A Manual of Esophageal Voice Instruction, 794
Mallery, Garrick. Sign Language Among North American Indians Compared with that Among Other Peoples and Deaf-Mutes, 721
Meisgeier, Charles H., and King, John D. The Process of Special Education Administration, 370
Menolascino, Frank J., ed. Psychiatric Aspects of the Diagnosis and Treatment of Mental Retardation, 297
Minnesota. Univ. Industrial Relations Center. Occupational Reinforcer Patterns (Second Vol.), 516
Myklebust, Helmer R., ed. Progress in Learning Disabilities, Vol. II, 221
Natl. Educational Consultants, Inc. Registry of Private Schools for Children with Special Educational Needs, 6
Natl. Found. for Handicapped Children (Israel). Rehabilitation Problems of Paralysed Adolescents in the Central Region of Israel, 447
Natl. Inst. on Mental Retardation, Canada. Mental Retardation—The Law—Guardianship, 654
Nebraska. Univ. Coll. of Medicine. Preliminary 8mm Film Project Report and Listing of 8mm Films, 2d ed., 587
Neff, Walter S., ed. Rehabilitation Psychology; Proceedings of the National Conference on the Psychological Aspects of Disability, Held at the Asilomar Conference Center, Monterey, Calif., Oct. 25-28, 1970, 518
Nelson, Nathan. Workshops for the Handicapped in the United States; An Historical and Developmental Perspective, p. 80
Nesbitt, John A., comp. and ed. Papers on Program Development in Recreation and Physical Activity for Handicapped Children, 4
New York Medical Coll. Dept. of Obstetrics and Gynecology; Edwin M. Gold, ed. Proceedings of the National Conference for the Prevention of Mental Retardation Through Improved Maternity Care, Mar. 27-29, 1968, Washington, D.C., 517
Nordoff, Paul, and Robbins, Clive. Therapy in Music for Handicapped Children, 449
Northeastern Univ. New England Regional Rehab. Research Inst. The Rehabilitation of the Young Epileptic; Dimensions and Dynamics, 371
O'Connell, Alice L., and Gardner, Elizabeth B. Understanding the Scientific Bases of Human Movement, 792
Org. for Social and Technical Innovation, Inc. Blindness and Services to the Blind in the United States; A Report to the Subcommittee on Re-

habilitation, National Institute of Neurological Diseases and Blindness, Originally Presented June, 1968, 365
Overs, Robert P., O'Connor, Elizabeth, and DeMarco, Barbara. Guide to Avocational Activities, 652
Perkins, William H. Speech Pathology; An Applied Behavioral Science, 299
Peter, Laurence J. Individual Instruction, 653
Raney, R. Beverly, Sr., Brashear, H. Robert, Jr., with the collaboration of Shands, Alfred R., Jr. Shands' Handbook of Orthopaedic Surgery, p. 177
Reynolds, Maynard C., and Davis, Malcolm D., eds. Exceptional Children in Regular Classrooms, 513
Rhodes, William C. The Emotionally Disturbed Student and Guidance, p. 49
Rigrodsky, Seymour, Lerman, Jay, and Morrison, Eleanor, eds. Therapy for the Laryngectomized Patient; A Speech Clinician's Manual, 160
Riley, Lawrence E., Spreitzer, Elmer A., and Nagi, Saad Z., eds. Disability and Rehabilitation: A Selected Bibliography, 217
Rivera, Geraldo. Willowbrook: A Report on How It Is and Why It Doesn't Have to Be That Way, 656
Roskies, Ethel. Abnormality and Normality: The Mothering of Thalidomide Children, p. 366
Roth, Robert M. Underachieving Students and Guidance, p. 49
Rusalem, Herbert. Coping with the Unseen Environment; An Introduction to the Vocational Rehabilitation of Blind Persons, 441
Rusk, Howard A. Rehabilitation Medicine, 89
Sager, Clifford J., and Kaplan, Helen Singer, eds. Progress in Group and Family Therapy, 444
Sainer, Janet S., and Zander, Mary L. SERVE: Older Volunteers in Community Service; A New Role and a New Resource, 372
Sanders, Lois Joan. Procedure Guides for Evaluation of Speech and Language Disorders in Children, 296
Sarno, Martha Taylor, ed. Aphasia; Selected Readings, 439
Schiefelbusch, Richard L., ed. Language of the Mentally Retarded, 585
Schoenheimer, Henry P. Good Schools, 651
Seligman, Milton, and Baldwin, Norman F., comps. and eds. Counselor Education and Supervision; Readings in Theory, Practice, and Research, 581
Shands, Alfred Rives, Jr. The Early Orthopaedic Surgeons of America, p. 51
Snook, Leslie. Gardening for the Elderly and Handicapped, 292
Social Survey Div., Off. of Population Censuses and Surveys. Handicapped and Impaired in Great Britain: Part I, by Amelia I. Harris, Elizabeth Cox, and Christopher R. W. Smith; Part II, Work and Housing of Impaired Persons in Great Britain, by Judith R. Buckle, 87
Spinner, Morton. Injuries to the Major Branches of Peripheral Nerves of the Forearm, 367
Stacey, Margaret, ed. Hospitals, Children, and Their Families: The Report of a Pilot Study, 293
Stevens, Ardis. Fun Is Therapeutic; A Recreation Book to Help Therapeutic Recreation Leaders by People Who Are Leading Recreation, 583
Stuart, Bruce C., and Bair, Lee A. Health Care and Income; The Distributional Impacts of Medicaid and Medicare Nationally and in the State of Michigan, 151
Texas A & M Univ. Coll. of Architecture and Environmental Design. Environmental Criteria: MR Preschool Day Care Facilities, 717
Thompson, Travis, and Grabowski, John, eds. Behavior Modification of the Mentally Retarded, 509
Thompson, Warren. Correlates of the Self Concept, p. 337
Trudeau, Elaine, ed. Digest of State and Federal Laws: Education of Handicapped Children, 216
Ulrich, Sharon, with Wolf, Anna W. M. Elizabeth, p. 209
Union of Cooperatives of Invalids, Warsaw, Poland. The Process and the Effects in Vocational Rehabilitation of Mentally Retarded Persons in Sheltered Workshops of Invalids' Cooperatives in Poland; Final Report, 156
U.S. Natl. Inst. of Neurological Diseases and Stroke; Eloise O. Calkins, comp. and ed. Reading Forum: A Collection of Reference Papers Concerned with Reading Disability, 5
U.S. Office of Education. Volunteers in Education; Materials for Volunteer Programs and the Volunteer, 722
U.S. Pub. Health Serv. Health Services and Mental Health Admin. Catalog of Health Services Research: Abstracts of Public and Private Projects, 1967-70, 214
U.S. Social and Rehab. Serv. Research Report No. 1: Overview Study of the Dynamics of Worker Job Mobility, 298
U.S. Social Security Admin. Off. of Research and Statistics. The Social Security Disability Program; An Evaluation Study, 375
Van Riper, Charles. Speech Correction; Principles and Methods, 92
Viscardi, Henry, Jr. But Not on *Our* Block, 510
Wagner, Rudolph F. Dyslexia and Your Child: A Guide for Parents and Teachers, 2
Weintaub, Frederick J., Abeson, Alan R., and Braddock, David L. State Law & Education of Handicapped Children: Issues & Recommendations, 223
Weiss, Marian. Myoplastic Amputation, Immediate Prosthesis and Early Amputation, 154
Wesley, Frank. Childrearing Psychology, 83
Weyman, Joan. The Dental Care of Handicapped Children, 85
White House Conference on Children. Report to the President; White House Conference on Children, 1970, 91
White House Conference on Youth. Report of the White House Conference on Youth, April 18-22, 1971, Estes Park, Colo., 90
Wisconsin. Univ. Library School; Margaret E. Monroe, ed. Reading Guidance and Bibliotherapy in Public, Hospital and Institution Libraries; A Selection of Papers Presented at a Series of Adult Services Institutes, 1965-1968, 445
Woestehoff, Ellsworth S. Students with Reading Disabilities and Guidance, p. 49
Zorab, P. A., ed. Scoliosis and Growth: Proceedings of a Third Symposium Held at The Institute of Diseases of the Chest, Brompton Hosp., London, on 13th Nov., 1970, 7

Cumulative Author Index

Abberton, Evelyn, 637
Abelson, Carol, 308
Aberg, Bertil, 746
Abery, Joan, 380
Abeson, Alan, p. 142; 223, 850
Abraham, Edward, 387
Abramovitz, Arnold, 306
Abrams, Annette, 366
Abrams, William B., 186
Abramson, Edward E., 597
Abramson, Leonard S., 150
Ackerman, Jeanne, 76
Ackerman, Peggy T., 221
Acton, Norman, 844
Adamovich, David, 348
Adams, Dwight S., 713
Adams, I. D., 639
Adams, James Luther, 79
Adams, Ronald C., 201
Adams, Ruth R., 5
Adamson, Graham T., 639
Adamson, William C., 535
Adelman, Howard S., 580, 699
Adour, Kedar K., 34
Affleck, J. W., 252
Agerholm, Margaret, 843
Aiken, W. J., 138
Aitchison, Jean, 637
Aitken, George T., 65
Albert, Bernard W., 495
Albright, James A., 55
Alderman, Mary, ed., 415
Alford, Gay, 702
All India Inst. of Med. Sciences, 692
Allan, Kathryn H., 674
Allen, James R., 199
Allen, K. Eileen, 488
Allen, Mark K., 760
Allen, S., 553
Allen, Sarah, 50
Allison, Richard B., 327
Almogi, J., 844
Alpern, Gerald D., ed., 3
Alpert, Arthur, 79
Alpiner, Jerome G., p. 49
Alston, Paul P., 145
Altshuler, Kenneth Z., 315
Altshuler, M. W., 65
Am. Acad. of Ophthalmology and Otolaryngology, 280
Am. Acad. of Pediatrics, 280, 546
Am. Assn. of Ophthalmology, 280
Am. Assn. on Mental Deficiency.

Section on Social Work, 334
Am. Congress of Rehab. Med., 432
Am. Diabetes Assn., 672
Am. Eugenics Soc., 41
Am. Found. for the Blind, 162, 400, 635
Am. Heart Assn., 745
Am. Hospital Assn., 451
Am. Library Assn. Assn. of Hospital and Institution Libraries, 364
Am. Med. Assn. Committee on Rating of Mental and Physical Impairment, 86
Am. Neurological Assn. Joint Comm. for Stroke Facilities, 603
Am. Occupational Therapy Assn., 567
Am. Physical Therapy Assn., 573
Am. Psychiatric Assn., 559
Am. Psychological Assn., 518
Am. Rehab. Counseling Assn., 138
Anderson, Camilla M., 533, 791
Anderson, David, 580
Anderson, M. I., 419
Anderson, Robert P., p. 49; 580
Anderson, V. Elving, 41
Anderson, Wilton, 513
Andreason, N. J. C., 666
Andrews, R. J., 611
Aramany, Mohamed A., 103
Arena, John I., ed., 580
Armstrong, Keith, 773
Armstrong, Margaret E., 724
Arnold, Arnold, 744
Arnold, Irene L., 334
Aronson, Leonard J., 22
Asirifi, Y., 461
Asma, Fern E., 224
Assn. for Childhood Educ. Internatl., 744
Assn. for Children with Learning Disabilities, 580
Atchison, Margaret, 580
Auburn Univ. School of Educ. Dept. of Vocational and Adult Educ., 776
Austin, Mary, 5
Australian Dental Assn. New South Wales Branch, 467
Auxter, David, 264
Avidor, Hanna, 844
Ayers, Robert E., p. 332
Ayres, A. Jean, 17, 232

Bachmann, Winnie H., p. 98
Backstrom, Lars, 265
Baer, Donald M., 585
Bailey, Elizabeth T., 53
Bair, Lee A., 151
Baird, Virginia Green, 73
Baker, A. B., 570
Baker, Abe B., 126
Baker, J. Garry, 769
Baker, Richard, p. 170
Baldessarini, Ross J., 546
Baldwin, Joan, 305, 753
Baldwin, Norman F., comp. and ed., 581
Balester, Raymond J., 694
Ball, Michael F., 687
Ball, Robert M., 426
Balow, Bruce, 144, 206
Banks, Henry H., 386
Bannochie, Margaret N., 221
Banus, Barbara Sharpe, 716
Barber, Lois, 100
Bard, Marc, illus., 368
Bardon, Jack I., 193
Barnes, Colin G., 379
Barnes, Marylou R., 719
Barnes, O. Dennis, 30
Barnett, Robert V., 327
Barr, Karen L., 805
Barrie, Sandie, 580
Barron, Nancy, 580
Barry, John R., 130
Barsch, Raymond, 193
Bassett, C. Andrew L., 369
Batchelor, Thomas M., 247
Bateman, Barbara, 5, 433
Bateman, James E., 373
Battle, Esther S., 738
Bauer, David H., 563
Bauer, Joseph J., 446
Baumstein, David S., 334
Bax, James A., 426
Bax, Martin, 383
Baxter, Donald, 631
Baxter, Janice C., 131
Bayer, Mary, 677
Beach, W. C., 628
Beals, Rodney K., 673
Bean, Margaret A., 458
Bean, William, 706
Beasley, Ann, 668
Becker, Howard S., 290
Becker, Wesley C., 88, 93
Bednar, Michael J., 220
Bee, W. Ronald, 348
Begab, Michael J., 297, 559
Behrmann, Polly, 486
Beilke, Gary R., 421
Belbin, R. Meredith, 448
Belchick, Jerry, 105
Bell, D. Bruce, 580
Bell, Richard Q., 235
Bellomy, Virginia, 277
Belmont, John M., 585
Bender, Lauretta, 297
Bender, Paul A., 170
Bennett, Douglas, 252
Benschoter, Reba, 587
Bentley, G., 380
Benton, Curtis D., Jr., 580
Bentovim, Arnon, 837, 840
Ben-Yishay, Y., 138
Berenson, Robert, 354
Berkman, Barbara Gordon, inside front cover (Sept.); 690
Berko, Frances G., 220
Berlin, Charles I., 160
Berner, Bernard, 708
Berni, Rosemarian, 131
Bernstein, Bebe, 9
Bernstein, Owen, 9
Bertness, Henry J., 513
Berwick, Arthur E., 352
Bharucha, E. P., 460
Bice, Thomas W., 143
Bickle, R. J., 179
Bidgood, Frederick E., 139
Bidwell, Gloria, 708
Bierbauer, Elaine, 807
Bigelow, George, 509
Bigge, June, 220
Birch, Jack W., 513
Birkenshaw, Lois, 408
Birkenstock, W. E., 94
Bishop, Edward H., 517
Bitter, James A., p. 354; 847
Black, Bertram J., 252
Black, F. William, 623
Blackburn, Clark W., 577
Blackhurst, A. Edward, inside front cover (Feb.)
Blacklow, Julie, ed., p. 142
Blackman, Leonard S., 759
Blank, H. Robert, 365
Blatt, Burton, 359, 513
Bleck, E. E., 164
Blinick, George, 41
Bliss, James C., 365
Blom, Gaston E., 5, 694
Bloom, Lois, 585
Blum, Eva M., 290
Blum, Lawrence P., comp., 515
Blum, Richard H., 290
Blumenfeld, Jane, 219
Bobath, Berta, 101
Bobath, K., 101
Bockoven, J. Sanbourne, 443
Boder, Elena, 221
Boehme, Rosalie, 426
Boelsche, Arr Nell, 636
Boese, Robert J., 543
Bognar, Carol, 668
Boll, Thomas J., ed., 3, 187, 385
Bolton, Brian, 243, 480, 854
Bolton, Elizabeth, 179
Bonelle, Alan E., 191
Bonilla, Luis E., 369
Borger, Joanne M., 404
Borkan, Eugene, 142
Bortner, Morton, 193
Bortz, Edward L., 448
Bose, K. S., 348
Boss, Peter, 291
Boswick, John A., Jr., 735
Bouchard, Virginia C., 819
Bowden, Judith, 180
Bowe, Frank G., 270
Bozarth, Jerald D., ed., 138
Braatz, James H., 554
Braddock, David L., 223
Bradley, Betty Hunt, p. 362
Bragg, Bernard, 802
Branson, Helen Kitchen, 547
Brashear, H. Robert, Jr., p. 177
Brassington, M., 348
Braun, Richard M., 37
Braunel, Laura M., 683
Brean, Edna, 105
Breig, Alf, 413
Brewer, William F., 5
Bricker, William A., 406, 585
Bridgeman, Donald F., 583
Brieland, Donald, 518
Briggs, Frances, 429
Brill, Norman Q., 150
British Coun. for Rehab. of the Disabled, 177, 348, 628
Britton, Alexander L., 844
Broder, Aaron J., 150
Broderick, Donald H., 188
Brody, Eugene B., 290
Brody, Jacob A., 407, 682
Brolin, Donn, 561, 831
Brooke, Clement E., 580
Brooks, Carole, 472
Brooks, D. N., 764
Brower, Phyllis, 615
Brown, Bertram S., 741
Brown, Betty Byers, 637
Brown, C. Selby, 329
Brown, Christy, p. 15
Brown, Clinton C., ed., 290
Brown, Daniel G., 266
Brown, Diana L., 334, 680
Brown, Dorothy, 297
Brown, E. G., 758
Brown, E. L., 484
Brown, G. D., 382
Brown, George W., p. 358
Brown, Joe R., 684
Brownlee, Mary Inez, 580
Bruce, Margaret, 502
Bruch, Catherine B., p. 49
Bryan, Fred A., 77
Buchan, A. C., 571
Buckle, Judith R., 87
Bucks County (Pa.) Schools, 153
Budoff, Milton, 78
Bunce, Roger T., 702
Bunch, Wilton H., 201, 718
Bundschuh, E. L., 640
Bundy, McGeorge, 366
Burden, Charles A., 44
Burgess, Ernest M., 95
Burney, Phillip A., 800
Burns, Yvonne, 21
Burr, Michael, 553
Burr, R. G., 571
Burton, Benjamin T., 77
Burwell, R. G., 7
Buscaglia, Leo F., 580
Bush, Charles R., Jr., 31
Buskirk, E. R., 369
Busse, Ewald W., 312
Butler, Alfred J., 138, 710
Butler, Robert N., 448
Butterfield, Earl C., 585
Buttrup, Ellen, p. 139
Bzoch, Kenneth R., 149

Cadogan, Dinah R., 179
Cahill, Robert, 259
Cahn, Lorynne, 593
Cairns, Robert B., 771
Calabro, John J., 10
Calcaterra, Thomas C., 409
Caldwell, Bill S., 636
Calkins, Eloise O., comp. and ed., 5
Call, Justin D., 297
Calleia, Patricia, 735
Campbell, Ann, 459
Campbell, Dorothy Drysdale, 408
Campione, Kenneth M., 418
Canadian Library Assn., 758
Canary, John J., 687
Carbary, Lorraine Judson, 245
Cares, Herbert L., 190
Carlson, B. Robert, 342
Carlson, Larry, 591

Carnes, G. D., 282, 642
Carp, Frances M., ed., 448
Carpenter, Malcolm B., 369
Carroll, John B., 5
Carter, Joan Haselman, 588
Carter, R. E., 571
Cartlidge, Niall, 344
Cason, David, Jr., 182
Castillo, Regina, 693
Cataruzolo, Michael J., 269
Catledge, Oraien E., 635
Cavaye, A. H., p. 211
Cerullo, L., 65
Chaitin, Horace, 394
Chalfant, James C., 221
Chall, Jeanne, 5
Chandler, Lynette S., 422
Chapman, L. J., 646
Chappell, Gerald E., 525
Chase, Richard Allen, 789
Chase, Robert C., 426
Chase, Thomas N., 11
Chernicoff, Anna, 279
Chess, Stella, 182, 297, 700
Cheyne, Alexander I., 676
Chez, Ronald A., 41
Chigier, E., ed., 844
Chöler, Ulla, 274
Chorn, Erwin J., p. 130
Christakos, Arthur C., 327
Christensen, Kathryn, 473
Christian, Joe C., 327
Chung, Stanley M. K., 66
Cibeira, Jose B., 571
Cicourel, Aaron V., 543
Cinsky, Mildred E., 674
Clark, Leslie L., ed., 400
Clark, Margaret, 448
Clark, W. Crawford, 369
Clausen, Johs., 759
Clay, E. L., 628
Cleeland, Charles S., 746
Cleland, Charles, Mrs., 258
Clements, Sam D., 221
Clifton, F., 50
Clippinger, Frank W., 96
Cobb, Beatrix, 793
Cobb, Henry V., 582
Cobb, Jessamine, 635
Cobun, John M., 793
Codd, R. Brinley, 620
Cogen, Victor, 200
Coghlan, Naidi, 326
Cohen, Don B., 53
Cohen, Julius S., ed., 182
Cohen, Lillian Kay, 12
Cohen, M. Michael, 327
Cohen, Michael J., ed., 220
Cohen, Oscar, 635
Cohen, Richard L., 297
Cohen, S. Alan, 450
Cohen, Sidney, 290
Cohen, Wilbur J., 426
Cohn, Robert, 221
Cole-Adams, B., 555
Collingwood, Thomas R., 495
Collins, Dean T., 297
Collins, James F., 565
Collis, W. R. F., 811
Collums, Louise, 107
Colodny, Dorothy, 297
Colvin, Craig R., 440, 793
Comly, Hunter H., 33, 580
Connell, Helen M., 828
Conners, C. Keith, 33, 546
Connolly, Christopher, 221
Connor, Frances P., ed., 220
Connor, P., 637
Conrad, W. G., 33
Conroe, Ray M., 188
Cook, Don, p. 11
Cook, J. B., 413
Cook, John B., 599
Cook, Richard C. M., 273
Cooper, Barbara S., 549
Cooper, Louis Z., 28
Co-ordinating Council for Handicapped Children, 263
Cope, Corrine S., p. 204
Copeman, W. S. C., 97
Copp, E. P., 598
Coppen, Alec, 411
Corbett, Margaret, 571
Corcoran, John W., 170
Corcoran, Paul J., 369
Corman, Rena, 268
Cornely, Paul B., 247
Corrigan, Eileen M., inside front cover (May)
Corthell, David W., 642
Cosgrove, John E., 79
Cosman, Bard, 369
Costello, Elaine, 30
Cott, Allan, 395
Cotzias, George C., 186
Council for Exceptional Children, 71, 216, 233
Council for Natl. Cooperation in Aquatics, 851
Council of Orgs. Serving the Deaf, 28
Courtless, Thomas F., 741
Coutinho, Claude B., 186
Cowden, J. E., 138
Cox, B. Patrick, 406
Cox, Elizabeth, 87
Cox, Janet, 61
Crase, Cliff, 495
Cratty, Bryant J., 5
Crawford, Susan, ed., 478
Creasy, Robert F., 634
Creer, Thomas L., 132
Crellin, Eileen, 288
Crichton, J. U., 806
Crinella, Francis M., 455
Criswell, Joan H., 518
Critchley, Macdonald, 580
Cronholm, Börje, 599
Croog, Sydney H., 325
Crosby, Kenneth G., 406
Cross, Kenneth, 229
Cruickshank, William M., 734
Crunk, William A., 793
Crutchfield, Carolyn, 719
Cruttenden, Alan, 637
Crystal, David, 637
Cull, John G., 790, 793
Cull, John G., Jr., 440
Cullum, Patric, 430
Cuming, Maurice W., 620
Cummings, Victor, 141
Curran, William J., 333
Currey, H. L. F., 379
Curtis, Brian A., 368
Curwen, I. H. M., 639
Curzon, Beverly, 380
Cutler, Stephen J., 704
Cyriax, James, 175
Cytryn, Leon, 297
Czaczkes, J. W., 212

Dale, Brian, 758
Dales, Sophie R., 203
Dandurand, Gary, 478
Daniel, Hal J., III, 145
Daniels, Lloyd K., 781
Dantona, Robert, 320
Darley, Frederic L., 226, 684
Darling, Robert C., ed., 369
David, Samuel, 388
Davids, Anthony, 33
Davidson, Philip W., 382
Davis, Bridget C., 179
Davis, Maetta, 580
Davis, Malcolm D., ed., 513
Davis, Naida, 728
Davis, Sarah F., 327
Dawe, Patricia A., 843
Day, H. I., 801
Daynes, Edward, 679
Dayton, Karla K., 106
Dean, Geoffrey, 48
Dean, Thomas, 142
Deane, M., 50
de Hirsch, Katrina, 5
Delivoria-Papadopoulos, M., 346
Dell Orto, A. E., 138
DeLong, Arthur R., 234
DeLong, James V., 366
Delp, Harold A., 694
DelPopolo, Anthony James, Sr., 744
DeMarco, Barbara, 652
Demopoulos, James T., 328
Demos, George D., ed., 788
Denckla, Martha Bridge, 732
Dengrove, Edward, 150
Denhoff, Eric, 33, 221
Denholm, D. H., p. 166; p. 170
Deno, Evelyn N., 513
De-Nour, A. Kaplan, 212
Detels, Roger, 407
Devine, Vernon T., 425
Dewdney, Patricia, 758
Dhir, Randhir S., 38
Diamond, Florence, 49
Dibner, Andrew S., 24
Dibner, Susan S., 24
DiCarlo, Louis, 160
Dickey, Marguerite A., 109
Dickey, Thomas W., 229
Dickinson, Walter, Jr., 268
Dicks-Mireaux, M. J., 681
Diedrich, William D., 160
Diller, L., 138
Diller, Leonard, 302, 518
Dodd, Alan L., 702
Doke, Larry, 585
Dolce, G., 599
Dollfus, P., 571
Doten, Dana, 167
Dott, Norman M., 413
Douglas, Ann M., 28
Douglass, Joseph H., 45
Dow, Thomas E., Jr., 150
Downey, John A., ed., 369
Downie, P. A., 628
Drake, William E., Jr., 474
Dreger, Ralph Mason, 455
Dressler, Joan, 131
Driscoll, Mary Cook, 308
Driver, Paul, 785
Dubner, Harriet W., p. 330
Dubo, Hyman I. C., 369
Dugard, P., 628
Dunn, Dennis J., p. 80
Dunn, John H., 706
Dunn, Michael, 188
Dunn, Nell, p. 113
Duplica, Moya, p. 198
Durham, James R., 53
Durie, Mason, 558
Duthie, Robert B., 7, 380
Duttarer, Janet, 720
Duval-Beaupère, G., 7
Dworkin, E. S., 33
Dyggve, H., 254
Dyhrberg, John S., 752
Dykman, Roscoe A., 221
Dyksterhuis, Jerry E., p. 136

Easton, Harry, 107, 669
Eaves, L. C., 806
Eberstein, Arthur, 650
Ebra, George, p. 2; 821
Edberg, Elwin, 720
Eddy, Clark, 408
Edgar, Anne H., 407
Edwards, Robert, 30
Egdell, H. G., 417
Eggert, Raymond L., 224
Einbund, Michael J., 65
Eisdorfer, Carl, 448
Eisenberg, Leon, 546, 559
Eisenman, Russell, 355
Eisenstadt, A. A., 207
El-Kashlan, Khalil, 345
Elkes, Joel, 290
Elkin, William F., 167
Elkington, Helen J., 179
Elliott, Raymond N., Jr., 182
Elliott, Ruth, 349
Ellis, H. L., 703
Ellwood, Paul M., Jr., ed., 218
Elsaesser, E., 571
Ely, Donald, 802
Emerick, L. L., ed., 213
Enelow, Allen J., 150
Engel, W. King, 11
Engelmann, Siegfried, 93
England, Gene, 208
English, R. William, 205, 356, 489
Enis, Carol A., 269
Epley, Carol, 408
Epps, Charles H., Jr., 798
Erenberg, Gerald, 733
Erhardt, Rhoda Priest, 99
Erickson, Donald K., 513
Erickson, Lorraine B., 336
Eriksen, Louise Shepard, 339
Erlenmeyer-Kimling, L., 41
Errickson, Eric, 509
Esibill, Nancy, 36
Espeseth, V. K., 220
Evans, E. Burke, 164
Evans, Ellis D., 5
Evans, James R., 404
Evans, Joyce Stewart, 271
Ewalt, Jack R., 559

Fahey, Joan Dahms, 408

Fajardo, Robert, 748
Falek, Arthur, 41
Falk, Marshall A., 53
Fargo, George A., 347
Faribault State Hosp. Occupational Therapy Dept., 509
Farmer, Frances, p. 306
Fassler, Joan, p. 17
Fasteau, Steven, p. 267
Faulkner, Betty L., 133
Federation Employment and Guidance Serv., 688
Feldt, Robert H., 176
Fenichel, Gerald M., 835
Fenton, Joseph, p. 232
Ferullo, Robert J., p. 236
Fielding, Leonard, 509
Finch, Helen, 380
Fine, Richard N., 754
Finkelstein, Arlene, 30
Finley, Sara C., ed., 327
Finley, Wayne H., 327
Fish, Barbara, 41
Fisher, Robert L., 618
Fisher, Stanley, 152
Fishman, Daniel B., 350, 504
Fitch, James L., 736
Fitts, William H., p. 337
Fitzhugh, Kathleen B., 40
Fitz Patrick, Thomas K., 67
Flach, Jytte, 599
Flammer, L., 65
Flathouse, Virgil E., 221
Flax, Herman J., 496
Floor, Lucretia, 631
Flowers, Charles E., Jr., 517
Flye, Marion E., inside front cover (April); 242
Fogel, Max L., 194
Folman, Rosalind, 78
Ford, Amasa B., 178
Ford, Fraughton G., 702
Ford Foundation, 366
Fordyce, Wilbert E., 518
Fort, Joel, 290
Foster, G. H., 413
Fourcin, A. J., 637
Fox, Gary C., 27
Frankel, Alan, 498
Frankel, H. L., 571
Frankel, Herman, 433
Frankel, Jacob J., 19
Franklin, Keith, p. 11
Frantz, Charles H., 161
Fraser, B., 769
Fraser, F. Clarke, 168
Fraser, Margaret, 827
Fraser, Morris, 701
Frasier, S. Douglas, 396
Fredman, Marion, 303
Freedman, Daniel X., 290
Freedman, Kayla, 194
Freeman, B. L., 495
Freeman, John M., 468
Freeman, M. A. R., 379
Freeman, Roger D., 297, 592, 691
Freeman, Vera, 330
Freiberger, Howard, 65, 382
Freitag, Nanci S., 475
Fricke, James E., 209
Fried, Christopher, 770
Friedlander, Walter J., 737
Friedman, C. J., 46
Friedman, C. Jack, 833
Friedman, Ephraim, 365
Friedman, Erwin, 694
Frith, Uta, 479
Friz, Barbara R., 65
Frohlich, Philip, 35, 399
Fromm, H., 599
Frostig, Marianne, 165, 575
Frye, Virginia, 520
Fudala, Janet Barker, 208
Fugl-Meyer, Axel R., 633
Fukushima, George E., 182
Fuller, Carl W., 28
Fullmer, William H., 509
Fulton, Robert T., 585
Furth, H. G., 138

Gage, N. L., 204
Galante, Margaret B., inside front cover (April); 242
Gallagher, James J., 359
Gallaudet College. Off. of Demographic Studies, 319, 393, 544, 815
Gambrell, Ed, 353
Gann, Lee Nell, 702
Ganoung, Laura, 208
Garber, Norman B., 59
Garcia, Alexander, 836
Gardner, Elizabeth B., 792
Gardner, G. Gail, 74
Gardner, James M., 560
Gardner, R. Vance, 558
Gardner, William I., 82
Garner, Ralph E., 634
Garner, Wuanita L., 30
Garrett, John, 431
Garside, Daniel, 500
Gateley, Gardner, 42
Gay, Dennis A., 135
Gazda, G. M., inside front cover (March)
Gearheart, B. R., ed., 649
Geever, Erving F., 125
Gehant, Barbara A., 285
Geis, H. Jon, p. 34
Gelfand, Bernard, p. 40
Geller, Jeffrey, 423
Gellis, Sydney, 517
Genece, Rene, 707
Gerber, Sanford E., p. 322; 664
German, James, 327
German, James L., III, 41
Gershenson, Charles P., 517
Gersten, Jerome W., 472
Gerstenbrand, F., 746
Gerstman, L., 138
Giacobbe, George A., 408
Gibbon, N. O. K., 506
Gibbons, Sister Kathleen, 124
Gibbs, Gertrude E., 241
Gibson, John, 843
Gilbert, Neil, 778
Gill, I. K., 514
Gill, Wayne S., 793
Gjone, Ragnar, 599
Glaister, B. R., 576
Glasauer, Franz E., 190
Glaser, Edward M., 347
Glick, Leonard B., 445
Glovsky, Leon, 564
Goble, R. E. H., p. 211
Goering, Pete, 605
Gold, Edwin M., ed., 517
Goldberg, Leon I., 186
Goldberg, Peter B., 366
Goldberg, Richard T., inside front cover (July); 276, 505
Golden, Thomas, 820
Goldin, George J., 371, 518
Goldish, Louis H., 532
Goldstein, Norman P., 684
Golightly, Carole, 485
Goodding, Patricia, 580
Goodgold, Joseph, 650
Goodman, Hollace, 357
Goodman, James M., illus., 719
Goodwill Industries of Am., Inc., 147
Goodwin, Frederick K., 186
Gordon, Edmund W., 518
Gordon, Emeric, 599
Gordon, Joseph A., 632
Gordon, Ronnie (Mrs.), 647
Gordon, Sol, 694
Gorelick, Jack, 31
Gottesman, Irving I., 41
Gottlieb, Jay, 357
Gowan, John C., p. 49
Gowan, John Curtis, ed., 788
Grabowski, John, ed., 509
Graham, John R., 610
Graham, Richard M., 408
Grand, Sheldon A., 420
Granger, Ben P., 761
Granholm, Lars, 599
Grantham, Elizabeth, 121
Gray, Madelaine, 568
Grayson, John, 408
Grayson, Ruth, 50
Green, Orville C., 221
Green, R. L., 275
Greenbaum, Werner, 65
Greenberg, Bernard L., 464
Greenberg, Joanne, p. 273
Greenberg, L., 839
Greenfeld, Josh, p. 369
Greenspan, Leon, 707
Griffiths, Rolland, 509
Grimby, Gunnar, 633
Grinker, Roy R., Sr., ed., 107
Groden, Bernard M., 676
Grossman, Frances Kaplan, p. 109
Group for the Advancement of Psychiatry, 1, 122, 331
Grunt, Jerome A., 55
Grushkin, Carl M., 754
Grynbaum, Bruce B., 38
Guerrero, Victor, 798
Guess, Douglas, 585
Guldager, Lars, 531
Gulliford, Ronald, 222
Guralnick, Michael J., 841
Gurel, Lee, 183
Gurney, Wilma, rev., p. 366
Gustafson, Elizabeth, 812
Gutmann, David, 448
Gutowski, Frances, 241

Haas, A., 138
Haas, Albert, 693
Haber, Lawrence D., 111, 138
Hagin, Rosa A., 193
Haimes, Norma, 304
Hainsworth, Marian, 221
Hainsworth, Peter, 221
Hall, Sylvia M., 406
Halliday, William R., 150
Halliwell, Joseph W., 494
Hamill, Charlotte M., 177
Hamilton, Ann, 628
Hamilton, E. A., p. 211; 452
Hamilton, Elizabeth Ann, 348
Hamilton, Elizabeth L., 360
Hamilton, Gloria Shaw, 777
Hammons, Gary W., 359
Hamre, C. E., ed., 213
Handy, Imena A., 279
Hannigan, Margaret C., 445
Hansen, Carl E., 427, 848
Hansen, Philip A., 580
Harbert, W. B., 349
Hardin, Veralee B., 580
Hardy, Madeline I., 8
Hardy, Richard E., comp. and ed., 790, 793
Hare, E. H., 41
Haring, Norris G., 5, 438, 513
Harlan, William L., 752
Harrington, P. R., 7
Harris, Albert J., 5
Harris, Amelia I., 87
Harris, Audrey, 731
Harris, Elizabeth, 750
Harris, Gail A., 545
Harris, Grace M., 80
Harris, James D., 483
Harris, P., 413
Harris, Stanley J., 179
Harrison, Robert H., 357
Harshman, Hardwick W., 694
Hart, Betty M., 585
Hartlage, Lawrence C., inside front cover (June); 108
Hartman, A. Carol, 580
Hartman, Lenore A., 453
Hass, Sarah K., 585
Hass, Wilbur A., 585
Hatfield, Elizabeth Macfarlane, 803
Hatfield, F. M., 637
Hatzidoulis, C., 50
Haug, Marie R., 138, 365
Hauser, Philip M., 426
Haviland, Richard T., 406
Hawkins, Raymond, 33
Hawkins, Robert P., 195
Hay, R. L., 7
Hay, Sylvia, 240
Hayden, Joan, 593
Hazen, Bronwyn, 553
Heath, Earl J., p. 49
Hedrick, Dona L., 585
Helal, Basil, 379
Helfenbein, Louis, 574
Hellmuth, George A., p. 162; 786
Hemmett, Gordon M., 795
Hemsing, Esther D., ed., 744
Henkels, Milo P., 649
Henningsen, Paul A., 366
Hensley, James H., 54
Henteleff, Maureen, 820
Hentschel, Richard P., 702
Hermelin, Beate, 479
Herr, Edwin L., inside front cover (Oct.)

Hertz, Roy, 41
Hertzig, Margaret E., 616
Heston, Leonard L., 41
Hewett, Frank M., 513, 702
Heylman, Katherine, 574
Hickey, Kathleen M., 678
Hickey, Noel, 326
Hickling, Jennifer, 419
Hicks, Doin, ed., 28
Hicks, Dorothy, 615
Hicks, John S., 789
Hide, D. W., 703
Higgins, Joseph R., 220
Hilker, Robert R. J., 224, 471
Hill, Patricia, 744
Hillsman, Gladys M., 523
Hineser, William F., 853
Hirst, Cyntha C., 648
Hoem, Jean C., 408
Hoemann, Harry W., 742
Hoffer, M. Mark, 387
Hoffman, Paul R., 793
Hohmann, George W., 695
Holahan, John F., 366
Holden, Raymond H., 238
Holder, Lee, 550
Holland, Thomas P., 613
Hollings, E. M., p. 211
Holman, Gerald H., 233
Holmes, Douglas, 617
Holmes, Jean E., 324
Holt, K. S., 628
Homan, Mary Jo, 70
Honesty, Henrene, 512
Höök, Olle, 705
Hoover, Todd J., 802
Hopkins, Mary T., 490
Horenstein, Simon, 53
Hottle, A. K., 352
Houghton, Celia, 700
Houston, Jean, 290
Howell, Anne R., 268
Howell, R. Rodney, 41
Howes, Davis, 221
Hoyt, W. Hadley, 483
Huckaba, Charles E., 369
Huffman, David, 635
Hughes, J., 413
Hughes, John R., 221
Human Resources Center, 287
Humes, Carol, p. 11
Hungerford, Jeanette, 553
Hunt, Howard F., 369
Hunter, Bruce, 625
Huntsman, R. G., 275
Hurst, J. Willis, 398
Hurt, H. B., 58
Hutchinson, John D., 793
Hutchison, M. K. F., 637
Hutt, Peter Barton, 366
Huusko, Simo, 746
Hyman, Martin D., 491, 552
Hyman, Melvin, 160
Hynes, Jo Catherine, 557

Iano, Richard P., 499
Illinois. Univ. Inst. for Research on Exceptional Children, 814
Inaba, Margaret K., 602
Ingwell, R. H., 138
Inst. for Development of Educational Activities, Inc., 714
Inst. of Rehab. Med., 110, 647, 804
Interagency Council on Library Resources for Nursing, 481
Internatl. Assn. of Rehab. Facilities, 157
Internatl. Information Centre on Technical Aids. Internatl. Soc. for Rehab. of the Disabled, 579
Internatl. Med. Soc. of Paraplegia, 413
Internatl. Soc. of Cardiology. Council on Rehab., 152
Internatl. Symposium of Cerebral Palsy, 158
Iorio, Samuel V., 251
Irwin, John V., ed., 789
Isaacs, Bernard, 519
Israel Soc. for Rehab. of the Disabled, 844
Iversen, Iver A., p. 130

Jablon, Bert, 565
Jackson, C. C., 571
Jackson, Fred S., 182
Jackson, R. W., 571
Jacob-Chia, D., 571
Jacobson, Stanley, 368
Jaeger, D. Lavonne, 537
Jaffe, Norma, 297
James, Carole A., 683
James, J. I. P., 7
Janzen, F. V., 138
Jaques, Marceline E., p. 49
Jaramillo, Selene, 707
Jarrell, George R., 793
Jasper, Malcolm, 334
Jeffrey, D. Balfour, 406
Jenkins, Ramon B., 834
Jennett, Bryan, 470, 599
Jennings, John J., 796
Jessen, W. E., 382
Johnson, Florence C., 362
Johnson, Gillian S., 414
Johnson, John L., 182
Johnson, Ralph H., 414
Johnson, Roger, 509
Johnston, Robert, 827
Joint Comm. on Accreditation of Hospitals. Accreditation Council for Facilities for the Mentally Retarded, 159
Jonas, Saran, 260
Jones, Arlene Whiteman, 5
Jones, Guy R., p. 49
Jones, Joyce S., 702
Jones, Reginald L., 307, 359, 759
Jones, W. E., 637
Jonson, Jennifer, 403
Jordan, J. E., 138
Jordan, Jerald M., 28
Jorgensen, G. Q., 138
Jorgenson, D. Elaine, 70
Jung, Arlene, 472
Juraschek, F., 571
Juurmaa, Jryki, 382

Kagan, Jerome, 5
Kahn, Alfred J., 426
Kahn, Raymond L., 39
Kalb, Irvin M., 237
Kalisch, Beatrice J., 566
Kamenetz, Herman L., 286
Kanjilal, G. C., 764
Kanner, Leo, 289
Kanno, Yasuo, 382
Kaplan, Harold I., ed., 84
Kaplan, Helen Singer, ed., 444
Kaplan, Norman, 844
Karchak, Andrew, Jr., 199
Karmen, Mel, 253
Karnes, Merle B., p. 49
Karpman, Harold L., 237
Kasl, Stanislav V., 410
Kass, Corinne E., 5, 789
Katz, S., 844
Katzell, Raymond A., 298
Keane, Vincent E., 406
Kearslake, Cecily, 811
Keenan, J., 598
Keiser, Lester, 150
Keith, Robert L., 655
Kellmer Pringle, M. L., 288
Kelly, James G., 182
Kempster, R. F., 348
Kendall, D. C., 806
Kenny, Thomas J., 18
Kenny Rehab. Inst., 12
Kenrick, Margaret M., 687
Kent, Allen, ed., 400
Keogh, Barbara K., 16, 580
Kephart, Newell C., 374
Kerr, W. G., 571
Key, A., 571
Key, A. G., 506
Kiernat, Jean M., 227
Killen, James R., 221
Kilroy, Anthony W., 835
King, John D., 370
King, Roy D., 295
Kingdon-Ward, Winifred, 584
Kirchhoff, Hans, ed., 726
Kirk, Samuel A., 511
Kirkham, Frederic T., Jr., 113
Kirkland, Marjorie H., 335
Klatskin, Ethelyn H., 384
Klavins, Ruta, 568
Klimasinski, Krzysztof, 382
Kline, Carl L., 450
Kloss, Joseph L., 580
Klotz, S. D., 580
Kløve, Hallgrim, 746
Kluever, Raymond, 221
Kluppel, D. D., 789
Knight, James A., 150
Knight, Octavia B., 782
Knox, E. G., 484
Knutsson, E., 261
Kodahl, T., 254
Kogan, Kate L., 462
Koh, May, 508
Koh, Soon D., 107
Kohl, John W., 849
Kokaska, Charles J., ed., 788
Kolderie, Mary L., 60
Kolstoe, Oliver P., 830
Koppitz, Elizabeth Munsterberg, 215
Korman, Abraham K., 298
Korsch, Barbara, 754
Kottke, Frederic J., ed., 218
Kramer, Edith, 530
Krantz, John, 290
Krents, Harold, p. 335
Krippner, Stanley, 669, 700
Krishef, Curtis H., 612
Kristiansen, Kristian, 599
Kronick, Doreen, 231, 450
Krueger, Keatha K., 77
Krusen, Frank H., ed., 218
Krush, Anne J., 327
Kubena, Maurice, 580
Kuehn, Melody, 43
Kuhlthau, Linda, 503
Kujoth, Richard K., comp., 515
Kulash, Walter M., 211
Kunce, Joseph T., p. 204
Kurlander, LeRoy F., 297
Kurtzke, John F., 48
Kutner, Bernard, 141, 518
Kvaraceus, William C., p. 49

Lacey, Beth, 738
Lacks, Patricia B., p. 258
LaCrosse, E. Robert, Jr., ed., 442
Lacy, Gene H., 634
Ladd, Herbert W., 57, 225
Ladson, Melvin, 802
Laging, Barbara M., 340
La Gow, Robert, 802
Lamb, Douglas W., 413
Lamb, Marilyn M., 739
Lambert, Claude N., 68
Landry, Richard M., 413
Langenskiöld, A., 7
Langley, Michael, 783
LaPierre, Richard A., 845
Lasky, Robert G., 192
Lassiter, Robert A., 793
Laufer, Maurice W., 33
LaVeck, Gerald D., 517, 559
Lavine, Karen, 307
Lavore, Joseph S., 809
Lawlis, G. F., 138
Lazerson, Jack, 747
Leach, Edwin, 728
Leach, Fay W., 47
League, Richard, 149
LeCompte, William F., 138, 432
Lee, Kenneth A., 562
Leedy, Jack J., ed., 150
Leeper, Herbert A., Jr., 739
Leffingwell, Lois M., 487
Lehneis, Hans Richard, 662, 804
Lehon, Lester H., 381
Leland, Henry, 759
Lemert, Edwin M., 294
Lemke, Haru, 624
Lemoreux, Larry W., 65
Lenz, Widukind, 327
Leon, Arthur S., 186
León, Carlos A., 252
Leopoldt, H., 348
Lerman, Jay, ed., 160
Lerner, Janet W., 580
Lerner, Joseph, 150
Lesowitz, Nathan, p. 204
Lethcoe, Betty J., 128
Levett, L. M., 72
Levey, Samuel, 596
Levin, Gail M., 408
Levin, Herbert D., 408
Levine, Edward L., 298
Levine, Samuel, 844
Levine, Sol, 325

Leviton, Gloria L., 518
Levitt, Eugene A., 730
Levy, Marvin R., 744
Levy, Michael, 378
Lewis, Arthur J., 513
Lewis, Earl A., 65
Lewis, Franklin D., 580
Leyman, Edward, 118
Library Assn. (London), 838
Liebman, Emil P., 112
Liendo, Ernesto C., 571
Lightbody, Forrest E. H., 475
Lightel, Helena, 668
Lilienfeld, Abraham M., 375
Lincoln, T. A., 58
Lindan, Rosemary, 277
Lindau, Marjorie, 832
Lindblom, Ulf, 746
Lindsay, Charles H., 112
Lingle, Jo Ann, 473
Linn, Bernard S., 183
Linn, Margaret W., 183
Linnell, Craig O., 548
Linton, Patrick H., 327
Lipman, Miriam H., 408
Lipskin, Ronald, 65
Lipson, Alberta, 325
Lipton, Edgar L., 210
Little, Elizabeth, 50
Livingstone, Maureen, 519
Llorens, Lela A., 69
Lloyd, Lyle L., 406
Loder, Sr. M., 553
Loflin, Marvin D., 580
Logue, George, 586
Lollar, D. J., 138
Lomax, J., 379
Long, Calvin L., 369
Longhurst, Thomas M., 406
Lord, Francis E., 220, 511, 513
Lord, Joan, comp., 787
Lorenze, Edward J., 177
Loring, James, 323
Lott, George M., 297
Louria, Donald B., 744
Lourie, Reginald S., 744
Lovelace, Robert E., 369
Lowe, C. R., 813
Lowell, Edgar L., 30
Lowenfeld, Berthold, 155
Lowenthal, Marjorie Fiske, 448
Lowther, C. P., 846
Lubchenco, L. O., 346
Luchow, Jed P., 665
Lucioli, Clara E., 445
Ludlow, Felicy, 758
Luhr, John P., 106
Luikart, Clark, 402
Lukoff, Irving F., 635
Lundeen, Dale J., 649
Lusskin, Ralph, 38, 667
Lustig, Felicia M., 693
Lyman, Helen H., 445
Lynch, Henry T., 327, 752
Lynch, Joan, 406
Lynch, M. C., 639
Lynch, Wallace J., 495, 638

McAlees, Daniel C., 642, 649
McArthur, J. A., 348
McCabe, O. Lee, 290
McCall, Raymond J., 424
McCarr, James E., 30
MacCaul, Grizel, 177
McCauley, W. Alfred, 793
McClear, John E., 794
McCollom, Ivan N., 62
MaConahey, O. Linda, 509
McCoy, Leslie F., 793
McCroskey, Robert L., 73
McCullough, Newton C., III, 796
McCune, Donald A., 744
McCurley, R., 762
McDaniel, Aina, 580
McDearmon, James R., 811
MacDonald, A. P., Jr., p. 44
McDonnell, Kathleen, 580
McDorman, Mary Ben, 580
McDowell, Richard L., 805
McElravy, A. E., 334
MacEwen, G. Dean, 7
McGeown, Mary G., 278
McGettigan, James F., 499
McGowan, John E., Jr., 487
McGrady, Harold J., 580
McGrew, Donna R., illus., 683
MacGuffie, R. A., 138
McIntyre, C., 50
Macintyre, M. Neil, 327
Mackay, D. N., 762
Mac Keith, Ronald C., 26
Mackeprang, Muriel, 240
McKerracher, D. W., 436
McKibbin, Elsie H., 405
McKinlay, John B., 600
McLaughlin, Parnell, 793
McLean, P., 379
McLean, Virginia, 252
McLeod, Alexander C., 28
MacMahon, M. K. C., 637
MacMillan, Donald L., 759
McNamara, Blanche H., 757
McPhee, W. M., 138
Magee, Kenneth R., 56
Maitinsky, Steven P., 565
Makhani, J. S., 595
Mallery, Garrick, 721
Malmros, Richard, 599
Maluccio, Anthony N., 609
Manaster, Al, 14
Mann, Lester, 193
Mann, Ruth J., 322
Manning, C. W., 7
Marchant, Marjorie, 772
Marcus, Elliott M., 368
Marge, Michael, ed., 789
Margolin, Reuben J., 188, 371
Marguliec, I., 844
Mark, Frank R., 495
Marks, Claude H., inside front cover (Feb.)
Marlow, Wilma D., 609
Marosszeky, J. E., 553
Marquardt, Ernst G., 301
Marr, V., 553
Marro, Thomas David, 849
Marrs, Lawrence W., 702
Marshall, James H., 809
Martensson, A., 261
Martin, Edwin W., 359, 580
Martin, Fred W., 64
Martin, M. Jeanette, 606
Martin, William E., 126, 570
Martinson, Melton C., 513
Marwit, Samuel J., 163
Masland, Richard L., 5
Mason, Michael, 379
Mason, Richard C., 369
Mathews, John A., 419
Mathias, James D., 706
Matoth, Yehudah, 19
Matteson, Carol A., 408
Matthews, Carol J., 558
Mattingly, Stephen, 134
May, Edgar, 366
May, Elizabeth Eckhardt, p. 139
May, Philip R. A., 252
Mayadas, Nazneen S., 492
Meadow, Kathryn P., 391
Means, James A., 435
Mednick, Birgitte, 41
Mednick, Sarnoff A., 41
Medsger, Anne R., 824
Meenach, Leon, 793
Meichenbaum, Donald H., 780
Meier, Manfred J., 570
Meier, Robert D., 708
Meighan, Thomas, 15
Meijer, Alexander, 272
Meijering, W. L., 252
Meisgeier, Charles H., 370
Meislin, Jack, 150
Melcher, John W., 359, 513
Mendell, Jerry R., 11
Menkes, John H., 327
Menolascino, Frank J., ed., 297
Metcalfe, J., 50
Meyen, Edward L., 649
Meyers, Robert D., 476
Michael, Donald N., 79
Michael Reese Hosp. Inst. for Psychosomatic and Psychiatric Research and Training, 107
Michaelis, L., 571
Michaels, Elaine, 648
Michigan. Univ. Inst. for the Study of Mental Retardation and Related Disabilities, 182
Midwinter, R. E., 763
Milani Comparetti, Adriano, 594
Milgram, Joel, 578
Milhous, Raymond L., 497
Miller, Douglas E., p. 204
Miller, Henry, 344
Miller, Joan, 43
Miller, Joel R., 119
Miller, John M., III, 369
Miller, Jon D., 478
Miller, Jon F., 406
Miller, Leonard, 282
Miller, Louis W., 487
Miller, Oral Q., 495
Miller, Sutherland, 140
Miller, William A., 352
Millman, Howard L., 663
Milowe, Irvin, 297
Minde, K., 23
Mindel, Eugene, 107
Mindish, Margaret, 279
Minnesota. Univ. Industrial Relations Center, 516
Minskoff, J. Gerald, 5, 580
Mirsky, Stanley, 321
Mitchell, K. R., 138
Mitchell, Marlys Marie, 51
Mitchell, Robert D., 624
Mitchell, William L., 448
Miyazaki, Kazuoki, 571
Moldofsky, Harvey, 13
Mondlock, Robert, 426
Money, John, 327, 694
Monroe, Margaret E., ed., 445
Montagnes, J. M., 801
Montagu, Ashley, 20
Montan, Karl, p. 103
Montgomery, John C., 426
Moody, Mildred T., 445
Moolten, S. E., 816
Mooney, Muriel K., 408
Mooney, Vert, 65
Moore, Jacklyn M., 789
Moore, Tom D., ed., 572
Moores, Donald, 789
Morales, Pablo A., 571
Morency, Anne, 538
Moretti, Vera, 580
Morgan, Clayton A., 793
Morgan, Essie D., 188
Morgan, Evelyn M., 569
Morgan, M., 50
Morlok, Edward K., 211
Morris, Robert, 750
Morrison, A. Marie, 635
Morrison, Eleanor B., ed., 160
Morrow, Joe C., 793
Morse, Joan, p. 290
Morse, William C., 513
Morton, Barbara G., 539
Moskowitz, Eugene, 475
Moss, Bertram B., 53
Motloch, Walter, 189
Mowan, A. J., 620
Mowat, Alastair G., 380
Mowatt, Marian H., 297
Mulcahy, Risteard, 326
Mulder, W. J. M., 725
Mullaferoze, Perin, 387
Mullins, June B., 220
Mundy, Jean, 495
Mura, Elaine, 41
Murphy, Ann, 256
Murphy, Catherine, 50
Murphy, Harry, 30
Murray, Edward R., 635
Murray, M. P., 329
Muscular Dystrophy Assns. of Am., Inc., 120
Muthard, J. E., 138
Myers, Brenda B., 239
Myers, Stanley J., 369
Myklebust, Helmer R., ed., 221

Nadolsky, Julian M., 641, 776
Naftchi, N. E., 768
Naggan, Lachaim, 75
Nagi, Saad Z., ed., 217, 365
Nagler, Benedict, 759
Najenson, Theodore, 378, 844
Nall, Angie, 580
Nance, Walter E., 327
Nanus, Burt, inside front cover (Aug.)
Napier, Grace D., 649
Narin, Francis, 500
Natl. Acad. of Sciences. Committee on Prosthetics Research and Development, 136
Natl. Center for Voluntary Action, 437

Natl. Educational Consultants, Inc., 6
Natl. Found. for Handicapped Children (Israel), 447
Natl. Paraplegia Found., 262
Naughton, John P., 401
Neal, W. R., Jr., 316
Nebraska. Univ. Coll. of Medicine, 587
Nebraska. Univ. Teachers Coll. Dept. of Educational Admin., 802
Nedler, Henry L., 327
Neeld, W. E., Jr., 822
Neely, John G., 390
Neff, Walter S., ed., 518
Nellans, Teresa A., 338
Nelson, Nathan, p. 80
Nemerof, Henry, 521
Nesbitt, John A., ed., 4
Nesbitt, Norma J., 334
Neville, Yvonne, 519
New, Maria I., 396
N. Y. Medical Coll. Dept. of Obstetrics and Gynecology, 517
N.Y. State Psychiatric Inst., 315
Newkirk, Tracy A., 56
Newman, Edward, 793
Newman, Joseph, 629
Newman, Judy, 76
Newman, Lawrence, 28
Nezol, A. James, 343
Nhan, Nguyen, p. 194
Nichols, Philip J. R., p. 211; 380, 452
Nickel, Vernon L., 387, 571
Nielsen, Helle H., 236
Nielsen, Margaret, 750
Nielsen, Ruth M., 626
Niewoehner, Gerald J., 361
Nishizawa, Michimasa, 522
Nixon, P. G. F., 628
Noakes, Edward H., rev., p. 142
Nocera, Sona D., 408
Nordan, Robert, 401
Nordgren, Bengt, 265
Nordin, Virginia Davis, 182
Nordoff, Paul, 449
Norris, A. S., 666
Norris, Carol, 353
Norris, David, 255
Northeastern Univ. New England Regional Rehab. Research Inst., 371
Norton, Yvonne, 534
Norwood, Malcolm J., 802
Novack, Harry S., 33
Novikova, L. A., 382
Nowell, Antoinette Mc., 247
Nugent, Timothy J., 495
Nurco, David N., 290
Nutter, Donald O., 398
Nuutila, Arto, 746
Nyström, Sune, 746
Nystrom, William K., 622

Oberle, Judson B., 205
O'Brien, John M., 413
O'Connell, Alice L., 792
O'Connor, Elizabeth, 652
O'Donnell, Edward J., 202, 779
O'Flynn, J. Dermot, 571
Ogg, Elizabeth, 120
O'Grady, Donald J., 523
Ohrtman, William F., 200
Ohwaki, Yoshikazu, 382
Oldham, A. J. P., 348
O'Leary, K. Daniel, 425
Oliver, Robert C., 177
Olshansky, Simon, 52
O'Malley, Michael H., 789
O'Neill, Brian, 376, 377
Oppenheim, William, 596
O'Rahilly, Ronan, 161
O'Reilly, D. Elliott, 25
Org. for Social and Technical Innovation, Inc., 365
Orritt, C. P., 436
Ostendorf, Richard, 401
Outland, Richard W., 220
Overs, Robert P., 652
Owen, Robert, 419
Owen-Smith, B. D., 177
Owrid, H. L., 29
Ozer, Mark N., 233

Pacht, A. R., 138
Page, John M., 341
Palkes, Helen, 235
Palmore, Erdman, 402
Panara, Robert F., 542
Pannbacker, Mary, p. 72
Panushka, Warren, 580
Pargman, David, 32
Paris, Scott G., 771
Parker, D., 50
Parker, Neville, 611
Parker, R. M., 138
Parks, James, inside front cover (Mar.)
Partridge, John W., 671
Partridge, Kay P., 550
Patel, Sudha, 460
Paterson, C. F., 348
Patrick, M. K., 620
Patterson, C. H., 282
Patterson, F. P., 329
Paul, Howard A., 119
Paulsen, William A., 835
Payne, James E., 334
Pearce, Beryl, 811
Pearl, Shirley, 580
Pedrone, Ronald J., 501
Peiser, Irving J., 580
Peizer, Edward, 188
Pendreigh, D. M., 278
Penn, Nolan E., 267
Penrose, L. S., 759
Pentre, Barbara, 700
Perkins, William H., 298
Perlman, Phillip R., 853
Perlman, Suzanne M., 221
Perozzi, Joseph A., 406
Perrin, Donald, 802
Perrine, George, 127
Perry, J. Warren, 65
Perseelin, Leo E., 30
Peter, Laurence J., 653
Peter, R., 571
Peters, John E., 221
Peters, Martha, 520
Peterson, Charles R., 767
Peterson, Dwayne D., 649
Peterson, Earl H., 65
Pettinelli, Vincent D., 81
Petty, Thomas L., 350
Pfetzing, Donna, 28
Phelps, William R., 793
Philip, A. E., 628
Philips, Irving, 297
Phillips, E. Lakin, 438
Phillips, Thomas L., 459
Philpott, William H., 580
Phinney, Eleanor, 608
Pilpel, Harriet, 41
Piltz, Bert, 829
Pino, Alfonso E., 554
Pinsker, Esther Jill, 250
Pinsky, Leonard, 168
Piorkowski, Marijean, 602
Pipe, Peter, 30
Pisarchick, Sally, 283
Pless, I. Barry, 142
Plotkin, Rosalie R., 104
Poinsard, Paul J., 689
Pollard, C. Owen, 635
Pollock, Franklyn J., 228
Pomerance, Ira, 700
Pomeroy, Janet, 230, 495
Ponseti, I. V., 7
Pope, Lillie, 580, 700
Posner, Bernard, 844
Post, Carole, 580
Potter, Howard W., 297
Poulos, Rita W., 425
Pounds, Lois, 256
Powell, Mary, 419
Powell, Susan, 576
Poznanski, Elva O., rev., p. 109
Prall, Robert C., 341
Prather, Elizabeth M., 585
Preston, Atkins, 700
Price, John Scott, 41
Price, Mary, 607
Price, Ronald, 408
Prime, F. J., 7
Proger, Barton B., 580
Pruitt, Basil A., Jr., 808

Quigley, Stephen P., 814
Quin, C. E., 116

Rabiner, S. Frederick, 748
Rabow, Lennart, 746
Rahe, Richard H., 601
Rainer, John D., 28, 315
Rallison, Marvin L., 396
Rampp, Donald L., 789
Ramsey, Glenn C., 644
Rancho Los Amigos Hosp., 199
Randar, Mary Ann T., 775
Randolph, Jennings, 635
Raney, R. Beverly, Sr., p. 177
Rankine, R., 348
Rasberry, John, 429
Rast, Lawrence, 408
Raven, Ronald W., 628
Raw, John, 509
Rawson, Margaret B., 5
Ray, Henry, 802
Raynes, Norma V., 295
Reagles, Kenneth W., 135, 138, 709, 710
Ream, Donald L., 177
Redys, John J., 351
Reed, Elizabeth W., 41
Reed, Sheldon C., 41
Reed, Terry E., 327
Reedy, Corbett, 793
Rees, Alan M., 478
Rees, Norma S., 637
Reger, Roger, 450
Rehr, Helen, inside front cover (Sept.), 690
Reich, Melvyn L., 694
Reid, Lynne, 7
Reid, Otto M., 202, 779
Reimers, Jørgen, 715
Reinehr, Robert C., 485
Reinert, Henry R., 649
Reiser, David E., 297
Reitan, Ralph M., 40, 187, 385
Reivich, Ronald S., 318
Resch, Joseph A., 126
Resnick, Rose, 98
Reynolds, Maynard C., 206, 513, 702
Reynolds, Robert E., 143
Rhind, J. R., 413
Rhodes, William C., p. 49, 182
Richards, Larry D., 562
Richardson, Elliot L., 426
Richardson, H. Burtt, Jr., 233
Richardson, Stephen A., 810
Richardson, Sylvia Onesti, 580, 789
Richman, Sol, 774
Richterman, Harold, inside front cover (Jan.)
Rider, Barbara A., 590
Rigrodsky, Seymour, ed., 160
Riley, Lawrence E., ed., 217
Risley, Todd R., 585
Rivera, Geraldo, 656
Roach, Catherine, 829
Roaf, Robert, 7, 413, 571
Robbens, J. W., 620
Robbins, Clive, 449
Roberts, Allyn, 267
Roberts, Florence Bright, 551
Roberts, Margaret V., 843
Robertson, John A., 290
Robertson, Leon S., 377
Robin, Lois, 664
Robinson, H., 824
Robinson, Luther D., 28
Robitscher, Jonas, 150
Robson, Peter, 26
Roche, Adam, Jr., 316
Rodriguez, Ramon, 30
Roebuck, Julian B., 625
Roessner, J. David, 777
Rogers, Everette M., 518
Rogers, Janet M., 780
Rogers, John E., 65
Roland, Paul, inside front cover (June)
Roland, Paul E., 108
Roman, Paul Michael, 150
Romano, Robert L., 95
Ronis, Max Lee, 112
Roosth, H. P., 164
Rose, Edward F., 793
Rosen, Marvin, 631
Rosen, Samuel, 466
Rosen, Stuart D., 516
Rosenberg, Seymour, 585
Rosenberg, Stanley G., 114
Rosenberger, Peter B., 585
Rosenstein, Solomon N., 31, 171

Rosillo, Ronald H., 194
Roskies, Ethel, p. 366
Rosner, Jerome, 220
Ross, W. Donald, 150
Ross Laboratories, 572
Roth, Robert M., p. 49
Rothermel, Joel E., 836
Rothman, Arthur I., 13
Rothrock, Irvin A., 318
Rothstein, David A., 107
Ruben, Robert J., 28
Rubin, Eli Z., 221
Rubin, Gustav, 65
Rubin, Rosalyn, 144
Rubin, S. E., 138
Ruder, Kenneth F., 585
Rusalem, Herbert, inside front cover (Jan.-Dec.), 220, 441
Rusk, Howard A., 89
Ryder, Claire F., 167

Sabatino, David A., 193
Sade-Sadowsky, N., 844
Sadock, Benjamin J., ed., 84
Sager, Clifford J., ed., 444
Sainer, Janet S., 372
Saint-Anne Dargassies, S., 465
Sallade, Jacqueline B., 352
Salmon, Peter J., 320
Salomon, E. J., 495
Salomone, P. E., 138
Salomone, Paul R., 192
Samilson, Robert L., 604
Samore, Theodore, 478
Samuelson, C. O., 138
Sanchez-Salazan, Virginia, 756
Sanders, Lois Joan, 296
Sankovsky, Ray, 629
Sano, Keiji, 746
Sarason, Irwin G., 347
Sarmiento, Augusto, 796
Sarno, John E., 302
Sarno, Martha Taylor, 302, 439
Sartain, Harry W., 450
Saul, Shura, 248
Savage, Charles, 290
Savino, Mike, 105
Saxer, Gertrude, 469
Scagliotta, Edward G., 193
Scally, B. G., 762
Scherzer, Alfred L., 74
Scheuer, James H., 744
Schick, Frank L., 478
Schiefelbusch, Richard L., ed., 585, 789
Schiff, William, 698
Schiff, Yehuda, 844
Schindler-Rainman, Eva, 81
Schlant, Robert C., 398
Schlesinger, Hilde S., 28, 391
Schlesinger, Lawrence E., p. 194
Schmid, Frank R., 53
Schmitt, Robert, 802
Schneider, Carol J., 504
Schoenheimer, Henry P., 651
Schroedel, John G., 698
Schucman, Helen, 369
Schulsinger, Fini, 41
Schwartz, Melvin L., 259
Schwartzberg, Joanne G., 166
Schwarz, Richard H., 169
Sciarra, Dorothy June, 578
Sciora, Jean, 68
Scoggins, Roy T., 729
Scott, Robert A., 365
Searcy, Laurel, 823
Searls, D., 346
Sefer, Joyce W., 637
Selden, William K., 642
Seligman, Milton, comp. and ed., 581
Selman, Laurie, 328
Semple, T., 628
Serjeant, G. R., 275
Sermon, Duane T., p. 130
Setoguchi, Yoshio, 285
Sewell, Helen Rose, 30
Seymour, Lowell A., 580
Shafer, Alice Litchy, 123
Shai, A., 33
Shambes, Georgia M., 65
Shanas, Ethel, 448
Shands, Alfred Rives, Jr., p. 51; p. 177
Shanks, James C., 160
Shannon, Phillip D., 568
Shaperman, Julie, 285
Sharkey, Harold B., 632
Sharman, E. M., 349
Shaw, N. C., 628
Shaw, Robert, 637
Shay, Harold F., 793
Shayon, Robert Lewis, 802
Shea, Con, 635
Shea, Thomas M., 459
Shekelle, Richard B., 310
Sheldon, Sandra M., 145
Shell, Joan, 307
Shenken, Ellis, 389
Sheppard, Joseph J., 237
Sheridan, Mary D., 675
Sheridan, Vivian, 802
Sherman, James A., 585
Shertzer, Bruce, p. 49
Sherwood, David M., 847
Shockley, William, 204
Shontz, Franklin, C., 432, 518
Shotel, Jay R., 499
Shuy, Roger W., 789
Sibinga, Maarten S., 833
Sidman, Murray, 585
Siegel, Gerald M., 585
Siegel, Norman J., 766
Siegenthaler, Bruce M., 332
Silberberg, Margaret, 450
Silberberg, Norman E., p. 130; 450
Silver, Archie A., 193
Simard, Thérèse G., 57, 225
Simon, G., 7
Simpson, Alice, 758
Sindberg, Ronald, 267
Sisson, Joe, inside front cover (Mar.)
Skelton, Mora, 257
Skipper, James K., Jr., 102
Skolnik, Alfred M., 203
Slater, Eliot, 41
Slawson, Paul Frederic, 150
Sloat, Wilbur L., 498
Sluyter, David J., 195
Small, R. J., 177
Smith, Christopher R. W., 87
Smith, David Horton, 855
Smith, David Joe, 471
Smith, David W., 327
Smith, Linwood, 743
Smith, P. H., 413
Smith, R., 7
Smith, Richard T., 375
Smits, S. J., 138
Smodlaka, Vojin N., 348
Snarples, G. E., 658
Snook, Leslie, 292
Snyder, Sally S., 30, 802
Social Survey Div., Off. of Population Censuses and Surveys, 87
Soc. for Research into Hydrocephalus and Spina Bifida, 249
Solan, Harold A., 494
Solnit, Albert J., 297
Soloff, Asher, p. 66
Solomons, Gerald, 33, 297
Sonnenreich, Michael, 290
Sorensen, Ewald T., 755
Sorensen, James E., 825
Sorenson, James R., 117
Sourkes, Theodore L., 186
Souter, W. A., 7
South, J. R., 177
Spain, Jayne B., 844
Spellacy, Frank, 623
Spence, Sarah E., 349
Spencer, George E., 471
Spidal, David, 802
Spiegel, Herbert E., 186
Spieker, Jane L., 128
Spinner, Morton, 367
Spira, R., 844
Spitz, Herman H., 180
Sponheim, Nils, 599
Spreitzer, Elmer A., ed., 217
Stacey, Margaret, ed., 293
Stackhouse, Max L., 79
Stanfield, J. P., 417
Stanish, B., 769
Stark, Anne, 756
Stark, Gordon D., 413
Stark, Mary H., 297
Starrett, Alfred B., 290
Stattel, Florence M., rev., p. 332
Stauffer, E. Shannon, 65, 571
Stead, William, 852
Steel, Sheena, 349
Stein, Arthur G., 150
Stenner, A. Jack, 163
Stephens, Lillian S., inside front cover (April); 242
Stephens, Thomas M., 580
Stevens, Ardis, 583
Stevens, Godfrey D., ed., 400; 511
Stevens, Jack, 53
Stevenson, Roger E., 41
Stewart, Charles A., 635
Stewart, Mark, 235
Stock, Claudette, 311
Stoddard, Lawrence T., 585
Stoephasius, E., 571
Stohl, Dora J., 751
Stolov, Walter C., 95
Stone, Edward H., 196
Stone, Martin L., 517
Stone, Robert, 220
Stone, Shelley C., ed., p. 49
Stork, F. C., 637
Stotsky, Bernard A., 596
Stout State Univ. Dept. of Rehab. and Manpower Services, 146
Stovall, Janice D., 683
Straley, Walter W., 580
Strauss, Hans, 150
Stremel, Kathleen, 406
Stricevic, Snezana, 348
Striefel, Sebastian, 406
Stroud, Sari V., 702
Strunk, Orlo, J., 661
Stuart, Bruce C., 151
Stuckless, E. Ross, 540
Subtelny, Joanne D., 239
Suhareva, G. E., 559
Sullivan, Donald R., 654
Sullivan, James F., 571
Sumida, Carl, 285
Summers, Hubert, 30
Sundstrom, Carl, 568
Suppes, Patrick, 30
Sussman, Marvin B., 138, 365, 448, 630
Sussman, Nathan, 689
Sutcliffe, Betty G., 843
Svendgaard, Niels, 599
Swadron, Barry B., 654
Swain, Ryland, 706
Swanson, Palmer J., Jr., 34
Swanson, William L., 507
Swedish Inst. for the Handicapped, 314
Sweeney, Anne, 28
Swerdlow, David, 495
Swinney, David, 789
Swisher, John D., inside front cover (Oct.)
Swisher, Linda Peck, 250
Sykes, Kim C., 129, 842
Sylvester, Joan, 50
Szasz, Thomas, 290

Tait, Perla, 463
Talfer, Margaret C., 748
Talkington, Larry W., 406
Talkington, Perry C., 150
Tanaka, Henry T., 253
Tanner, J. M., 7
Taraba, Dorothy, inside front cover (June)
Tarabulcy, Edward, 571
Tardibuono, John S., 352
Targett, R. J., 843
Tarjan, George, 559
Taylor, A., 413
Taylor, Charles, 448
Taylor, Frank D., 580
Taylor, Orlando, 789
Telford, Nancy Jo, 580
Tellam, Joan, 30
Terris, Milton, 517
Tessier, Annette, 580
Tews, Ruth M., 445
Texas A & M Univ. Coll. of Architecture and Environmental Design, 717
Theiss, Frances Case, 574
Theorell, Töres, 601
Thetford, William N., 369
Thiagarajan, Sivasaliam, 802
Thomas, Barbara, 831
Thomas, Charles W., 182
Thomas, Don R., 93
Thomas, Gordon, 186

Thomas, Kenneth R., 709
Thompson, Alice C., 358, 450
Thompson, David, 434, 811
Thompson, M. A., 571
Thompson, Pearl E., 219
Thompson, Travis, ed., 509
Thompson, Warren, p. 337
Thoreson, Richard W., 282, 712
Thuring, C. M., 725
Tikofsky, Ronald, 789
Timmons, Dean, 580
Tisdall, William J., inside front cover (Feb.)
Tittle, Charles R., 817
Tizard, Jack, 295, 297, 559
Tobiessen, J. E., 33
Tofanelli, Ruth, 580
Tolliday, Heather, 620
Topaz, Peter M., 33
Torr, Donald, 30
Toth, John C., p. 2
Tourlentes, Thomas T., 53
Toyama, Philip M., 522
Tracy, Michael L., 182
Trefler, E., 589
Treitel, Ralph, 363
Trice, Harrison M., 150
Trippe, Matthew J., 513
Troop, Harry W., 793
Trudeau, Elaine, ed., 216
Truscott, B. Lionel, 115
Trussell, Elizabeth C., 179
Trybus, Raymond J., p. 258
Tseng, M. S., 711
Turaids, Dainis, 538
Turk, Lorraine, 780
Tuscher, James, 27
Twiname, John D., 426
Tyler, Nancy, 462
Tyzenhouse, Phyllis, 313

Uchida, Irene A., 327
Ulrich, Sharon, p. 209
Union of Cooperatives of Invalids, Warsaw, Pol., 156
U.S. Admin. on Aging, 482
U.S. Congress. Senate. Special Committee on Aging, 660
U.S. Dept. of Agriculture. Child Nutrition Div., 685
U.S. Dept. of Health, Educ., and Welfare, 137
Health Services and Mental Health Admin., 818
Off. of Asst. Secy. for Health and Scientific Affairs, 246
U.S. Dept. of Housing and Urban Development, 528
U.S. Dept. of Labor. Employment Standards Admin., 645
U.S. Forest Service. Inyo Natl. Forest, 197
U.S. Natl. Heart and Lung Inst., 309
U.S. Natl. Inst. of Mental Health, 148, 723, 741, 825, 826
U.S. Natl. Inst. of Neurological Diseases and Stroke, 5
U.S. Natl. Park Service, 627
U.S. Off. of Educ., 702, 722
U.S. Off. of Educ. Natl. Center for Educational Statistics, 109
U.S. Off. of Educ. Natl. Center for Health Statistics, 501
U.S. President's Committee on Employment of the Handicapped, 244
U.S. Public Health Service, 614, 765
Community Health Service, 749
Health Services and Mental Health Admin., 214
Natl. Center for Health Statistics, 185, 337
U.S. Rehab. Services Admin., 67, 428, 643, 696
U.S. Social and Rehab. Service, 284, 298
Community Services Admin., 335
Youth Development and Delinquency Prevention Admin., 556
U.S. Social Security Admin., 399
U.S. Social Security Admin. Off. of Research and Statistics, 375, 674
Unterharnscheidt, Friedrich J., 599, 746
Urquhart, G. S., 611
Usdane, William M., 518

Vacc, Nicholas A., inside front cover (Nov.)
Vaillancourt, Pauline M., 478
Vandersypen, Hugo L., 211
Vandyk, Neville D., 348
Van Hattum, Rolland J., 239
Van Kirk, Barbara, p. 107
Van Osdol, Bob M., 591
Van Riper, Charles, 92
Vasile, John, 394
Vattano, Anthony J., 697
Vaughan, Margery M., 408
Vaughan, Tony D., ed., 649
Veigh, Gretchen, 502
Vernon, Jack, 173
Vernon, McCay, 28, 107
Verstappen, H. M. Ch., 725
Vetter, N., 628
Vieceli, Louis, 229
Vineberg, Shalom E., 138, 432, 518
Virden, Virginia D., 160
Viscardi, Henry, Jr., 510
Vogel, Beverly S., 219
Vogler, W. J., 822
Volante, Roberta S., 354
von Heijne, Christina, 705
von Hilsheimer, George, 580
Vora, Pravin H., 387
Vorwaller, Darrel J., 657
Voysey, Margaret, 416

Wachs, Harry, 404
Wagner, Muriel G., 247
Wagner, Rudolph F., 2
Wald, Joan Rosalind, ed., 220
Wald, Patricia M., 366
Waldrop, Mary F., 235
Walker, A. Earl, 599
Walker, I. Constance, 382
Walker, J. E., 619
Walker, J. L., 317
Walker, Robert, p. 326
Wallace, Helen M., 686
Walls, Richard T., 61
Walsh, E. G., 413
Walsh, R., 348
Walter, Felix, 198
Wang, Mamie Kwoh, 113
Warkany, Josef, 327, 740
Warner, Frank, 820
Warner, Richard W., Jr., inside front cover (Oct.)
Waterland, Joan C., 65
Watter, Pauline, 21
Waylett, Janet, 100
Webb, John, 429
Webster, Thomas G., 297
Wedell, K., 646
Weil, Andrew T., 366
Weiner, Paul S., 585, 659
Weingold, Joseph T., 706
Weinrich, John E., 670
Weintraub, Frederick J., 223
Weisbrod, Jo Anne, 408
Weisbroth, Stephanie, 36
Weisert, Hilde, 700
Weiss, Marian, 154, 797
Wellek, Charles S., illus., 512
Weller, George M., 235
Wellman, Klaus F., 300
Wells, Anna A. M., 843
Wells, Robin W., 477
Welsbacher, Betty T., 408
Wepman, Joseph M., 527, 538
Werry, John S., 456
Wesley, Frank, 83
West, Howard, 184
West, James A., 793
West, Patrick, 288
Wester, Inna, 172
Weyman, Joan, 85
Whatley, Lydia W., 678
Whelan, Richard J., 182
White, Marilyn, 241
White, Marjorie, 102
White, Paul E., 550
White House Conference on Children, 91
White House Conference on Youth, 90
Whitehouse, Frederick A., p. 226
Whiteley, Norman, 785
Whitsett, Thomas L., 186
Whittemore, Ruth, 351
Whittett, Martin M., 177
Wickham, Edcil R., 334
Wiig, Elisabeth, 541
Wilhelm, Irma J., 621
Willems, Edwin P., 138, 432
Williams, C. Arthur, J., 397
Williams, H. Parry, 703
Williamson, Lawrence, 454
Willson, Harold L., 706
Wilmore, Douglas W., 808
Wilson, A. Bennett, Jr., 524
Wilson, Frank B., 739
Wilson, J. N., 639
Wilson, James B., 759
Wilson, Lee A., 548
Wilson, P. D., Jr., 329
Winston, Ellen, 426
Winston, Kim, 580
Winter, R. B., 7
Winterfeldt, Curt, 408
Winters, John J., Jr., 180
Wirls, Charles J., 104
Wisconsin State Div. of Health, 683
Wisconsin. Univ. Library School, 445
Wisconsin. Univ. Regional Rehab. Research Inst., 135
Wisconsin. Univ.—Stout. School of Educ., 831
Wiseman, Douglas E., 580
Wisher, Peter R., 495
Withey, Stephen, 182
Withrow, Frank, 802
Witkop, Carl J., Jr., 327
Witschi, Emil, 41
Wittenmyer, Jayn J., 334
Witwer, Michael W., 53
Wixom, Charles W., 377
Woestehoff, Ellsworth S., p. 49
Wolcott, Lester E., 483
Wolf, Anna W. M., p. 209
Wolf, Carolyn, 43
Wolfensberger, Wolf, 181
Wolfram, Jill, 802
Wolkon, George H., 253
Wood, Courtney B., 354
Woods, Max L., 63
Woodward, Elizabeth, 529
Woodward, Katherine, 297
Woodward, Peter, 529
Wooley, H., 764
Workman, Ronald W., 635
Worsley, B., 349
Worthington, Nancy L., 549
Wortis, Joseph, 559
Wright, Beatrice A., 493
Wright, George N., 135, 138, 709, 710
Wright, Keith C., 793
Wright, Margaret M., 297
Wunderlich, Ray C., 536
Wunderlich, Richard A., 597
Wyatt, Kenneth E., 220, 513
Wykert, John, 10
Wynn Parry, C. B., 639

Yablonsky, Lewis, 290
Yamamoto, Kaoru, 563
Yase, Yoshiro, 727
Yater, Verna, 392
Yates, D. A. H., 419
Yates-Smith, G. M. K., 539
Yoches, Carol, 132
Yoder, David E., 406
Youniss, J., 138

Zaizov, Rina, 19
Zander, Mary L., 372
Zedler, Empress Y., 5, 789
Zehrbach, R. Reid, p. 49
Zelle', J. A., 281
Zerrip, Charles E., Jr., 30
Zinberg, Norman, 290
Zink, G. David, 174
Zorab, P. A., ed., 7
Zuger, Rosalind R., 36
Zuniga, Efrain N., 784
Zutshi, Derek W., 379

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REHABILITATION LITERATURE

National Easter Seal Society for
Crippled Children and Adults

In This Issue

Hard-Drug Addiction

Rehabilitation Research

A Capsule Research Review

Herbert Rusalem, Ed.D.

Multihandicapped Blind Persons Can Work

By: **Herbert Rusalem,** Teachers College, Columbia University, and **Harold Richterman,** National Industries for the Blind

New York: National Industries for the Blind, 1972.

The Study

Under a grant from the U.S. Social and Rehabilitation Service, National Industries for the Blind (NIB) explored the potentialities of federal work contracts under the Wagner-O'Day Act for the rehabilitation and employment of blind persons with such other complicating disabilities as mental retardation, emotional disturbance, hearing losses, physical limitations, advancing age, and cultural limitations. A products laboratory was established with which a government products committee linked forces to evaluate products purchased by the federal establishment for their possible usefulness in sheltered workshop evaluation and training processes for multihandicapped blind persons. This marked the first systematic attempt to screen such products for persons who, along with blindness, have had their work capacities sharply reduced by other concomitant severe conditions.

Products with potential for use with this client group were placed with cooperating NIB-associated workshops for the blind and tested in actual trials with multihandicapped blind persons. Those products surviving the field tests were installed in these workshops with the aid of engineering, rehabilitation, and new products development services provided centrally by NIB. An evaluation team assessed the impact of these procedures upon the rehabilitation and employment of multihandicapped blind persons in sheltered workshops for the blind.

The Findings

1. Thirty-seven new major government-purchase product lines were developed that are suitable for this special client population.

2. More than 290 multihandicapped blind persons achieved employment through participating in the manufacture of these products.

3. The large majority of these clients had their cases closed as "rehabilitated" at their respective state rehabilitation agencies.

4. Subsequent to the termination of the project, most of the participating workshops planned to retain both the new project products and the multihandicapped persons who had worked on them.

5. The new products, engineering, and rehabilitation procedures developed through the project have been so practical and successful that they are being retained on an ongoing basis by NIB after the termination of project activities.

The authors concluded that the combination of new product development, engineering know-how, and rehabilitation skill can widen rehabilitation and employment opportunities for multihandicapped blind persons and that such persons have surprising levels of work potential when placed in proper working conditions.

Implications for Our Field (As Seen by the Reviewer)

Blindness once was viewed as being so disabling, in and of itself, that sustained employment was virtually unthinkable for this group. In time, this view was demolished and, today, thousands of blind persons are functioning successfully in a wide spectrum of occupations. The study under review suggests that currently held beliefs that blindness in conjunction with other severe disabilities renders the individual scarcely able to work for a living are also in error.

On the contrary, this research demonstrated that work conditions can be created that result in successful work experiences for members of this group. Thus, another myth concerning the employment potential of the severely disabled has been put to the test and found wanting.

It would seem advisable to launch similar studies designed for other severely limited, multihandicapped target groups who currently are functioning below their real level of vocational fitness. Such studies can help to vitiate current attitudinal barriers that deter the severely handicapped from attaining deserved full or partial self-support in our society.

REHABILITATION LITERATURE

January, 1973, Volume 34, No. 1

(In Two Parts)

CONTENTS

Page

PART ONE

A Capsule Research Review — Inside Front Cover
Conducted by Herbert Rusalem, Ed.D.

Article of the Month — 2
What's Happening in Hard-Drug Rehabilitation? by Richard T. Walls, Ph.D., and Steven P. Gulkus

Special Article — 7
A Tale of Two Lives, by Lex Frieden

Special Reports

Vocational Rehabilitation of the Hard-Core Addict, by Charles W. Reeder, Joseph T. Kunce, Gerald J. Niewoehner, and Robert B. Inskeep — 11

A Five-Year Follow-Up of Psychiatrically Disabled Clients, by Simon Olshansky — 15

Book Reviews — 17

Abstracts of Current Literature — 21

Events and Comments — 31

Author Index — Inside Back Cover

PART TWO

Annual Index, Volume 33, 1972

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REHABILITATION LITERATURE

Article of the Month

What's Happening in Hard-Drug Rehabilitation?

Richard T. Walls, Ph.D.
and
Steven P. Gulkus

THE 1972 National Directory of Drug Abuse Treatment Programs[1] indicates identification of 2,254 drug treatment programs in the United States. Of these, 974 are individually described with respect to type of program, services, admission, staff, and clientele. The present paper does not attempt any sort of integrative review of such programs; instead its purpose is to provide a brief description of predominant and promising modalities in the treatment of morphine or heroin addiction. Pharmacological use of the term *narcotic* is now restricted to those substances with morphine-like effects. Injected intravenously, they produce a "rush" in the abdomen that users often describe as similar to an orgasm. Although no rush is experienced when the drug is taken orally, the high, relaxation, and indifference may be similar. Addiction is usually considered the physiological or psychological state in which the getting and the taking of the drug become the focus of the user's entire life.[2]

Most rehabilitation programs use a combination of treatment modalities while giving primary emphasis to a single aspect. For example, the National Institute of Mental Health Clinical Research Center at Lexington, Ky., places heavy reliance on the concept of the therapeutic community; however, psychotherapy, social services, occupational therapy, and medical attention are important collateral aspects of the program. A methadone program usually includes some form of reorientation and vocational counseling. The five major modalities of program focus discussed here are methadone, antagonists, psychotherapy, the therapeutic community, and behavioral treatment.

Methadone

The treatment of drug addiction using methadone is a relatively recent approach to solving the problems of addiction. The potent narcotic analgesic drug was given the generic name methadone after World War II but has been classified under numerous other names such as dolophine, adanon, amidon, physeptone, miadone, butalgin, diadone, and polamidon.

About the Authors . . .

Dr. Walls is associate director of research in the Rehabilitation Research and Training Center, West Virginia University. He is also associate professor of educational psychology and clinical studies. His Ph.D. degree from the Pennsylvania State University includes an emphasis in learning psychology and development. He has received outstanding teaching awards and is the author of more than 20 scholarly publications.

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Preparation of this manuscript was supported in part by the U.S. Social and Rehabilitation Service through the Regional Rehabilitation Research and Training Center (West Virginia Division of Vocational Rehabilitation and West Virginia University).
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The pharmacological properties of methadone are similar to those of morphine, exhibiting a depressant effect upon the central nervous system. However, when methadone is administered to subjects physically dependent on other narcotic drugs the effect is similar to that of a cross tolerance with these drugs. As a result, methadone facilitates detoxification for the addict by suppressing stress experience and withdrawal symptoms. Doses of methadone also act to reduce narcotic hunger and blockade the usual euphoria experienced under the influence of heroin.

There is a variety of methadone maintenance treatment plans being experimented with at present. The most widely established program was developed by Dole and Nyswander[3] and involves three phases. The first phase is hospitalization for a period of several weeks. Increasing doses of methadone, which blockades sites of narcotic drug action, are given until a stabilization level of 80 to 120 mg per day is reached. The second phase requires a single dose of methadone daily on an outpatient basis. Urine specimens are taken to determine illicit drug use. In this phase the client is encouraged to utilize medical, psychiatric, social, and vocational resources made available to him as part of his reorientation back to a drug-free existence. The final phase requires that he continue medication and periodic checkups. Some similar programs utilize a computer to pick at random one day per week to take a urine specimen. This reduces the possibility of a client's planning illicit narcotic use according to a scheduled urine test program. Programs often require the client to obtain methadone at a nominal expense of approximately $1.00 per day. This gives him a feeling of self-supportedness, and most importantly he has the feeling that he is being treated for a medical disease rather than something criminal.

Dole and Nyswander summarize the advantages of a methadone maintenance program over other forms of maintenance therapy. First, methadone (methadose) can be administered orally. This method of administering methadone alleviates the secondary effect of "needle popping," which is a high produced by intravenous injections. Second, methadone has an extended duration of action (24 to 36 hours). Third, there are few serious side effects. Fourth, methadone will block the effects of heroin. Fifth, administered orally it does not produce euphoric effects of its own; however, intravenous self-administration may produce a euphoric experience.

The most supportive factor in the recommendation of methadone maintenance treatment programs is methadone's being a legally administered drug that frees him from illegal use of harmful narcotic opiates and the "street hassle." He no longer has to use criminal acts such as stealing to maintain his habit. Methadone gives him the chance to spend more time "getting his head straight," while not worrying about where, when, or how he will get his next fix. Treatment, to be successful, should incorporate rehabilitation programs that help the addict shift from a life concerned with drug-seeking and hustling into one that is more productive and self-supporting both vocationally and psychologically.

Opposition to methadone maintenance programs is largely concerned with serious social costs of trading one kind of addiction for another. Those who support methadone maintenance defend their position, stating that addicts steal goods annually worth $300 million to support their habits.[4] Dole[5] maintains addicts on $2,000 per person annually. For each untreated addict the cost to the community averages about $35,000 (theft, welfare, etc.) or $5,000 for criminal incarceration. Jaffe[2] reported that two-thirds of the 1,000 clients in a New York methadone maintenance program were either working or attending school. In one study, however, of a random sample of 100 clinic patients receiving methadone maintenance, the majority were still using heroin.[6] Dropouts and program jumpers pose another problem. Of 66 dropouts from a methadone maintenance program, only 2 had been abstinent for a significant length of time.[7] Opposition also comes from those who feel that heroin addiction is more than just a physiological dysfunction; for example, Bates[8] contends that addiction is symptomatic of severe emotional maladjustments and personality disorders (see subsequent discussion under Psychotherapy).

Methadone treatment programs are still in the experimental stages. Original formulations of maintenance strategies have been modified due to a number of criticisms and findings. Alteration of dose levels, omission of hospitalization (complete outpatient treatment), variations of ancillary services, withdrawal from methadone, placebo effects, and incorporation of methadone maintenance therapy into a multimodality treatment orientation are some of the experimental modifications being used in an effort to clear an effective route for reintegration of the addict back into society.[9]

Morphine and Heroin Antagonists

The function of a narcotic antagonist is to prevent the narcotic from reaching the nervous system, thus blocking both the habituating effects and the euphoria. They are thought to work because they have greater attraction and attachment capability to the "morphine receptors" of the central nervous system than the narcotics do. Although several other drugs such as nalorphine are known to have antagonistic properties, the two antagonists receiving most attention in experimental treatment programs are cyclazocine and naloxone.[10]

While very effective in the treatment of heroin overdose (because of its pharmacologically pure antagonist form), naloxone does not last as long as cyclazocine and is thus not as well suited to treatment and prevention. Following detoxification and a blocking dose build-up period, a 4 to

5 mg. daily dose of cyclazocine can effectively block clinical and electroencephalogram effects of 15 mg. intravenous heroin up to 28 hours. However, the client may experience side effects such as tiredness, dizziness, or headaches, and as noted a dose is effective for only one day. Several reports have indicated encouraging findings.[11, 12] Cyclazocine has been effective in relatively rapid experimental treatment programs coupled with intensive psychotherapy, outpatient counseling, or group work. However, even for clients who are highly motivated to stop shooting drugs, the variety of problems that accompany this intent is often overwhelming. Almost all authors stress the need for adjunct counseling and help, particularly with antagonists.

The antagonist is not addictive and, unlike methadone, it does not satisfy the urge or craving for drugs. While a methadone house or ward usually appears to have a relaxed atmosphere, tensions and anxiety characterize a cyclazocine ward. Under the frustration of the blocking agent, many who would otherwise "mainline" heroin turn to highly addictive barbiturates or to multidrug use. Thus, the addict's emotional and behavioral problems must be addressed in a comprehensive way rather than being dealt with as a trivial accompaniment to the physiological problems.[10]

Continued research appears assured in light of White House drug advisor Jerome Jaffe's recently announced push to develop a dependable antidrug drug. Synthesis of more long-acting drugs (e.g., EN-16-39) and novel use of existing antagonists (e.g., time-release capsules) are certainly not *the* solution to the drug problem. But development of a long-lasting, nonaddicting narcotic antagonist would provide an extremely important treatment option. Such medication has the potential of freeing a client from the street scene and permitting engagement in the continuity of rehabilitation and resocialization efforts.

Psychotherapy

The psychoanalytic approach seeks an underlying psychological cause for the drug dependence. The therapist attempts to aid in strengthening of superego and ego functions related to self-respect. Such self-knowledge and respect are reality-based in contrast to drug-based omnipotence. There is some evidence that individual psychotherapy is of limited usefulness when addicts are forced to participate but is helpful when sought voluntarily. Sabath[13] describes such treatment as consisting of *1)* establishing a working relationship between the therapist and patient, *2)* working on conflicts that lead the patient into emotional crises in his environment, and *3)* helping the patient in establishment of new relationships. However, Zucker[14] contends that individual psychotherapy may be unproductive because of the addict's use of it as unchallenged narcissistic gratification. Group psychotherapy, on the other hand, may lead to intense rivalries for the therapist's attention and consequent growth of "cotherapeutic functioning, ego esteem, belongingness, and mutuality."

Contact with peers and a sharing of therapeutic experiences appear to be important. The false autonomy, centered around his power to take drugs and feel immune in the drug state, must be discarded in a group of fellow addicts. He knows or learns that he cannot con them as he customarily does the straight world. The group thus aids the therapist in making the deceits and temptations of his drug-taking understood and vice versa.[15] The skilled psychotherapist uses group dynamics of conflict and support as tools for understanding and changing behavior. However, the relapse rates reported in follow-up studies are seldom encouraging.[16]

Therapeutic Community

For more than a decade the therapeutic community concept, or what some call mutual help programs, has been established to help the addict come into contact with the underlying causes of his escape into a world revolving around narcotic addiction. Programs are structured about a small community setting with the establishment of complex social systems operated almost entirely by ex-addicts.[17] The programs are usually run on an open-door basis, and withdrawal is by "cold turkey" (without pharmacological aids). Rigid systems of punishment and reward, encounter experiences, involvement in social processes, and controlled reentry into society are characteristic.[18] Organizations such as Synanon, Phoenix House, Odyssey House, Daytop Village, and Gateway House provide the individual with a new drug-free society.

In 1958 the Synanon Foundation developed a community of ex-addicts involved in the formation of their new society based on a drug-free life style.[19] Status systems, social roles, social growth, social controls, empathy, self-identity, and most importantly the encounter "game" are characteristic of Synanon cities.[20] Educational, business, and family activities are also part of the overall plan.

An addict enters Synanon voluntarily and is viewed neither as a "normal" person nor as a patient in a hospital. He is recognized only as a person who uses dope as a defense and has not learned to get along with himself and others without drugs. In the Synanon game each day, he encounters his feelings of inadequacy, low self-esteem, passive-aggressive defenses, instability, impulsivity, and authority problems.[21] A minimum of 12 people play the Synanon game in which very intense emotional interaction is characteristic, and hostile verbal attacks occur often at the street language level. However, violence and threats of violence are not tolerated, and the group challenges those who do not express themselves honestly or try to con the group. After several months of profane rage the individual usually forms some affectionate relationships. Group support is crucial, and everyone in the group is

a "right guy" (member of the ingroup). Follow-ups indicate that about 40 percent stay clean after leaving. Many work for Synanon, and some may stay forever in this special new society of concerned others with similar life experiences.[20]

Various other programs utilizing the therapeutic community concept, such as Phoenix House, Odyssey House, and Daytop Village may vary with regard to structure and rehabilitation criteria. All Phoenix and Odyssey Houses are located in residential neighborhoods where drug problems flourish and are run by former addicts. When the addict is accepted into the community, he is given a job and allowed the opportunity to work his way up within the house. That is, he may begin as a dishwasher and evolve to a position of public relations agent for the house within 16 months. The two primary community-enforced rules are no violence and no drugs.

A major factor differentiating Odyssey from Phoenix Houses (as well as Synanon and group psychotherapy for that matter) is the approach to the encounter. The Phoenix philosophy holds that the community members are best equipped to direct and participate in the sessions, while the Odyssey Centers use trained personnel to lead the group encounter.[22] However, regardless of format, the honest encounter and mutual support experiences appear an essential contributor to the encouraging results produced by therapeutic communities.

Behavioral Treatment

Although almost any form of group or individual counseling may be related to behavioral treatment, the distinction intended here refers to more traditional learning classifications. The two general learning classifications considered are *1)* classical, involving more reflex or autonomic responding, and *2)* instrumental, involving voluntary response characteristics and control.

Aversive classical conditioning usually pairs electric shock with a drug-related picture, object, or procedure in the drug-taking chain.[23] For example, Herman[24] reports encouraging results from presenting shock at particularly reinforcing times in the addict's heroin shooting sequence. There are wide variations in procedures used by many heroin addicts. "One person may just take the heroin out, put it in a spoon, cook it up and draw it up and shoot. Another may have 20 or 30 or even 50 steps. . . ." Through interviews, reenactments, Q-sorts, and selection of slides, the therapists determine the most important or reinforcing parts of the client's behavioral drug chain. The slide selection procedure is of interest in its own right. Herman and colleagues first get the addict to select the slides that relate most closely to his own drug-taking behavior. These slides are then projected, using a console with illumination controls. By repeatedly pressing a bar, the addict can keep the picture bright. If his bar-pressing slows or stops, the picture fades. Electrical printouts indicate the length of time spent looking at each slide and the rate of bar presses.

Aversive counterconditioning then begins at the places in the behavior chain identified as most reinforcing. As the addict goes through his customary routine, he is shocked at appropriate points. For some clients capable of good visualization or imagery, the shock may be replaced by imagining some noxious event. For example, an addict may be taught to think "your connection's going to rip you off . . . or of getting a hot shot—of overdosing —of abscessing." Such techniques help the client control his behavior so that appropriate behaviors can be developed and reinforced in a more complete treatment program.

A behavioral modification treatment strategy, utilizing instrumental learning, involves what is termed *contingency contracting*. Henry Boudin's[25] unique demonstration project is noteworthy here. A legally binding contract is drawn up between the therapist and client specifying the narcotics that may not be taken. The taking of such drugs then becomes a breach of contract, and the consequences of such a breach are noted in the contract. Usually the consequence involves a specified contribution to an organization that the client detests. For example a violation of a given client's contract might require that a $50 donation be sent to the Ku Klux Klan in the client's name. The money for such a donation comes from the bank account of the client that has been established jointly with the therapist. That is, the therapist can control expenditures from the account. If the client has no money, his stereo, automobile, or other possession may be involved in the contingency.

Another unique feature of Boudin's program is the charting of overt and "covert" behaviors. The client wears a mechanical counter on his wrist for counting such behaviors as number of drug-taking urges or number of cigarettes smoked. The client phones in his counts or data to the treatment headquarters at three-hour intervals. The data are charted in graphic form so that trends, improvement, and possible oncoming crises can be noted. Failure to phone can constitute a breach of contract, and volunteers are used to help with field work. The thought of a $20 donation being sent to the Narc Squad that busted him and objective behavior monitoring are enough to keep a number of former junkies straight. Some might propose that such behavioral treatment is too simplistic since it does not get to and treat deep causes of drug-taking behavior; however, clean urine and track-free arms make a strong argument.

Discussion

On the basis of research results, many believe that there is no single reason for starting to use narcotics, no characteristic user personality, and no single inevitable out-

come.[2] At this state of the art or science of opiate treatment, it is important that varied programs of research continue. It is encouraging to note the relative merits and demerits of a number of counseling and treatment modes (multifamily and concerned other counseling, halfway houses, religious experience, parole for clean urine, computer-based counseling, the Tinley Park multimodal approach) in addition to those discussed herein. The management and feedback capabilities of the token-economy concept have also been used as aids in resident treatment programs.[26]

While the impetus of varying hard-drug research method and procedure based upon different philosophical premises is encouraging, the waste of human resources and the social cost of mounting addiction problems are indeed discouraging. Rehabilitation personnel must be creative enough to design novel treatment plans, objective enough to accurately monitor the behaviors such plans are designed to change, and wise enough to recognize useful solution elements.

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A Tale of Two Lives

Lex Frieden

Preface

I HAVE LOOKED at life from two sides of a many-sided fence. I do not pretend to know everything about either side, but I have experienced a rather unique situation, and I believe I can, by sharing my experience, contribute a valuable perspective to the viewpoint of others.

Mr. Freiden, after graduating from the University of Tulsa in December, 1971, continued with graduate studies. He received an assistantship to continue his studies in psychology at the University of Houston in the fall of 1972.

Man has often contemplated the possibilities of living twice, but few men have ever realized the opportunities of their dreams. Although it seems like a nightmare at times, I have realized an opportunity few men dare to imagine.

In the spring of 1967, I graduated from Alva High School, Alva, Okla., after a fairly successful childhood filled with a variety of enlightening experiences. I was a good student and consequently had the privilege of leading my class as valedictorian. I was also fortunate to have the confidence of my peers who selected me as Most Likely to Succeed.

I was able to participate in a wide variety of school activities, including music, drama, athletics, and student government. I played first chair trumpet in the band, had the lead in the junior and senior class plays, and was captain of the golf team. Probably my most exciting experience during this time was my selection as the Oklahoma representative to the Student Burgesses in Williamsburg, Virginia.

As a youngster, I was very active in the Boy Scouts, earning Eagle and attending two National Jamborees in Colorado Springs and Valley Forge, Pa. Later, I became a camp counselor and spent three summers teaching boys how to row boats, paddle canoes, and swim.

I always managed to keep busy, and the summer of my senior year is a good example. Besides lifeguarding at a municipal swimming pool, I worked part time at a commercial radio station, coached a Little League baseball team, played in a rock band, and earned six hours of credit at Northwestern State College.

After all that, I was ready to make my way off and conquer the great university. I accepted a President's Scholarship from Oklahoma State University and enrolled in an electronics engineering program offered there.

November 20, 1967, was the last day of school before Thanksgiving break at O.S.U. That day I had classes from 7:30 in the morning to 5:30 in the evening. After classes, I went with a friend to a fraternity rush party and then returned to the dormitory. There, I encountered four other fellows with whom I went for a car ride at about 11:30. That night, as we were returning to the dorm, we had a head-on collision with another car.

I was stunned momentarily but immediately regained consciousness and, as everyone scattered from the car, I discovered that I could not move!

Since we were all conscious, the ambulance company took us to the university infirmary where a single doctor and an incompetent nurse tried to patch up everyone.

The driver of our car had several broken ribs, another boy had a broken leg, and two others had severe lacerations. Since I was the only one there who was not bleeding, I was the last to be examined.

When the doctor discovered I was paralyzed, he immediately diagnosed my injury as spinal shock. At this point, he began taking x-rays in an effort to determine the extent and location of the injury. The startled expression on Dr. Jenkin's face as he looked at the x-rays somehow signaled the severity of my injury.

He immediately telephoned Don Rhinehart, M.D., a neurologist at the Oklahoma University School of Medicine. Dr. Rhinehart agreed to meet me at St. Anthony's Hospital in Oklahoma City. I was still conscious at the emergency room, so Dr. Rhinehart took some more x-rays before moving me to the intensive care unit, where I was to be in critical condition for the next 10 days.

My recollections from that period are clouded by much pain and the heavy drugs used to subdue it.

When I awakened, the day after the accident, my mother and father were there with Dr. Rhinehart and an orthopedic surgeon, Dr. Spencer. My head was strung in a clumsy harness and tied to sixty pounds of weights. This traction or constant pressure was to remain on my spine for the next six weeks.

Dr. Rhinehart said my neck had been broken by a whiplash at the fifth vertebra, but he could make no prognosis until he did a laminectomy or exploratory surgery. Dr. Spencer was to do a bone transplant from my hip to my neck and fuse a new vertebra in place of the one that had been shattered. They needed to operate as soon as

possible to keep the splintered bone from severing the nerves to my heart and lungs. They had to wait three days for the hemorrhaging to stop in my neck and for the swelling to subside.

On the day of surgery, everyone from a Methodist minister to a Catholic priest came in to pray for me. I was drowsy when the orderly carted me into the operating room, but I remember the glint of the powerful lights on the stainless steel fixtures in the room. Six hours later I emerged unconscious, fused, and inspected.

The next several days were touch and go, but gradually I improved to the point where I could be transferred to a private room.

My last day in intensive care was really quite an experience. It was the first day I had been conscious enough to be aware of much going on around me. The room was always lighted so that you could not tell night from day, and it was filled with the constant and resounding din of respirators and heart pumps. That day I saw one man die of stab wounds and another die of a heart attack. It would be hard for a healthy person to remain so under such conditions, but it seems to be a highly effective method of maximum care.

I was confined to a Stryker Frame rotating bed for six weeks after the operation, and during this time I was rolled from my stomach to my back every two hours. To turn on that contraption was a horrifying experience every time. The procedure required two aides to strap me in between two panels and then flip the bed, so that I landed on the opposite side. It did not always work, and I dreaded the ordeal.

This constant rotating was complicated by the presence of a set of head tongs drilled into my skull. On these tongs were hung the weights that created the traction on my spine. Twice the tongs were pulled from my head and twice they were replaced.

Many of these terrifying experiences may seem to have been unbearable, but my state of mental awareness was so vague that I did not care what was happening. By the time I could actually sense the pain, my body was already conditioned to it.

It was not until a few days before Christmas that I realized the potential consequences of my injury. One night I happened to watch a late movie on television about a soldier who had been shot in the neck and paralyzed. Until then, I had successfully ignored the implications of reality, but now I had to face the truth. The problem was I did not know the truth, and no one else seemed to either.

I asked everyone, but no one could tell me when I would get over the paralysis. I assumed it would disappear as I recovered from the surgery, but I still could not move anything but my eyes, and that was very discouraging.

My confidence and faith began to wane, and I slipped into a deep state of mental depression. Christmas came just in time to pull my spirits out of the fire.

For the first time in my life, I realized the true value of friends. My home, Alva, is a small farming community of seven thousand in northwestern Oklahoma, but no city in the world could extend as much love as those people did to me.

I received literally trunkfuls of cards, letters, and gifts from my friends and, though often misused and ignored, the sentence, "Our love and prayers are with you," means hope to me. Those people gave me a portacolor television for Christmas, but, not only that, they gave me the courage to face tomorrow.

The following poem was written for me by one of my friends and helps describe the kind of support I received from the people of Alva.

A small city (a little town?) is made
up of
Many business and professional people
all fierce competitors;

Many churches, each with congregations
convinced
That they alone possess the master key
to Heaven;

Stubborn political groups who think
that there is only their side of
any question;

Little cliques and clubs, exclusive
and united
For their personal projects and pleasures;

Rows of houses called "homes"
Each centered on "me" and "mine."

But when one family enters a valley
between life's mountaintop experiences
All of the business people, professional
people, church people, political
groups, cliques, clubs, and families
Flow together as at a given signal
and form one strong unit,

Expressing love and faith and
determination
That with heaven's help "we," not
just "he" or "she" or "they,"
SHALL PREVAIL.

This miracle of molding a unit of
strength
Is indeed one of God's rich blessings
Both for those who give and for those
who receive.

By the middle of January, I had progressed to the point that I could be moved and the doctors suggested that I be taken to a rehabilitation center. After much investigation, deliberation, and many arrangements, I was flown to the Texas Institute for Rehabilitation and Research (TIRR) in the Texas Medical Center in Houston.

There are very few good rehabilitation centers in this country, and among them TIRR is highly regarded. The attitude of William Spencer, M.D., director of the institute, is characteristic of the progressive outlook of the institute. A leader in the field of rehabilitation, Dr. Spencer believes that, "We must try to organize, co-ordinate and manage our efforts to assist the handicapped from *his* perspective which is, after all, *our* perspective." *

Upon arriving at TIRR, I was taken to a medium care ward, which I shared with five other boys. After a brief physical examination and a bite to eat, it was time to get acquainted.

On my right was Ronnie, a swell guy from Austin, Tex. We were about the same age and had about the same injuries. Ronnie was hurt a few months before I was, in a diving accident. To my left was Bardot. He was a New York boy who had had poliomyelitis as a youngster and had experienced several complicating accidents and illnesses since then. Bardot may have been a bit eccentric, but I enjoyed his piercing questions and natural curiosity.

Across the room was Scott. Scott had been in the center longer than the rest of us; although younger, he was the veteran among us. He, too, had suffered a broken neck in a car wreck. Next to Scott was Richard, a boy from Louisiana whose neck was broken when he dived into the shallow end of a swimming pool. Richard's rehabilitation had been set back several times by severe infections.

Finally, there was Cowboy. Cowboy was a bronc rider whose head was smashed against the gate when he was bucked off his horse as it left the chute at a rodeo. He was married and had two children, and he loved country music.

It had been a busy day, and I was just about to get some sleep, when an orderly came through the door pushing a huge yellow cylinder. It was the first time I had ever seen an iron lung up close, and I could not imagine what it was. The orderly put Bardot inside it, plugged it in, and turned it on. Without thinking, I imagined they had one of those "tanks" for each of us, and this scared me. Frightened as I was, I eventually fell asleep to the bru-um, bru-um, bru-um of the compressor on Bardot's tank.

The following day I met my doctor, R. E. Carter. A spearhead in the efforts of the Institute to develop the finest spinal cord center in the country, Dr. Carter is highly respected by his patients and associates. After a comprehensive physical examination and evaluation, Dr. Carter started me on an individualized program of intensive rehabilitation.

I spent two hours a day in physical therapy, where one of eight therapists gave me both active and passive exercises. By the middle of February, I could move my head, shoulders, and arms. There were very few active nerves remaining that I could not control.

Occupational therapy occupied an hour of my time each day. Here, I learned to utilize those muscles that had been restrengthened. The therapists showed me how to substitute working muscles for others and to apply them as replacements in constructive tasks.

After consultation with a leading bone specialist, Dr. Carter removed the brace that helped support my neck after the tongs were removed. Also, he prescribed an externally powered orthosis, or assistive device, for my right hand.

The powered orthosis was first developed at TIRR by Thorkild Engen, C.O., director of the orthotic department. The device utilizes a tubular muscular substitute fixed on an arm or hand brace and inflated with carbon dioxide. Activated by a specially designed control valve, the orthosis allows me to grip a number of things, including pencils, pens, and eating utensils. After being totally dependent for so long, it is great just to be able to feed yourself again.

The Institute maintains an excellent counseling and social services staff. They try to assist the patient in adjusting his outlook on life to fit his new role. A person must command some degree of self-confidence if he is to find his place in society, and to do this the handicapped person must be able to perceive his norms and goals in the context of his own ability.

I was in a class with 14 other patients that met several times a week to study and discuss the problems of our disabilities. We had the opportunity to visit with specialists from all fields of rehabilitation. These included the real specialists, people who had been hurt like us and who had reentered the mainstream of life as productive and contributing citizens.

Dr. Carter met with us on several occasions. He explained that most of our injuries were the result of spinal cord lesions. These lesions occurred when the bones in our necks were broken, and we were all paralyzed to different degrees, depending upon the point at which our spinal cords had been severed.

When a nerve is cut and hemorrhaging occurs, scar tissue usually forms. If the scar tissue has actually sealed itself across the spinal cord, it is very unlikely that those muscles activated by nerves extending below the severed point will be able to move voluntarily. This set of circumstances creates a more or less permanent disabling paral-

*Spencer, William. Expectations for the Future. *Promethean.* Oct., 1970. 8:4:2.

ysis. Naturally, the higher the injury is, the more complete is the resulting paralysis. Since my neck was broken very near the top, I am almost totally disabled and, having little use of my arms, I am classified as a quadriplegic.

I spent most of my spare time visiting with my roommates, but occasionally I took advantage of the recreational therapy program. The Institute believes, and justifiably so, that recreation is a fundamental unit of total rehabilitation. The program provides not only games, parties, and special programs but also frequent field trips to selected social events. While I was there, I saw my first hockey game, my first soccer game, my second, third, and fourth pro baseball games, and my first formal civic ballet. I am convinced that these field trips are very important from the standpoint that they keep the patient in touch with the outside world so that he does not develop an institutionalized concept of life.

Before I could participate in any of these special events, I had to build up my stamina in general and my sitting tolerance in particular. To assist me in doing this, I was started on a controlled weight-bearing program. Simply, this means standing. Since I could not support my own weight, I was strapped to a tilting board or standing board and gradually raised to increasing degrees. After being prone for so long, your body has to slowly recondition itself to the vertical plane. In the beginning, my therapist monitored my pulse and blood pressure so that I did not go up too quickly.

The method used to build sitting tolerance is similar to that of standing. To start with, I was placed, for a few hours each day, in a wheelchair with a reclining back. Gradually, over a period of weeks, the back of the chair was raised to the normal position. From then on, it was simply a matter of sitting a little longer each day.

By the end of March, I had progressed sufficiently so that there was no immediate danger of medical setback. At this point, I was transferred to a semiprivate room on a minimum care station. It was here that I came to know Steve.

Steve had broken his neck in a motorcycle accident two days before my accident. Our injuries were almost identical and our attitudes complemented each other. Steve was married, and his wife, Lyn, was a beautiful girl. Their home was in Florida, where Steve was a medical student.

Besides sharing a room, Steve and I shared our accomplishments, our problems, our hopes, and our dreams. We came to understand each other as friends seldom do. We were released from the hospital on the first day of May. Steve and Lyn went back to Miami and I went back to Alva.

It is difficult to return to an old setting as a new or different person. People are not sure how to accept you and they do not know what to expect from you. They are often overcautious and consequently awkward, but the people of Alva did their best to make me feel at home.

Two weeks after I got home, I was asked to preside at the initiation ceremonies of my high school's National Honor Society. As the curtains were drawn on the stage, I received a standing ovation. I will never forget that moment, and the only way I can begin to repay those people for their encouragement is to do my best to overcome my handicap.

I was determined to return to school, so without wasting any time I enrolled in summer school at Northwestern State College. After that I had the pleasure of visiting Mexico with four of my lifelong friends. We spent two weeks in Mexico City and Acapulco and had a wonderful time. Those fellows convinced me that I could go just about anywhere and do just about anything I wished.

Our family moved to Tulsa in the fall of 1968, since my father had been promoted to vice president of sales for Oklahoma Natural Gas and was transferred to the main office. I was sorry to leave all my friends, but I was glad to have the opportunity to study at the University of Tulsa.

This story would be incomplete if I ended it without mentioning my number-one supporters, my family. It is extremely difficult to describe or even list all the help and encouragement they have given me. In this day of prosperity and independence, the family is often disregarded, but, if I succeed in reaching any of my goals, it will be in no small part a result of my family's faith in me.

It has been three years since I was hurt, and I have not yet completely adjusted to my new role in life. At least now, I can look at the future with a sense of security in knowing my own goals. I plan to continue my education, working towards a doctorate in psychology, with the hope that I may be able to serve my fellow man.

My story has not ended, and I do not intend it to end here. I believe my future is just as promising now as it was before I was hurt. I may be handicapped, but any roads that are closed now have simply led me to new horizons.

It would have been easy for me to have stopped living after my accident, but, instead, I chose to accept my experience as an enlightening adventure rather than a disastrous ending.

ACKNOWLEDGMENTS

My sincere thanks to Dr. Nancy Feldman, for giving me the incentive to write this paper, and to my sister, Brooke, for helping me type it.

Vocational Rehabilitation of the Hard-Core Addict

Charles W. Reeder, Joseph T. Kunce, Gerald J. Niewoehner, and Robert B. Inskeep

AN INCREASING number of persons throughout the United States are becoming addicted to heroin. Director John E. Ingersoll of the Bureau of Narcotics and Dangerous Drugs estimates that there are now 560,000 hard-core addicts. The present estimate is 10 times as much as the 1960 Bureau estimate of 55,000 heroin addicts.[5]

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Heroin addiction is said to be responsible for one-third to one-half of the major crimes in our cities. In the jails of New York City, for example, the hard-core addict makes up 50 percent of the inmates. Furthermore, in that city heroin overdosage and complications rank as the leading cause of death for those between the ages of 15 and 35 years.[6]

The dimensions of the drug problem are reflected not only by the number of addicts but also by the pervasiveness and rapid growth of drug use in recent years. Midwestern and southeastern sections of the country, previously thought to be relatively free from hard-core addiction, have recently reported substantial increases in heroin addiction rates. If the present rate of growth continues through the next two decades, we can expect an addict population of several million.[5] The drug problem is not limited to large city ghettos but has spread to the suburbs, small towns, college campuses, military services, and secondary schools.[6] Agencies that have had little or no experience with the hard-core addict may now be expected to cope with the complex task of helping drug addicts to become stable and productive members of society.

One of the more recent legislative actions pertaining to the rehabilitation of drug addicts is the Federal Drug Abuse and Drug Dependence Prevention, Treatment, and Rehabilitation Act of 1970. It provides an administrative department within the Department of Health, Education, and Welfare to coordinate all existing federal rehabilitation programs related to drug dependence. The Act encourages state and local programs to undertake research, education, training, and coordination of drug-treatment programs by providing federal assistance in terms of advisement and funds. It seeks to provide equal opportunity for all drug-dependent persons to receive treatment and rehabilitation regardless of their circumstances.[10] The 1970 Act provides just one of many resources now becoming available for the treatment and rehabilitation of the drug addict. Such increases in support and resources should enable more agencies to expand their programs to include services to drug addicts.

The purpose of this paper is to review some of the issues in rehabilitating the hard-core addict. Hard-core refers to those addicts who are using hard drugs such as heroin, not the drug abuser or experimenter using, for example, L.S.D. The role of vocational rehabilitation services in community programs is discussed and guidelines are suggested for developing services and resources. In addition, some of the major ongoing research programs are presented along with needed areas for research of special concern to the vocational rehabilitation staff.

Treatment Modalities

Many methods of treatment have been used in rehabilitating the hard-core addict. The major settings in which these modalities are implemented usually have been institutional or community-based. Treatment modalities commonly found in either the institutionalized or community-based settings include group encounter,[3] chemotherapy,[2] therapeutic communities,[4] halfway houses,[14] and multimodality approaches.[11]

The institutional approach placed the addict in a residential facility most often located away from his own community at institutions such as the federal hospital in Lexington, Ky.[9] Although reeducation and rehabilitation were attempted in the institutional setting, research indicated that without follow-up services in the addict's own community he would return to drugs.

As a result of the need for follow-up, contemporary, community-based rehabilitation programs have developed. These programs direct rehabilitation efforts toward helping the addict change within his own community.[1] Many agencies such as welfare, probation, and social services cooperate in providing the addict with comprehensive rehabilitation services. Follow-up activities are much more effectively administered from a community than from an institutional setting.

Vocational Rehabilitation's Role in Community Programs

The community-based approach to the rehabilitation of the hard-core addict is a cooperative venture involving the services of many agencies. The vocational rehabilitation agency can play a significant role in the coordination of the social, psychological, and medical services necessary for the successful vocational rehabilitation of the hard-core addict.

In the provision of services to the hard-core addict, a rehabilitation agency should consider a number of factors. Some of the critical factors discussed here include: community resources, immediate services, rehabilitation agency staffing, client selection for rehabilitation services, rehabilitative services, follow-through services, program evaluation, current research programs, and suggested areas of research and development.

Community Resources

Some type of community center, facility, or project for drug addiction seems to be necessary to develop a viable program. These programs will generally require special funding. Financial assistance from the federal government is usually available to supplement state and local funds for establishing and operating community-centered treatment programs. Some established federal programs such as Model Cities provide administrative and coordinating assistance.

A successful community-based treatment program requires coordination and cooperation among many agencies. One agency is seldom able to provide comprehensive services. Therefore, a specific client might require family counseling service from a social service agency, financial assistance from the Welfare Department, and medical assistance and treatment facilities from a community hospital. At the same time the probation officer may be involved in making arrangements for the addict to participate in a treatment program in lieu of a jail sentence. Vocational rehabilitation programs will have varying roles to fulfill, depending upon the particular community setting and resources.

Immediate Services

The hard-core addict will often require immediate attention to his "crises." Upon admittance to a treatment program he must generally undergo some form of detoxification procedure. Many therapeutic community programs detoxify the addict "cold turkey," without the assistance of any antagonistic or substitute drugs. Methadone is sometimes used as a temporary aid to detoxification, even when not used as a part of a maintenance program. The procedure is supervised by a physician and the length of detoxification periods varies with the individual addict.[17] Emergency medical treatment should be provided to addicts with additional problems that require immediate attention. Urgent family and financial problems often follow along with personal, social, and vocational difficulties.

Rehabilitation Staffing

Rehabilitation counselors can be directly recruited from existing, interested counseling staff members to work with an addict caseload. Some agencies also train former addicts to be responsible for some aspects of the rehabilitation process. Ex-addicts seem to function well as counselor aides, stimulating a peer relationship with the addicts undergoing treatment. The combination of ex-addict and professional staff members provides a more effective counseling relationship.[3]

Both the counselor and paraprofessional ex-addicts may benefit from special training. These training programs usually provide experience in encounter groups, counseling technics, self-awareness, medical and legal aspects of addiction, and communication skills.

Client Selection for Treatment and Rehabilitation Services

Selection of program participants will depend upon the treatment approach and the facilities available. Most treatment programs develop guidelines for determining eligibility and the potential for success, but the nature of these guidelines varies considerably. Factors generally considered include the degree of the addiction, age, legal compulsion, and former failure in other programs. After admission for treatment, most programs expect the addict to meet the standards set by that program.

In determining the addict's feasibility for vocational rehabilitation services, the following should be considered: *1)* basic medical information to determine physical problems, *2)* accurate assessment of applicant's vocational assets, *3)* the successful participation in an ongoing addiction treatment program, and *4)* the demonstration of readiness for training or employment.

Rehabilitative Services

Therapeutic counseling may consist of individual and group psychotherapy, milieu therapy, and vocational counseling. Most of these treatment methods are similar to those used with people having emotional problems. The unique aspects of most drug addict therapy programs have developed through the use of ex-addict counselors employing group confrontive technics.

Recreational therapy is included in some programs to provide alternative activities and outlets for the addict to engage in when he is off drugs. Therapeutic recreation helps the addict to develop a more positive self-image, teaches him social skills, and introduces him to the advantages of participating in community life.[21]

Vocational rehabilitation counseling must continue to

help the addict become more aware of his problems and how they affect independent living. Such counseling is seen as a part of a total "life-style change" program. The depth of the client's insight helps the counselor evaluate accurately the addict's readiness to cope with the many realities of employment.

Early in the counseling process it is often useful to assist the client in achieving short-term goals that gradually enable him to become increasingly independent. When extended goals become advisable, they should be agreed upon and seen as a path to an extended goal.[18] Although the addict-client may be placed directly on a job, transitional training programs such as on-the-job training, vocational school, or college is often more appropriate.

During the job-placement phase the counselor or counselor-aide has a special responsibility for contacting employers and working out arrangements for hiring ex-addicts. The counselor or counselor-aide, perhaps together with other members of the treatment team, can serve as drug educators to help clarify misconceptions employers may have about addicts and addiction. In particular, attitudinal barriers interfering with the addict's equal opportunity-for-employment must be overcome.

Follow-Through Services

Follow-up counseling of the drug addict after he successfully completes a rehabilitation program seems to be the most neglected and least developed phase of his rehabilitation. Lack of funds and personnel makes follow-up over an extended period of time difficult. Follow-up treatment should be included, however, to provide continued supervision and support for extended periods of time. This follow-up is often complicated, since it is desirable for the client to establish himself in an environment substantially different from his previous one. Halfway houses are useful resources that can be used as a means of gradually integrating the addict back into the community away from his old environment.[14]

Program Evaluation

The success of programs for the hard-core addict is not clear-cut. The Michigan Vocational Rehabilitation Services in Detroit reported that about 100 heroin addict cases were closed as successfully rehabilitated in the past 18 months. Of these clients, however, it is estimated that only about 40 continued to maintain a fully adequate social and vocational adjustment since closure from rehabilitation services. Although this observation is somewhat sobering, it does suggest that a significant number of hard-core cases can benefit from rehabilitation services. Even more favorable outcomes are reported by the methadone maintenance program in New York City. Two-thirds of the 1,000 addicts they treated are now either working or attending school.[11]

The outcomes of most community treatment programs are difficult to assess. Community research projects generally follow the addict for only a short period of time and long-term results are not available. Because there seems to be no single treatment approach that successfully rehabilitates all addicts, it is also difficult to compare one program with another. Evaluation is further compounded since different criteria of outcomes are used: e.g., employment, arrest records, or educational pursuits.[1]

Current Research Programs

Many ongoing research programs supported by the federal government may have potential value in the rehabilitation of the hard-core addict. Most of the research either develops and evaluates the various methods of treatment and rehabilitation or investigates the characteristics of the drug addict, his personality, his family, his subculture. Selected projects that have received considerable federal funds are discussed in this section.

A major research program currently under way at Texas Christian University is designed as a "Taxonomic Study of Narcotic Addiction Treatment Programs."[19a] This investigation intends to develop a system for classifying and comparing drug addiction treatment programs. Information concerning the philosophy and practice of various programs can be evaluated for their potential value in the development of new programs. Other large ongoing research programs investigating treatment and rehabilitation include "Demonstration Project of Evaluating Two Methods of Delivering Services to Drug Abusers"[19b] at Oregon State Mental Health Division, Portland, and "A Community Approach to the Control of Drug Dependency"[19c] by Stamford Community Council at Stamford, Conn.

The Mount Zion Hospital and Medical Center in San Francisco, Calif., is presently investigating "Psychosocial Factors in Drug Abuse: Drug-Based Subcultures; Personality and Values; Natural History; Patterns of Use; Community Needs Resources."[19d] The study uses psychiatric interviews, diagnostic tests, and measures of background factors to determine the social and psychological characteristics of drug abuse subcultures.

Other current research projects involved with the characteristics of addicts include the "Study and Evaluation of Patterns of Family Behavior Related to Drug Abuse"[19e] at Stanford University and a project studying the "Effects of Long-term Drug Dependence"[19f] at the University of Oregon Medical School, Portland.

Suggested Areas of Research and Development

In addition to these ongoing research projects, other areas of potential investigation may be of value to the rehabilitation staff involved in vocationally rehabilitating the hard-core addict. Several topics of research that may be

particularly relevant to vocational rehabilitation are presented here.

Experience has demonstrated that counselor peculiarities, in addition to those of the client, can undermine efforts to rehabilitate hard-core addicts. Quite frequently attitudes and values manifested by drug counselors weaken the success of rehabilitation efforts. Future research should attempt to isolate the counselor attitude-value patterns most frequently associated with drug rehabilitation success. The successful isolation of such characteristics might greatly enhance the process by which counselors are selected for drug rehabilitation assignments.

In lieu of more refined methods for counselor selection, several projects have been undertaken to facilitate counselor familiarization with the addict's subculture and vice versa. Effective screening and intensive training programs aimed at upgrading ex-addicts to paraprofessional positions, as well as classes designed to familiarize counselors with cultural differences in language and values should be evaluated to determine their effectiveness in promoting communication and understanding across subcultures, e.g., those of the blacks, Indians, and Chicanos.

The portrayal of hard-core addicts as different from persons suffering from other disabilities has led to the adoption of several new addict rehabilitation technics also used with the culturally disadvantaged. The use of paraprofessional aides, rehabilitation teams, and the group or cluster movement of clients has been aimed at improving service to the drug abuser. Evaluation of the pros and cons of all such technics is perhaps long overdue.

The nature and consequences of vocational planning with addicts are critically in need of examination. Vocational planning with addicts often reduces to a tug-of-war between the client's need for skill acquisition through training and his need for the immediate gratification that employment may bring. As stated by Richman[15] and in the experience of the authors, addicts are often unable to judge their own ability and readiness for work. Too often clients are placed on jobs prematurely or allowed to remain in school too long. Either error may result in failure on the job for the client. The role of workshops' experiences with addicts in promoting work adjustment programs should also be investigated. Similarly, it is imperative that we compare the effects of long-term training versus rapid job placement as they are related to an ex-addict's job satisfaction, drug use, and job retention.

Perhaps the most important research need is the development of realistic criteria for measuring success in drug addict rehabilitation. The proven ability of many hard-core addicts to hold jobs while addicted renders the traditional vocational rehabilitation agency 30-day period of job retention essentially meaningless as a criterion of total rehabilitation success, i.e., job adjustment and drug abstinence. The high incidence of drug relapse in the first few months of employment might justify extending employment follow-up periods for drug addicts as has been suggested by Schaefer and others for working with the psychiatrically disabled.[16] Prevention of relapse often depends on how well the ex-addict has learned to cope with stress and change in his day-to-day life "on the street." Perhaps the documentation of just such changes in coping styles should be included in any new measures of drug rehabilitation success.

In conclusion, vocational rehabilitation agencies can provide a significant and meaningful service to the hard-core addict. Available data indicate that approximately 50 percent or more of the addicts can be returned to gainful employment. Participation by rehabilitation staff in resolving this difficult community problem should be a worthwhile agency endeavor. There are no definite guidelines for program operation substantiated by research and each agency must develop its own approach to the hard-core addict using the existing community resources that are available locally. Study and evaluation of approaches now being used in current ongoing programs and research projects can provide further guidance to local program needs.

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(Continued on page 20)

A Five-Year Follow-Up of Psychiatrically Disabled Clients

Simon Olshansky

Introduction

BETWEEN January, 1967, and December, 1971, Community Workshops, Inc., of Boston, served 345 psychiatrically disabled clients. Almost all of this population had been referred by counselors of the Massachusetts Rehabilitation Commission, the federal-state agency serving the disabled.

Mr. Olshansky is executive director of Community Workshops, Boston. He was a selective placement director for the U.S. Employment Service and then spent 10 years with the Massachusetts Division of Vocational Rehabilitation as a vocational rehabilitation counselor. Mr. Olshansky served as a research associate for the Joint Commission on Mental Illness and Health (1957-1959). Prior to his current post, he was study director for the Children's Development Clinic (formerly named Cambridge Service for Retarded Children), in Cambridge, Mass. He is a frequent contributor to the literature.

A follow-up study of this population was carried out during the summer of 1972 to determine their current status: How many were working? How many were home? And, how many were back in the hospital?

Essentially, we were interested to see how successful Community Workshops was in helping psychiatrically disabled clients achieve employment.

Collecting Information

Information was gathered through the following means: mailed questionnaires, telephone calls to the home, inquiries of counselors who had made the referrals, appropriate hospital personnel, and employers.

Only 81 responses were received to the questionnaire, which had been mailed to 297 clients. (Information had been obtained earlier on 48 clients through the counselor or hospital personnel.) Fifty letters had been returned with the notation, "addressee unknown."

Telephoning the home produced 123 responses. Seventy-five responses were secured from the counselor or from hospital personnel. Five responses came from employers. (Generally, it is not a good idea to contact employers.) For 61 clients no information could be secured.

Characteristics of Population

Of the 345 clients served, 148 (43%) were males and 197 (57%) were females. The largest number, 126 (36%), were between the ages of 20 and 29. The smallest number, 42 (12%), were 50 or older.

One hundred thirty-nine (40%) had no history of mental hospitalization but had histories of emotional disturbance extending for many years; 115 (33%) had been hospitalized one to 3 times; 91 (26%) had more than 3 admissions, along with long periods of hospitalization. Almost all of the ex-mental hospital patients had been classified as schizophrenic.

A brief note on the nonhospitalized clients might be useful. Contrary to one's expectations, some of them were sicker than some of the previously hospitalized clients. Somehow, they were able to avoid hospitalization either because their families were more tolerant or because their symptoms were less visible and, therefore, more acceptable. Almost all of them had been treated or were being treated in outpatient clinics. A few had been seen or were being seen by private psychiatrists. A small number, after many years of treatment, refused any kind of psychiatric help despite the obvious need for it. They were tired of being treated.

Interestingly, many of the nonhospitalized clients looked and dressed much better than those clients who had been hospitalized. They were noticeably free of the "odor" and "look," which afflict so many clients with a long history of hospitalization.

Moreover, having avoided hospitalization, many had better images of themselves and felt more worthy of consideration in the labor market. Some of these feelings of self-respect, so painfully lacking among so many clients with a history of hospitalization, served to encourage them in their search for work. Also, employers were less reluctant to consider them than clients who had a record of hospitalization.

Major Findings

Seventy-two (21%) were employed in regular industry, many for two and three years. Eighteen (5%) were either in job training or in sheltered shops. Of the 72 employed, 40 had no record of hospitalization, and 48 of those employed were between the ages of 16 and 29.

One hundred fifty (44%) were unemployed, most of them for long periods of time.

Thirty-three (10%) were back in the hospital, while 77 (22%) had had at least one hospitalization since leaving Community Workshops. Six (2%) were in nursing homes.

Five had died—all suicides.

Sixty-one (18%), as reported, were not found, despite heroic efforts to locate them.

Other Findings

A large number of family members disclosed a sense of helplessness in aiding their sick relative. Some typical comments were: "I just don't know what to do with him." "He just sits around all day." "He'd be happier doing something." "He needs to keep busy." "He was happiest at Community Workshops." Many family members did not know to whom to turn for help.

Seventeen clients expressed an interest in returning to the workshop.

Only 24 percent of the responses were initiated by the clients themselves. Most responses came from family members and professional personnel. Many clients saw, with much validity, little point in returning the questionnaire. A small number were angry at being asked about their current status.

Discussion

The first outstanding fact was that the largest number of clients served were unemployed, probably unemployable except for sheltered work.

The second outstanding fact was that the majority of employed clients were under 30 and without a record of hospitalization. Putting it another way, not too many psychiatrically disabled clients found work following a period of evaluation and training at Community Workshops.

Considering the size of the unemployed population, one may question the value of the transitional workshop for many of the psychiatrically disabled. While it is obviously helpful for some, especially those without a history of hospitalization, the transitional workshop appears to have limited effectiveness in preparing many for regular employment.

One may respond to this judgment by suggesting that the reported outcome is peculiar to Community Workshops; i.e., better results might have been achieved if the shop had been more creative in its management of these psychiatrically disabled clients.

Also, one could suggest that a better quality of aftercare services would have made a difference. These are two judgments about which one can argue endlessly.

What would be of considerable value would be follow-up studies by other workshops in and outside of Boston to see to what extent the reported results are unique to Community Workshops, reflecting its limitations. Or are we dealing with a very vulnerable and fragile population for whom psychiatry has demonstrated, so far, very limited treatment effectiveness?

Some of our clients have had decades of treatment by a number of psychiatrists with little evidence of improvement. In fact, some have deteriorated while undergoing treatment. A significant number have refused the offer of treatment even when available.

Summary

It would appear that Community Workshops, as a transitional workshop, met the vocational needs of only a small number of the psychiatric population it served over a five-year period.

Whether this relatively low rate of vocational success is due to the way Community Workshops manages its clients, psychiatry's limited effectiveness in treatment at this time, or both, remains to be determined. Other follow-up studies might be helpful in identifying some of the factors involved in the low success rate.

In the interim, as a demonstration of our humanity, it is urgent that we develop as soon as possible sheltered employment opportunities for those clients who want to work but who cannot find acceptance in the regular labor market. In the absence of work, many of the unemployed psychiatric clients only deteriorate and become burdens to themselves and their families.

ACKNOWLEDGMENTS

Dorothy Beach was responsible for collecting and tabulating the information. She is to be congratulated for her stamina, persisting against many difficulties, which would have discouraged other less hardy persons. The author thanks Hilma Unterberger for her many helpful suggestions.

Next Month

The February issue will carry as Article of the Month, "A Cooperative Program in Materials Development for Very Young Hospitalized Children," by Gloria F. Wolinsky, Ed.D., and Nancy Koehler, M.A. The Special Article will be "Rehumanization and the Helping Services," by Károly Nagy, Ph.D. Frances Helmig, O.T.R., will review *A World To Care For; The Autobiography of Howard A. Rusk, M.D.*

Book Reviews

1

Atlas of the Ultrastructure of Diseased Human Muscle

By: W. G. P. Mair, M.D., F.R.C.Path., and F. M. S. Tomé

1972. 249 p. plates. Published originally by Churchill Livingstone, Edinburgh, Scotland, and available in the U.S. from Williams and Wilkins Co., 428 E. Preston St., Baltimore, Md. 21202. $20.75.

TO FACILITATE access to currently available information on the ultrastructure of muscle in various human muscular disorders, an effort has been made in this volume, originally published in England, to provide a concise general view of the ultrastructure of both normal and diseased human muscle. Skeletal and cardiac muscles of the human fetus are also described. Patterns of change that take place in common pathological conditions are illustrated with detailed electron micrographs, this material being based on some 250 biopsies. Chapters included in the book cover normal striated muscle; changes in muscle fibers; changes in blood capillaries and interstitial tissue of muscle; changes in nerves, motor end plates, and muscle spindles; and changes in various muscle diseases.

2

Developmental Handicaps in Babies and Young Children; A Guide for Parents

By: Diana L. Brown, ACSW

1972. 89 p. Charles C Thomas, Publisher, 301-327 E. Lawrence Ave., Springfield, Ill. 62703. $5.75.

WRITTEN FOR PARENTS of infants whose development seems to be slower and more difficult than normal, this book attempts to help them to identify and define their child's specific problem so that treatment and counseling can be sought as early as possible. Major causes and characteristics of brain damage are outlined. Several general developmental handicaps, including orthopedic, visual, hearing, language, and speech problems and minimal brain dysfunction, are discussed, along with such primary handicapping conditions in babies and young children as mental retardation, mental illness, cerebral palsy, muscular dystrophy, epilepsy, and the effects of lead poisoning.

To enable parents to understand the meaning of technical terms used in the diagnosis and evaluation of developmental disabilities, a glossary with simplified definitions is included. Also included is a list of outside resources that can be utilized by the parent in search of information and help, among which are the family doctor, local health departments, community councils, family agencies, specialized centers and clinics, state departments, the federal government, and a number of national organizations, including the National Easter Seal Society.

3

Directory of Facilities for the Learning-Disabled and Handicapped

By: Careth Ellingson and James Cass

1972. 624 p. Harper & Row, Publishers, 10 E. 53rd St., New York, N.Y. 10022. $15.00, clothbound; $6.95, paperbound.

ANALYTICAL DESCRIPTIONS and comparative data are presented on diagnostic facilities and remedial, therapeutic, and developmental programs throughout the United States and Canada. Included in each entry is information on evaluation and diagnostic programs, total annual case load, diagnostic procedures, core battery of testing instruments, parent conferences, fee charged for evaluation, faculty, and funding. For facilities providing remedial, developmental, and therapy programs, information is given on diagnostic categories treated, average annual enrollment, minimum and maximum age of enrollment, enrollment requirements, faculty, and additional background data.

In order to offer the basis for informed decisions in the selection of facilities, comparative data are presented on all institutions that were willing to provide information about themselves. The data will be easily interpreted by professionals in the field, and a careful reading of several descriptions will make it possible for laymen to compare facilities. The statistics given in this directory are for the school year 1969-1970. Entries are arranged alphabetically by city within each state or province. Along with an index of facilities listed, there is an index of facilities available in 21 metropolitan areas.

This directory is apparently an updating of the one included in Mrs. Ellingson's earlier book, *The Shadow Children* (see *Rehab. Lit.*, Feb., 1968, #98).

4

A Directory of National Organizations Concerned With School Health, 1972-1974

By: American School Health Association

1972. 131, vii p. Mimeo. Paperbound. American School Health Association, Kent, Ohio 44240. $2.00.

OVER 100 NATIONAL ORGANIZATIONS in the health field are included in this directory, which is designed to facilitate communications with and among those concerned with the health of the school child and will also

be useful for others in this broad area. Formerly published by the U.S. Department of Health, Education, and Welfare, this edition was compiled and published by the staff of the American School Health Association.

Each entry in the directory includes the following information: name of organization; name, highest academic degree, and official title of chief administrative officers; mailing address and telephone number of organization; approximate number of members; list of major 1972-1974 meetings; official publications; committees, councils, etc. with interests and/or responsibilities in school health; brief description of purposes and objectives; and additional comments.

5

Early Care of the Injured Patient

By: American College of Surgeons. Committee on Trauma

1972. 441 p. figs. W. B. Saunders Co., W. Washington Sq., Philadelphia, Pa. 19105. $9.00 ($9.30, Canada; £3.85, U.K.).

INTENDED to improve the quality of the early care of the injured by providing a ready reference for physicians as to the care of patients in the emergency room and early patient care in the hospital, this manual is a practical reference book rather than a treatise on trauma. A wide variety of traumatic conditions is covered systematically in separate chapters, including ones on head injuries, spine and spinal cord injuries, fractures, nerve injuries, and amputation. This edition represents the contributions of many members of the American College of Surgeons and other selected authorities.

6

Games, Sports and Exercises for the Physically Handicapped

By: Ronald C. Adams, Alfred Daniel, and Lee Rullman

1972. xiii, 254 p. figs. Paperbound. Lea & Febiger, Washington Sq., Philadelphia, Pa. 19106. $11.00.

CONCENTRATING on actual programs, procedures, and equipment, this book emphasizes the need for gross motor activities in the daily life of the physically handicapped child and adult. The text focuses on therapeutic rather than purely recreational aspects of games, sports, and exercises and is written from the standpoint of the adapted physical education teacher in the schools and the therapeutic recreation leader in the hospital setting.

Following an introductory discussion on the history and principles of therapeutic recreation, the authors describe specific disabilities and games, sports, and exercises that may be adapted to particular handicaps. Each piece of equipment is described and diagramed. In the appendixes exercises are outlined; information covers areas of the body treated, specific positioning, and methods of stretching and strengthening various muscle groups. The materials described have been developed or modified by the authors and have been tested in practical situations.

7

Hemodialysis Manual

By: U.S. Public Health Service. Health Services and Mental Health Administration

1972. 326 p. illus. *(DHEW Pubn. No. 72-7002)* Paperbound. Available from Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. $2.50.

ALTHOUGH this manual was originally produced for nurses and technicians active in the field of hemodialysis, there are areas discussed that may be useful to all members of the dialysis team, including the patient. The manual is compiled in 3 sections, each dealing with an area of major concern to hemodialysis personnel. Part I deals with the theory of hemodialysis. Containing the majority of the basic principles that can be applied in this field, this section provides an understanding of the physiological mechanisms associated with end-stage renal disease and dialytic therapy. In the second part, the operation, maintenance, and repair of hemodialysis equipment are discussed in detail. Part III, written with the patient in mind, deals with the patient and dialysis and includes suggestions for patient teaching. The manual is illustrated throughout with photographs and line drawings.

8

Muscle Testing; Techniques of Manual Examination; 3d ed.

By: Lucille Daniels, M.A., and Catherine Worthingham, Ph.D.

1972. 165 p. illus. Spiral bound. W. B. Saunders Co., W. Washington Sq., Philadelphia, Pa. 19105. $7.00.

THIS NEW EDITION added explanatory information to the introductory section and throughout the book, reflecting significant changes that have occurred since the 2d edition was published in 1956. A number of test positions have been revised and newly illustrated, and a section has been added on gait analysis with emphasis on its usefulness as a screening device.

Muscle tests for neck, trunk, lower extremity, upper extremity, and face are included. Stress is placed on the testing of prime movers in relation to the principal joints of each segment of the body.

Lucille Daniels is associate professor of physical therapy at the Stanford University School of Medicine, and Catherine Worthingham was formerly director of professional education at the National Foundation. Anatomical drawings in this book are by Lorene Sigal, and tests and gait illustrations are by Harold Black and Charlene Levering.

For Your Professional Reading

INITIATED recently under the general editorship of Harvey Halpern, the *Bobbs-Merrill Studies in Communicative Disorders* series represents a comprehensive approach to this field. To consist initially of 20 to 25 papers, each written by an authority in the field and published separately in an inexpensive pamphlet format, the series covers the major areas of speech and language pathology, audiology, and speech-hearing science. It is intended to suit the needs of students and their instructors on both the graduate and undergraduate levels. The series combines an overview of the general field of communicative disorders with specialized information relating to various issues, theories, and methodologies that make up its several subdisciplines.

Volumes received to date include the following:

- *Disorders of Voice,* by Margaret C. L. Greene. 1972. 39 p. 95¢.
- *Speech Acoustics and Perception,* by Philip Lieberman. 1972. 34 p. 95¢.
- *The Development of Speech,* by Paula Menyuk. 1972. 44 p. $1.25.
- *Speech Therapy in the Public Schools,* by Martha E. Black. 1972. 19 p. 95¢.
- *Cerebral Palsy,* by Daniel R. Boone. 1972. 32 p. 95¢.
- *Adult Aphasia,* by Harvey Halpern. 1972. 67 p. $1.25.
- *Disorders of Articulation,* by John V. Irwin. 1972. 34 p. $1.25.
- *Psycholinguistics,* by Joseph A. DeVito. 1971. 36 p. 95¢.
- *Clinical Audiometry and Masking,* by Frederick Martin. 1972. 45 p. 95¢.
- *Principles of Aural Rehabilitation,* by Mark Ross. 1972. 50 p. 95¢.
- *Hearing Aids,* by Maurice Miller. 1972. 47 p. $1.25.

Three more volumes in this series are expected to be published in the spring, and three more later in the year. All volumes in the series are available from the Bobbs-Merrill Company, Inc., College Division, Indianapolis, Ind. 46268. —MMJ

9

New Life for Millions: Rehabilitation for America's Disabled

By: Russell J. N. Dean

1972. 180 p. illus. Hastings House, Publishers, Inc., 10 E. 40th St., New York, N.Y. 10016. $6.95.

IN THIS narrative chronology, persons, organizations, and events are identified and credited for their contribution to the advancement of rehabilitation programs in the United States. The efforts of private citizens, voluntary agencies, and professional groups are recognized but the focus is largely on progress made in the past 60 years in the federal-state vocational rehabilitation program. The politics of the times, the wars and their wounded, and Congressional legislation are part of the author's own interest and administrative concerns. He served in the Convalescent Rehabilitation Program of the Air Service Command, in medical and hospital administration with the Army Air Force, and as Assistant Commissioner for Legislation and Public Affairs in the U.S. Rehabilitation Services Administration. Rehabilitation students will find the book a helpful guide to the history of the fields; persons knowledgeable of the rehabilitation movement will read it with interest to note the persons and events that Mr. Dean recognizes and those he has not mentioned. The detailed index should prove useful, but there is no list of references or bibliography.

This book was published shortly before Mr. Dean's death on Oct. 27 (see *Rehab. Lit.,* Dec., 1972, p. 384).

10

Proceedings of the Second Congress of the International Association for the Scientific Study of Mental Deficiency, Warsaw, Poland, 25th August-2nd September, 1970

By: International Association for the Scientific Study of Mental Deficiency; edited by D. A. A. Primrose

1971. 774 p. figs., tabs. Published by Polish Medical Publishers and available from Swets & Zeitlinger, N.V., Heereweg 347B, Lisse, The Netherlands. $35.00.

THE WARSAW CONGRESS was the second to be held by the International Association for the Scientific Study of Mental Deficiency. Over 400 papers from 42 countries were read in English, French, Russian, Spanish, and Polish. Papers for plenary sessions and those by invited individual speakers are published here in full, in English. Symposia have been restricted to about 3,000 words. Many short papers are listed by title and author only, while others are abstracted.

The meeting was cosponsored by the Polish Society for Rehabilitation of the Disabled *(Plac Trzech Krzyzy, Warsaw),* Dr. A. Hulek, Secretary General.

11

Semiotics and Human Sign Language

By: William C. Stokoe, Jr.

1972. 177 p. figs., tabs. *(Approaches to Semiotics)* Mouton Publishers, P.O. Box 482, The Hague 2076, The Netherlands. Dutch guilders 48.—.

SIGN LANGUAGES are treated in this book as a special class of semiotic systems. The degree to which sign languages possess the properties of the vocalized systems called language is investigated. A widely used sign language, that of deaf persons in the United States, is submitted to detailed analysis as a semiotic and as a linguistic system and is considered as a body of data suitable for the elucidation of various theories of language. Recent research relating to sign language is reviewed.

12

Special Olympics Instructional Manual . . . From Beginners to Champions

By: Julian U. Stein and Lowell A. Klappholz

1972. 138 p. illus. Paperbound. Published by the American Association for Health, Physical Education, and Recreation and the Joseph P. Kennedy, Jr. Foundation. Available from AAHPER Publication Sales, 1201 16th St., N.W., Washington, D.C. 20036. $2.00.

DEVELOPED primarily to assist classroom teachers, aides, volunteers, and parents in providing physical education and recreational activities for mentally retarded children, this manual can also be used by professionals. Contents include methods, activities, teaching and coaching hints, drills, special devices, and sequential progressions appropriate for children of all ages and at all performance levels in the areas of physical fitness and conditioning, track and field, volleyball, and swimming.

Each section contains information about basic, intermediate, and advanced fundamentals in each activity, progressive teaching sequences, and detailed practice schedules and lesson plans. The manual is fully illustrated with line drawings and includes selected references for future study. Philosophy and rationale for physical education and recreation programs for the mentally retarded in general and for Special Olympics in particular are included, along with material designed for the volunteer coach or classroom teacher.

SPECIAL REPORT—Continued from page 14

10. *Federal Drug Abuse and Drug Dependence Act of 1970.* Special Subcommittee on Alcoholism and Narcotics of the Committee on Labor and Public Welfare, U.S. Senate, 91st Congress, 2nd Session, Mar. 16, 17, 23, 24, 25, 1970.

11. Jaffe, Jerome. Whatever Turns You Off. *Psychol. Today.* May, 1970. 3:12:42-44, 60-62.

12. *Narcotic Addict Rehabilitation Act of 1966.* Washington, D.C.: National Institute of Mental Health. *(Dept. of Health, Educ., and Welfare Pubn. no (HSM) 72-9017)*

13. The President's Advisory Commission on Narcotic and Drug Abuse. *Final Report.* Washington, D.C.: U.S. Government Print. Off., Nov., 1963.

14. *Rehabilitating the Narcotic Addict.* Report of the Institute on New Developments in the Rehabilitation of the Narcotic Addict. Reprint of 1966 ed.—New York: Arno Press, 1968.

15. Richman, Sol. The Addict As a Rehab Client. *Rehab. Rec.* May-June, 1966. 7:3:24-26.

16. Schaefer, I., Bartholow, G., and Niewoehner, G. A Follow-up Study of 73 Psychiatric Rehabilitation Clients. *Rehab. Res. & Practice Rev.* In press.

17. Straus, Nathan, III. *Addicts and Drug Abusers: Current Approaches to the Problem.* New York: Twayne, 1971.

18. Thompson, Kent, and Cole, Bruce N. Rehabilitation Counseling with Drug Abusers. *J. Applied Rehab. Counseling.* Winter, 1971-72. 2:4:165-172.

19. *Vocational Rehabilitation of the Drug Addict, Computer Information File, March 1972.* Rockville, Md.: National Clearinghouse for Drug Abuse Information. Federal Accession Numbers: (a) *1-R01-MH-14230-01;* (b) *15-P-55301/0-01;* (c) *3-R01-MH-149944-0151;* (d) *2-R01-MH-15737-03;* (e) *J-69-14;* (f) *R01-19682.*

20. Westman, Wesley. *The Drug Epidemic.* New York: Dial Press, 1970.

21. Young, Elliott. Therapeutic Recreation for the Narcotics Addict. *J. Rehab.* Jan.-Feb., 1964. 30:1:23-24.

This section serves as an index to current publications reviewed, digested, or abstracted in this issue. The subject headings are those under which the same references are cataloged in the Library of the National Easter Seal Society for Crippled Children and Adults. The author index for each issue will be found on the inside back cover. The annual index, of authors only, is published with the January issue of the following year.

ACCIDENTS

See 5.

ALCOHOLISM

13. **Hilker, Robert R. J.** *(Illinois Bell Telephone Co., 212 W. Washington St., Chicago, Ill. 60606)*

A company-sponsored alcoholic rehabilitation program; ten year evaluation, by Robert R. J. Hilker, Fern E. Asma, and Raymond L. Eggert. *J. Occupational Med.* Oct., 1972. 14:10:769-772.

Data were accumulated on 402 employees participating in the Illinois Bell Telephone Company's rehabilitation program for alcoholic employees. The data covered the 5-year period prior to entering the program and the 5 subsequent years and included information on how the employee was referred to the program, years of service, age, marital status, areas of life stress, diagnosis of type of drinking, and psychiatric consultations.

AMPUTATION—PROGRAMS

14. The elderly amputee. *Lancet.* Oct. 7, 1972. 7780: 747-748.

The medical and rehabilitative management of elderly amputees is reviewed. Some high points, such as the policy, followed by a few centers, of below-knee amputation and immediate postoperative fitting of temporary prostheses, are compared with the more usual policies. The need for the establishment of regional amputation centers, closely allied to effective rehabilitation units, is stressed.

AMPUTATION (CONGENITAL)—MEDICAL TREATMENT

15. **Elting, James J.** *(Yale Univ. School of Medicine, 333 Cedar St., New Haven, Conn. 06510)*

Management of the young child with bilateral anomalous and functionless lower extremities, by James J. Elting and John C. Allen. *J. Bone and Joint Surg.* Oct., 1972. 54-A:7:1523-1530.

Three cases of severe bilateral lower extremity limb deficiency are presented and their management is discussed, along with that of a case of mature, untreated lumbosacral agenesis with spinal, pulmonary, and renal compromise. It is concluded that stability of the spine is essential not only to sitting posture and prosthesis wear, but also to effective renal function and respiratory exchange. Hence ablative surgery as a constructive procedure is suggested before the age of 7. It is stressed that the course of therapy should be decided while the child is young and a positive emotional structuring should be encouraged through family education and support.

AMYOTROPHIC LATERAL SCLEROSIS—ETIOLOGY

16. **Mulder, Donald W.** *(Mayo Clinic Dept. of Neurology, Rochester, Minn. 55901)*

Late progression of poliomyelitis or forme fruste amyotrophic lateral sclerosis?, by Donald W. Mulder, Robert A. Rosenbaum, and Donald D. Layton, Jr. *Mayo Clinic Proceedings.* Oct., 1972. 47:10:756-761.

This study was based on 34 patients seen at the Mayo Clinic between 1942 and 1970, all exhibiting a history of poliomyelitis, a partial recovery of function, a minimum 10-year stabilization of this recovery, and the subsequent development of progressive muscular weakness. It is suggested that acute poliomyelitis may in some instances give rise to a syndrome resembling but not identical with amyotrophic lateral sclerosis. The differentiation of these 2 kinds of motor neuron disease is of prognostic significance for the patient and the physician. The occurrence of this syndrome suggests the possibility that amyotrophic lateral sclerosis may be caused by an acute viral infection early in life, becoming manifest as motor systems disease 30 or 40 years later.

APHASIA

See p. 19; 65.

ARTHRITIS—NURSING CARE

17. **Loxley, Alice Keating** *(c/o Frances Payne Bolton School of Nursing, Case Western Reserve Univ., Cleveland, Ohio 44106)*

The emotional toll of crippling deformity. *Am. J. Nursing.* Oct., 1972. 72:10:1839-1840.

A case study is presented on a woman with rheumatoid arthritis. The author is a nurse who addresses herself to the conflicts experienced by patients who are unable to cope with making necessary changes in their body images of themselves despite physical changes that have occurred in their bodies. Other psychological blocks of the arthritis patient are suggested.

ARTHRITIS—OCCUPATIONAL THERAPY

18. **Coley, Ida Lou** *(Dept. of Occupational Therapy, Children's Hosp. at Stanford, Palo Alto, Calif. 94304)*

The child with juvenile rheumatoid arthritis. *Am. J. Occupational Ther.* Oct., 1972. 26:7:325-329.

This paper examines the personalities of juvenile rheumatoid arthritis patients, as perceived by the occupational therapy staff at Children's Hospital at Stanford, and describes the interpersonal relationships that have been constructive in their management. Pointed out are additional factors for consideration to help achieve a treatment goal of total care.

ARTHRITIS—PROGRAMS

19. **Vignos, P. J., Jr.** *(Dept. of Medicine, Univ. Hosps. of Cleveland, Univ. Circle, Cleveland, Ohio 44106)*

Comprehensive care and psycho-social factors in rehabilitation in chronic rheumatoid arthritis: a controlled study, by P. J. Vignos, Jr., and others. *J. Chronic Diseases.* Aug., 1972. 25:8:457-467.

A controlled study of comprehensive care in 40 ambulatory patients with severe rheumatoid arthritis was conducted to determine the interrelationships between the type of medical care, psychosocial factors, and functional performance. Results suggest that patients with higher intelligence scores more often maintain functional performance and improve in social adjustment than do patients with low intelligence scores. The more intelligent patients also had better motivation for rehabilitation. Improved social adjustment was more often seen in the intensive treatment group. It is suggested that psychosocial factors, although they do not alter rheumatoid disease activity, can affect functional results of rehabilitation measures as judged by performance of activities of daily living.

BLIND—EMPLOYMENT

See inside front cover.

BLIND—EQUIPMENT

20. **American Foundation for the Blind** *(15 W. 16th St., New York, N.Y. 10011)*

Aids and appliances, 18th ed., July 1972-June 1973. New York, The Foundation, 1972. 62 p. illus.

Photographs illustrate this catalog of practical and useful items for blind or visually handicapped persons. Everything from Braille wristwatches and Scrabble boards to self-threading needles and audible compasses is available, as well as other types of items that are manufactured at workshops for the blind. Write to the American Foundation for the Blind at the above address for a copy of the catalog.

21. ***New Outlook for the Blind.*** Oct., 1972. 66:8:249-286.

Title of issue: Maps—designing them, making them, reading them.

Contents: Production and testing of an orientation and travel map for visually handicapped persons, by Billie Louise Bentzen, p. 249-255.—The environmental perceptions of blind persons and their haptic representation, by Ann Middleton Kidwell and Peter Swartz Greer, p. 256-276.—Behavioral strategies and problems in scanning and interpreting tactual displays, by Edward P. Berlá, p. 277-286.

BRACES

See 67.

BRAIN INJURIES

22. **Fowler, Roy S., Jr.** *(Dept. of Rehabilitation Medicine, Univ. of Washington School of Medicine, University Hosp., Seattle, Wash. 98195)*

Adapting care for the brain-damaged patient, by Roy S. Fowler, Jr., and Wilbert E. Fordyce. *Am. J. Nursing.* Oct., Nov., 1972. 72:10 and 11:1832-1835, 2056-2059.

In this 2-part article, 2 rehabilitation specialists discuss symptoms often found in nursing home patients in cases when seemingly inexplicable deterioration is related to difficulties in communication and performance due to brain damage. In the first part, differences in symptoms for patients with damage to the left and to the right side of their brain are discussed, along with adaptations in care resulting from these differences. Speech-language deficits are often caused by strokes or other injuries to the right side of the brain, while spatial-perceptual deficits relate to injury to the left hemisphere. Other conditions, including memory loss, affective lability, quality control, and sensory deprivation, do not relate so specifically to one side or the other. These are discussed in the second part.

See also 3; 29; 31.

BRAIN INJURIES—DIAGNOSIS

23. **David, Oliver** *(Dept. of Psychiatry, State Univ. of New York, Downstate Medical Center, Brooklyn, N.Y. 11203)*

Lead and hyperactivity, by Oliver David, Julian Clark, and Kytja Voeller. *Lancet.* Oct. 28, 1972. 7783:900-903.

A comparison was made between 54 hyperactive children and 37 nonhyperactive controls on 2 measures that reflect the presence of body lead—blood-lead levels and urine levels after challenge by a single oral dose of the chelating agent penicillamine. Hyperactive children, classified on the basis of doctor's diagnosis, a teacher's rating scale, and a parent's rating scale, had significantly higher values on both measures than did the controls. More than half of the hyperactive children had blood-lead levels in the range considered to be raised but not toxic, and 60% of the postpenicillamine urine levels were in the toxic range. It is concluded that there is an association between hyperactivity and raised lead levels, that a large body-lead burden may exert consequences that have not yet been realized, that the definition of what is a toxic level for blood lead needs reevaluation, and that physicians should look for raised lead levels in children with hyperactivity.

24. **Wolcott, George J.** *(Dept. of Neurology and Pediatrics, Univ. of Wisconsin Medical Center, 1300 University Ave., Madison, Wis. 53706)*

Learning disability; a cooperative team approach. *Wis. Med. J.* Oct., 1972. 71:10:223-226.

Fifty children were evaluated by an interdisciplinary team at the University of Wisconsin Medical Center because of their failure to achieve their expected level of academic success. Each member of the team (social worker, occupational therapist, speech pathologist, neuropsychologist, educator, and pediatric neurologist) did an evaluation and the team together formulated a prescriptive program for each child. Results are discussed.

CHILDREN—GROWTH AND DEVELOPMENT

25. **U.S. National Institutes of Health**

How children grow. Washington, D.C., U.S. Govt. Print. Off., 1972. 56 p. illus. *(Clinical Research Advances in Human Growth and Development; DHEW Pubn. No. NIH 72-166)*

Over 40 pediatric consultants furnished background information for this booklet, which describes the evolvement of a human being from 2 germ cells into an adult. Sections are included on intrauterine life, low birth-weight babies, the effects on childhood growth of nutrition, hormones, illness, and emotion, and the role of obesity and early and late puberty on adolescent growth. By focusing on the unique problems of low birth-weight babies, medi-

cal science research, supported by NIH, may be able to halve the infant death rate in the U.S. and perhaps eliminate the major cause of brain damage in children.

A free copy is available from the Information Office, Division of Research Resources, National Institute of Health, Bethesda, Md. 20014. For additional copies (65¢ each), order from the Superintendent of Documents, Washington, D.C. 20402.

CHRONIC DISEASE

See 32; 33; 39; 45.

CHRONIC DISEASE—ETIOLOGY

26. Wan, Thomas *(Dept. of Sociology, Cornell Univ., Ithaca, N.Y. 14850)*

Social differentials in selected work-limiting chronic conditions. *J. Chronic Diseases.* July, 1972. 25:6/7:365-374.

Although the study of differentials in morbidity has received relatively concentrated attention, many results have been inconclusive in delineating the causal relationship between disease and etiological factors. This study demonstrates, using a number of socioeconomic and demographic indicators, the possible differentials in selected work-limiting chronic conditions prevalent in a significant proportion of the U.S. populaton. The analysis is based upon data collected in the national Survey of Economic Opportunity in 1967. Sharp differences were found for white vs. Negro, the married vs. the nonmarried, the young vs. the old, high vs. low socioeconomic status, urban vs. rural residents, and migrants vs. nonmigrants. It is suggested that these findings may in part reveal the potential contributions of social epidemiological studies in the understanding of sociopathogenic factors in illness.

COLLEGES AND UNIVERSITIES

27. Lawrence, Richard E. *(Dept. of Rehabilitation Counselor Education, Univ. of Maryland, College Park, Md. 20742)*

Rehabilitation concerns of the handicapped college student, by Richard E. Lawrence, George W. Krieger, and Cary B. Barad. *Rehab. Research and Practice Rev.* Summer, 1972. 3:3:53-61.

Focusing on the interaction of the handicapped college student and the college environment, this review of the literature explores limitations imposed by curriculum and available academic options, social adjustment concerns, needed services not generally available, architectural barriers, and programs that have been set up to meet the needs of handicapped students. Also discussed is the conclusion that college training is worthwhile for such students, particularly in terms of vocational outcome factors. Suggestions for further research and action are presented. References.

CONGENITAL DEFECT—ETIOLOGY

28. Speidel, B. D. *(Dept. of Paediatrics, Southmead Hosp., Bristol, Eng.)*

Maternal epilepsy and abnormalities of the fetus and newborn, by B. D. Speidel and S. R. Meadow. *Lancet.* Oct. 21, 1972. 7782:839-843.

Results are presented of the first large-scale survey from Britain investigating whether maternal anticonvulsant therapy may be associated with an increased incidence of certain congenital abnormalities. This retrospective survey into the outcome of 427 pregnancies to 186 epileptic women showed that major congenital malformations, particularly heart disease, cleft lip with or without cleft palate, and microcephaly, occurred in their children with twice the expected frequency. The perinatal mortality rate was 42.5 per 1,000 for pregnancies in which anticonvulsants were taken. It is asserted that these malformations probably have a multifactorial etiology and that, while anticonvulsant drugs may have a teratogenic action mediated by interference with folic-acid metabolism, such teratogenic activity is likely to be influenced by hereditary and environmental factors.

See also 56.

CRIME

29. Engel, Eric *(Cytogenetics Division, Vanderbilt Univ. School of Medicine, Nashville, Tenn. 32703)*

Guest editorial: the making of an XYY. *Am. J. Mental Deficiency.* Sept., 1972. 77:2:123-127.

An expert in the field of cytogenetics discusses the much-publicized theory relating the presence in some men of an extra Y chromosome to a tendency toward mental subnormality and criminal violence. Dr. Engel notes that this publicity has continued and expanded despite later reports from the original researchers revising their own theory. He cites in this editorial the sensational publicity accompanying the trial of the murderer of 8 Chicago nurses in 1966. Having personally ascertained that the accused murderer did not, in fact, have this extra chromosome, he notes that the many unfounded statements circulated at and since that time by the media could have had a prejudicial effect on this and other trials.

DEAF

See p. 19; 11.

DEAF—SOUTH AFRICA

30. Du Toit, C. J. *(Dept. of Otorhinolaryngology, Univ. of Stellenbosch, South Africa)*

The modern approach towards the habilitation of the hearing impaired infant and child. *Rehab. in S.A.* June, 1972. 16:2:56-58, 63-65, 76.

Traditional approaches towards the welfare and rehabilitation of the deaf are reviewed, and the importance of residual hearing in the more contemporary auditory approach to the problem of deaf-mutism is stressed. Emphasis is placed on the importance of applying this treatment at the early period when a hearing child would normally develop hearing and speech. The pedoaudiological department at the Tygerberg Hospital in South Africa is discussed in detail.

Other articles in this issue relating to deafness include: A comprehensive programme for the pre-school deaf child, by Robyn E. Lewis, p. 50-52, 75.—St. Vincent's School for the Deaf, by Sister Ligouri, p. 59-62.—The education of the educable white deaf children in South Africa, by P. J. (Klasie) van der Merwe, p. 68-70.—Evoked response

audiometry, by D. A. Smith, p. 71-74.

Rehabilitation in South Africa is published quarterly by the Department of Labour, Private Bag X117, Pretoria, S.A.

DRUG ADDICTION

See p. 2; p. 11.

DRUG THERAPY

31. **Browder, J. Albert** *(Univ. of Oregon Medical School, Crippled Children's Div., 3181 S.W. Sam Jackson Park Rd., Portland, Ore. 97201)*

Appropriate use of psychic drugs in school children. *Am. J. Diseases of Children.* Oct., 1972. 124:4:606-607.

Pointing out the fact that there is a great need for controlled studies on the specific actions of various psychic drugs in children, Dr. Browder reviews some of the problems created by the increased psychopharmacological use of drugs in school-age children with learning disabilities and other disorders. He suggests that physicians have a responsibility to inform and educate families and schools adequately about the important medical aspects of therapeutic use of this group of drugs, as well as their possible side effects.

EPILEPSY

See 28.

HANDICAPPED—SURVEYS

32. **U.S. Social Security Administration. Office of Research and Statistics** *(Washington, D.C. 20201)*

The disabled: means of meeting medical care charges, by Cary B. Barad. Washington, D.C., U.S. Govt. Print. Off., 1972. 43 p. tabs. *(Reports from the 1966 Survey of Disabled Adults, No. 20, Sept., 1972; DHEW Pubn. No. SSA 72-11713)*

An examination was made of the specific resources utilized by individuals with work-limiting disabilities to meet medical care expenses. The survey was based on a multiframe area probability sampling design, in which 8,300 noninstitutionalized disabled persons aged 18 to 64 were selected as representative of the U.S. disabled adult population. It was found that 70% of the total disabled population was able to meet medical charges through personal resources, although less than ¼ of this group received health insurance benefits. The more severely disabled and those with early onset dates relied more heavily on outside sources for meeting or defraying costs. Positive correlates of independence in meeting costs were age, health insurance coverage, and amount of health care bills incurred.

(For references to earlier reports in this series see *Rehab. Lit.,* Oct., 1972, #674.)

33. **U.S. Social Security Administration. Office of Research and Statistics** *(Washington, D.C. 20201)*

Personal care and household help needs of the noninstitutionalized disabled, by Mary E. Burdette. Washington, D.C., U.S. Govt. Print. Off., 1972. 23 p. tabs. *(Reports from the 1966 Survey of Disabled Adults, No. 21, Sept., 1972; DHEW Pubn. No. SSA 73-11713)*

This report examines factors related to the quantity and type of assistance needed in the areas of personal care and household activities by adults with work-limiting disabilities, of whom close to 18 million were identified by the 1966 Social Security Survey of the Disabled. Regardless of the severity of the disability, 10% of the disabled had assistance in personal care activities, primarily in dressing and personal hygiene, provided primarily by members of their immediate family. Household help was used by as much as 40% of the disabled, half of which was provided by spouse or child. Of the 25% with paid help, few had help more than 2 days a week. Diagnostic groups of disabilities are related here to physical mobility, sensory limitations, limitations in activities, need for bedrest, and use of special adaptive aids.

See also 43.

HEAD INJURIES

34. ***Scandinavian J. Rehab. Med.*** 1972. 4:3.

Issue devoted to papers presented at the International Symposium of Rehabilitation in Head Injury, Göteborg, 1971.

Contents: Comparison of effects from single and repeated trauma to the animal brain, by Lennart Rinder and others, p. 97-99.—The problem of brain stem injury with special reference to serial EEG studies, long-term rehabilitation and results, by O. V. Jooma, p. 100-105.—Mental disorders in the early stage of brain injury, by Theodor Kirschbichler, p. 106-109.—Neck injuries in road accidents, by Jan Thorson, p. 110-113.—The importance for rehabilitation of the interbody fusion and stabilization operation in fracture dislocations of the cervical spine, by Kurt Schürmann, p. 114-122.—Epilepsy and driver's licence—some comments, by Oskar Steinwall, p. 123-125.—Vestibular and medico-legal aspects of closed cranio-cervical trauma; electronystagmographic analysis of 568 patients, by J. U. Toglia, p. 126-132.—Housing and community planning for disabled, by Sven-Olaf Bråttgard, p. 133-136.—Organisation of medical resources for rehabilitation in neurological diseases, by Olle Höök, p. 137-139.

Reprints from the *Scandinavian Journal of Rehabilitation Medicine* may be obtained from Almqvist & Wiksells Boktryckeri AB, Box 616, S-751 25 Uppsala 1, Sweden. (For a listing of other papers read at this symposium, see *Rehab. Lit.,* Nov., 1972, #746.)

HEALTH EDUCATION—DIRECTORIES

See 4.

HEMIPLEGIA

See 22.

HEMIPLEGIA—NURSING CARE

35. **American Neurological Association. Joint Committee for Stroke Facilities**

Report of the . . . : IV. Guidelines for the nursing care of stroke patients, by Nursing Study Group, Irene G. Ramey, chairman. *Stroke.* Sept.-Oct., 1972. 3:5:632-681.

These nursing guidelines are organized so that initially the discussion concerns the philosophy, the organization of

resources, and the education of auxiliary personnel and professional nurses involved in the care of the stroke patient. Thereafter, the clinical aspects of nursing care are described in terms of the patient with a transient ischemic attack and the prevention and treatment of stroke. The patient's needs and the nursing actions specific to those needs are presented in the chronological order in which they might appear. Recommendations are made for nursing education and research, extending the scope of practice for educationally prepared nurses, and giving greater attention to the provision of individualized, comprehensive, continuous stroke care.

Inquiries concerning the Committee and its reports may be addressed to A. L. Sahs, General Chairman, Joint Committee on Stroke, Suite 1010, 1776 K St., N.W., Washington, D.C. 20006. (For previous reports from this committee, see *Rehab. Lit.,* Sept., 1972, #603.)

HEMOPHILIA

36. Sergis, Elaine *(Pediatric Hematology Dept., New York Hosp.-Cornell Medical Center, 525 E. 68th St., New York, N.Y. 10021)*

Hemophilia, by Elaine Sergis and Margaret W. Hilgartner. *Am. J. Nursing.* Nov., 1972. 72:11:2011-2017.

The etiology of hemophilia and some problems caused by this condition are discussed. A home care program under the auspices of New York Hospital, in which hemophilic patients and their families are taught how to administer cryoprecipitate and plasma concentrates, is reviewed and evaluated.

Also included in this issue is an article on p. 2018-2020, which depicts photographically the process of teaching transfusion for home care.

INFORMATION AND REFERRAL SERVICES

37. Donohue, Joseph C. *(Bureau of Foods, Food and Drug Administration, Washington, D.C. 20204)*

Planning for a community information center. *Library J.* Oct. 15, 1972. 97:18:3284-3288.

The creation of an experimental Public Information Center (PIC) by Baltimore's Enoch Pratt Free Library is discussed by the former director of the project. Like newspaper trouble-shooting columns, the PIC gathers information from whatever sources are available for the purpose of making it immediately accessible, with primary emphasis on the broadly construed area of health and welfare. To implement these goals, the PIC has worked closely with the Health and Welfare Council and with other public and private agencies. The structure, operation, and implementation of the program are detailed.

KIDNEY DISEASE

38. De-Nour, A. Kaplan *(Dept. of Psychiatry, Hadassah Hosp., Jerusalem, Israel)*

A study of chronic hemodialysis teams—differences in opinions and expectations, by A. Kaplan De-Nour, J. W. Czaczkes, and P. Lilos. *J. Chronic Diseases.* Aug., 1972. 25:8:441-448.

This study examines the expectations that teams of chronic dialysis units have of their patients. Subjects for the study were the medical teams of 3 dialysis units, each team including about 10 members. Each member completed a questionnaire and also a ranking of various items in order of importance. Two of the teams were found to have team opinions, both based on similar systems of values. High discrepancies were found, however, in the actual expectations of individual members in all 3 teams, a finding interpreted as a manifestation of professionals' personal bias. It is suggested that interteam discrepancies in expectations may explain the discrepancies in reports on patients' adjustment to chronic hemodialysis.

See also 7.

LIBRARY SERVICE

See 37.

MENTAL DISEASE

See 62.

MENTAL DISEASE—PROGRAMS

See p. 15.

MENTAL HYGIENE

39. Barton, Keith *(Dept. of Psychology, Univ. of Illinois, Urbana, Ill. 61801)*

Personality before and after a chronic illness, by Keith Barton and Raymond B. Catell. *J. Clinical Psychol.* Oct., 1972. 28:4:464-467.

A group of 593 New Zealand high school students completed a personality test in 1965 and again in 1970. One aspect, the effect of chronic illness on personality, is reported here from a larger study. Several significant differences were noted between those who had experienced a chronic illness during this 5-year testing period and those who had not. Various conclusions are discussed.

MENTAL RETARDATION

See 10; 29; 71.

MENTAL RETARDATION—PARENT EDUCATION

40. Gumz, Edward J. *(Dr. Gubrium, Marquette Univ., Milwaukee, Wis. 53233)*

Comparative parental perceptions of a mentally retarded child, by Edward J. Gumz and Jaber F. Gubrium. *Am. J. Mental Deficiency.* Sept., 1972. 77:2:175-180.

Data were collected from 100 parents of mildly and moderately retarded children between the ages of 2 and 5 years. A 32-item questionnaire was designed to elicit information about their attitudes, perceptions, and beliefs about retarded children. The particular focus of this study was to compare the roles of the mother and father within the nuclear family and to determine whether their respective roles influence their perceptions of their retarded child. The results indicated that there were some differences between mothers' and fathers' perceptions of the crisis of having a retarded child, of this child in extrafamilial roles, and of the child in future roles. Fathers' perceptions tended to be more instrumental, and mothers' more expressive.

MENTAL RETARDATION—RECREATION

See 12.

MENTAL RETARDATION—SPECIAL EDUCATION

41. **Ross, Dorothea M.** *(Sheila A. Ross, Palo Alto Medical Research Foundation, 860 Bryant St., Palo Alto, Calif. 94301)*

The efficacy of listening training for educable mentally retarded children, by Dorothea M. Ross and Sheila A. Ross. *Am. J. Mental Deficiency.* Sept., 1972. 77:2:137-142.

This study tested the efficacy of a 10-week intensive listening training program for 33 educable mentally retarded children, on the assumption that such children lack language experience relevant to effective listening but can respond to training in necessary listening skills. Procedures utilized during the program included intentional teaching, peer modeling, and tangible, social, and symbolic rewards. The experimental group, although still below an average group of the same chronological age level, showed marked improvement. A control group following a traditional special class program showed no improvement in listening skills.

MUSCLES—TESTS

See 8.

MUSCULAR DYSTROPHY

See 1.

MUSIC

42. **Erickson, Lorraine B.** *(2635 Dartmouth Ave., Boulder, Colo. 80303)*

Keyboard fun for children with O.I. and other physical disabilities. *Breakthrough.* Oct., 1972. 3:2(Supp.):(4 p.).

Technics are discussed that enable children and adults with osteogenesis imperfecta (O.I.) and other conditions, which include hand and arm deformities, to successfully play the piano or electric chord organ. Adaptations for various hand, wrist, and arm deformities and limitations are described and illustrated, and the psychological and social advantages of being able to play an instrument are stressed. (See *Rehab. Lit.,* May, 1972, #336, for reference to another article by Mrs. Erickson.)

Reprints are available from the author upon receipt of a stamped, preaddressed envelope or from the Editor, *Breakthrough,* Osteogenesis Imperfecta Foundation, 632 Center St., Van Wert, Ohio 45891.

NATIONAL HEALTH SURVEY—REPORTS

43. **U.S. Public Health Service**

Health characteristics of low-income persons. Washington, D.C., U.S. Govt. Print. Off., 1972. 51 p. tabs. *(Vital and Health Statistics, Ser. 10, No. 74; DHEW Pubn. No. HSM 73-1500)*

This report is based on data collected from all persons in the Health Interview Survey who reported an annual family income of less than $5,000. Recipients of any kind of public assistance are compared with nonrecipients, and both groups are compared to the population as a whole in terms of health characteristics. The low-income population is considered in terms of aid status, demographic characteristics, comparative health status, type and extent of disability, medical care, and hospitalization. Over ¼ of all aid recipients had limitation of activity from chronic conditions.

Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, at 55¢ a copy.

NEUROLOGY

See p. 1; 8.

NURSERY SCHOOLS

See 57; 58.

OLD AGE—MEDICAL TREATMENT

44. **Isaacs, Bernard** *(Dept. of Geriatric Med., Glasgow Royal Infirmary Group of Hosps., Glasgow, Scot.)*

Towards a definition of geriatrics. *J. Chronic Diseases.* Aug., 1972. 25:8:425-432.

A series of medical and social surveys was conducted in Glasgow, Scotland, in the years 1966-1969, in the hope of defining the nature of the geriatric problem. These surveys involved observation of patients referred to a geriatric unit, elderly persons admitted to a general medical unit, a random population sample, and, retrospectively, a group of old people in the period preceding their deaths. The type of geriatric unit that has developed in the United Kingdom, with specialized physicians, nurses, rehabilitation personnel, and social workers linked to community resources, is seen to be well adapted to meeting the needs of the large numbers of people who live into advanced old age while being afflicted with multiple physical, mental, and social disabilities.

45. **Milne, J. S.** *(MRC Clinical and Population Cytogenetics Unit, Western General Hosp., Crewe Rd., Edinburgh, EH4 2XU, Scot.)*

The design and testing of a questionnaire and examination to assess physical and mental health in older people using a staff nurse as the observer, by J. S. Milne and others. *J. Chronic Diseases.* July, 1972. 25:6/7:385-405.

A questionnaire, based on a previous study of the elderly population in Edinburgh, Scotland, by the authors, and on the publications of others, was devised in order to estimate physical and mental illness in older people. The various topics included in the questionnaire are detailed here. A simple physical examination, devised to follow the questionnaire, is also described. A staff nurse was trained to satisfactorily administer the questionnaire and the examination, both of which are outlined in appendixes.

See also 14.

OLD AGE—RECREATION

46. **Quigley, John L.** *(Soldiers' Home in Massachusetts, 91 Crest Ave., Chelsea, Mass. 02150)*

Recreation renews interest in life, by John L. Quigley and Alexandra Walcott. *Hospitals.* Nov. 1, 1972. 46:21:52-57.

A pilot therapeutic recreation program was devised for the residents of the Chelsea, Mass., Soldiers' Home, a large institution that cares for the elderly on a long-term basis. Staffed by a recreation therapist, 2 college students participating in work-study programs, and volunteers, the pilot project emphasizes activities for special interest groups that require a high degree of active participation by the residents and the development of activities organized and run by the residents themselves. Therapeutic goals of the program are discussed, and efforts to involve even initially unresponsive residents are described.

OSTEOGENESIS IMPERFECTA

See 42.

PARALYSIS AGITANS—PSYCHOLOGICAL TESTS

47. **Maskin, Michael B.** *(Dept. of Clinical Psychology, Fordham Univ., Bronx, N.Y. 10458)*

A preliminary study of selected emotional changes in parkinsonians on L-dopa therapy, by Michael B. Maskin, Manuel Riklan, and David Chabot. *J. Clinical Psych.* Oct., 1972. 28:4:604-605.

Twenty-eight persons with Parkinson's disease were divided into 3 independent groups consisting of pre-, short-term, and long-term levodopa patients. A control group consisted of 10 cardiac patients. Each patient was given the depression and paranoia scales of the MMPI (card form), and the Multiple Affect Adjective Check List. Results suggest that parkinsonian patients show more depression than cardiac patients, and that during initial therapy L-dopa may reduce this depression.

PARAPLEGIA

48. **International Medical Society of Paraplegia**

Proceedings of the annual scientific meeting of the . . . held at Stoke Mandeville Hospital on 28th to 30th July 1971 (Part II). *Paraplegia.* Aug., 1972. 10:2:107-133.

Contents: Psychological and social problems of paraplegics in Pakistan, by Z. K. Kazi and Asim Qureshi, p. 107-110.—A follow-up service—supplemented by domiciliary visits, by H. W. Francis Jones, p. 111-114.—Follow-up of 423 consecutive patients admitted to the spinal cord centre, Rancho Los Amigos Hospital, 1 January to 31 December, 1967, by N. Elane Wilcox and E. Shannon Stauffer, p. 115-122.—The recruitment and training of nursing staff for a spinal injuries unit in an acute general hospital, by John B. Cook and Evelyn V. Swan, p. 123-125.—Problems of social integration for paraplegics in Scotland, by Gillian S. Johnson, Ralph H. Johnson, and Gaie Bowie, p. 126-133.

Paraplegia is published by E. & S. Livingstone, Longman Group Ltd., Journals Div., 5 Bentinck St., London, W1M 5RN, Eng. Annual subscription, £5.25.

PARAPLEGIA—BIOGRAPHY

See p. 7.

PARAPLEGIA—PROGRAMS

49. **Deyoe, Frank S., Jr.** *(Physical Medicine and Rehabilitation Service, Veterans Administration Hosp., 1400 V.F.W. Pkwy., W. Roxbury, Mass. 02132)*

Spinal cord injury: long-term follow-up of veterans. *Arch. Phys. Med. and Rehab.* Nov., 1972. 53:11:523-529.

During a 2-year period, 219 veterans, aged 21 to 75 years, with spinal cord injuries of long duration, were interviewed to assess their current living status, evaluate their ability to function effectively outside the rehabilitative milieu, and determine their level of reintegration into family and community activities. Accomplishments in physical-functional, educational, vocational, and social-cultural areas are surveyed, and where possible these levels of accomplishments are related to the group's vital statistics and disability residual.

PARENT EDUCATION

50. **Haynes, Beryl S.** *("Lexington," Sandford, Tasmania, 7020, Australia)*

The handicapped child at home. *Australian J. Physiother.* Sept., 1972. 18:3:83-88.

Suggestions are given for parents, particularly mothers, on methods of handling and assisting small handicapped children. The necessity of thorough assessment of the child and of parental understanding of the prescribed treatment regime is stressed. Practical information is given in the areas of dressing, bathing, toilet training, feeding, and general positioning of the child, as well as on the development of proper speech patterns. Also discussed are play technics and methods of transporting the child.

See also 2; 57; 63.

PHYSICAL EDUCATION

See 12; 58.

PHYSICAL EFFICIENCY

51. **Potvin, A. R.** *(Bioengineering Program, Univ. of Texas, Arlington, Tex. 76010)*

Simulated activities of daily living examination, by A. R. Potvin and others. *Arch. Phys. Med. and Rehab.* Oct., 1972. 53:10:476-486, 498.

A battery of tests called the Simulated Activities of Daily Living Examination (SADLE) was evaluated using 40 young adult normal subjects, 10 patients with Parkinson's disease and their 10 matched normal controls, and 10 patients with multiple sclerosis and their 10 matched normal controls. The tests, chosen for their practicality, have potential application in a broad variety of neuromuscular disorders. They differ from traditional scoring systems in that they are administered by paramedical personnel and are timed using a stopwatch. The evaluation of the test battery included measures of coefficient of variation, reliability, long-term learning (1-month test-retest interval), and differences due to the subject's age and sex. The results of this study appear to encourage the use of this test battery along with other tests for quantitatively evaluating neurological function. A description of the tests in SADLE and the instructions given to subjects by the test administrator are appended.

PHYSICAL EXAMINATION

52. **Brubaker, Warren W.** *(Milton S. Hershey Medical Center, College of Medicine, Pennsylvania State Univ., Hershey, Pa. 17033)*

Pre-employment physical examinations. *Pa. Med.* Oct., 1972. 75:10:53-56.

The results are discussed of a preemployment physical examination program carried out on 842 job applicants at 2 food manufacturing plants during a 3-month period. Cost analysis indicates that such examination can be done at a cost of approximately $15.

Applicants are classified into 3 groups. Group A includes those who are qualified for *any* type of work, Group B for some type of limited work, and Group C not qualified for any type of work. Dr. Brubaker observes "Placement of persons with limited physical capacities is difficult in industries in which job placement is based on seniority. Any new employee without bidding power, must be able to do *any* job. . . . Certain jobs have been taken out of the group which are bid upon. However, they are few in number and are usually occupied by older employees with chronic disabilities."

53. **Smodlaka, Vojin N.** *(Dept. of Rehabilitation Medicine, Methodist Hosp. of Brooklyn, 506 Sixth St., Brooklyn, N.Y. 11215)*

Use of the interval work capacity test in the evaluation of severely disabled patients. *J. Chronic Diseases.* July, 1972. 25:6/7:345-352.

To evaluate the physical condition of severely disabled patients at the beginning and end of a reconditioning program, the Interval Work Capacity test was designed. The patient is asked to cycle a bicycle ergometer while lying in the supine position in short intervals of 30 seconds of work and 60 seconds of rest. This test enables the patient to reach his maximal work load, to perform the highest total work load, and to have a more intensive cardiovascular and pulmonary reaction, regardless of his disability.

See also 45.

PIERRE ROBIN SYNDROME

54. **Agrafiotis, Persephone C.** *(Boston State Hosp., 591 Morton St., Dorchester, Mass. 02124)*

Teaching parents about Pierre Robin Syndrome. *Am. J. Nursing.* Nov., 1972. 72:11:2040-2041.

Pierre Robin Syndrome, which consists of a cleft palate, a tongue that falls back on the pharynx, and an underdeveloped chin, is described, and suggestions are made as to methods of teaching parents how to manage babies with this condition. It is stressed that early feeding and airway maintenance are critical in caring for the child, and two types of elastic traction are described that have been devised to hold the infant's tongue until he develops muscle strength to hold his jaw and tongue forward. Sources of further information for parents are mentioned.

PODIATRY

55. **Sharp, John T.** *(Podiatry Service, Abington Memorial Hosp., Abington, Pa. 19001)*

Podiatry service in a suburban hospital. *Pa. Med.* Oct., 1972. 75:10:38-40.

A 3-year review of the organization and functions of the formal podiatry service at Abingdon Memorial Hospital in Pennsylvania, written for the purpose of assisting hospitals that are considering the addition of a podiatry service to their facilities. The review covers consultation services for inpatients, outpatient foot clinic, inpatient care for private podiatry patients, podiatric surgery, and a short procedures unit for outpatient surgery.

See also 69.

POLIOMYELITIS

See 16.

PREMATURE BIRTH

56. **Wright, F. Howell** *(Wyler Children's Hosp., 950 E. 59th St., Chicago, Ill. 60637)*

A controlled follow-up study of small prematures born from 1952 through 1956, by F. Howell Wright and others. *Am. J. Diseases of Children.* Oct., 1972. 124:4:506-521.

Follow-up studies were made on the 70 infants who survived birth weights of 1,500 gm. or less at the Chicago Lying-In Hospital between 1952 and 1956 and on control subjects matched for obstetric, social, and economic factors. These studies included physical, neurologic, audiometric, ophthalmologic, and psychometric examinations approximately 10 years after birth. Data were obtained from 65 (93%) of the complete pairs, either at the University of Chicago or elsewhere. Through analysis, mainly by intrapair differences, it was determined that the controls and prematures matched on a wide range of medical, socioeconomic, and obstetric parameters other than low birth weight. Prematures exceeded their controls in mortality, mental retardation, poor school performance, pyramidal tract disorders, and visual defects. The data are stored on cards and magnetic tape for additional analysis.

PSYCHOLOGY

57. **Toepfer, Caroline** *(Slippery Rock State College, Slippery Rock, Pa. 16057)*

Design and evaluation of an obedience training program for mothers of preschool children, by Caroline Toepfer, Jeanette Reuter, and Charles Maurer. *J. Consulting and Clinical Psych.* Oct., 1972. 39:2:194-198.

A training program to teach 24 mothers to use the principles of contingent social reinforcement to increase their preschool children's obedience was conducted in a clinic playroom. It was indicated that the mothers developed skills in the observation and definition of their own and their children's behavior and in the use of contingent social reward and nonreward as a behavioral management technic. Children's obedience to their mothers' verbal commands also improved.

RECREATION

See 6.

RECREATION—EQUIPMENT

58. **Hall, Irma** *(Orange County Dept. of Education, Educational Assessment Center, 14031 Webber Pl., Westminster, Calif. 92653)*

Educational uses of physical activities, by Irma Hall and others. *J. Learning Disabilities.* Nov., 1972. 5:9:576-580.

Described is an individualized program of physical activities designed to enhance the awareness of preschool aged handicapped children, focus their attention, and provide a maximum of multisensory input for learning. The value of properly designed intensive play equipment to help such children develop physically and socially is emphasized. Photographs illustrate some of the activities that have been developed for this program.

REHABILITATION—GREAT BRITAIN

See 14.

REHABILITATION—ADMINISTRATION

59. Kennedy, O. George *(MEDICUS Systems Corp., 401 E. Ohio St., Chicago, Ill. 60611)*

A conceptual model for planning the delivery of rehabilitation services, by O. George Kennedy, Byron B. Hamilton, and Julie Galliers. *Arch. Phys. Med. and Rehab.* Oct., 1972. 53:10:461-469.

A model is outlined for planning the provision of medical-vocational rehabilitation services on a community level. To provide an objective basis for planning, the model utilizes the management sciences technics of systems analysis and cost-benefit/cost-effectiveness analyses. The two major portions of the project are the demand model, designed to provide reliable estimates of the number of persons who will seek care, the types of care they will seek, and where they will go to receive services; and the delivery model, which will generate and test alternatives for delivery of care to disabled patients and efficiently allocate scarce rehabilitation resources in a way that can effectively meet the needs of disabled persons.

REHABILITATION—EQUIPMENT

60. Hagedorn, R.

Therapists are dissatisfied with rehabilitation equipment. *Occupational Ther.* Sept., 1972. 35:9:655-657.

Responding to a request made in November, 1971, for information on consumer opinions of rehabilitation apparatus, a number of British occupational therapists completed a questionnaire, the results of which are summarized here. Questions dealt with degree of satisfaction with present equipment, criteria for the design of rehabilitation machines, treatment problems that might be solved and jobs that might be performed by a new piece of equipment, costs of available apparatus, and current research projects being carried out. Occupational therapists in Britain are asked to submit details on rehabilitation equipment currently being used in their departments.

See also 20; 21; 58.

REHABILITATION—HISTORY

See 9.

SHELTERED WORKSHOPS

See inside front cover; p. 15.

SOCIALLY HANDICAPPED

See 43.

SOCIALLY HANDICAPPED—PSYCHOLOGICAL TESTS

61. Kirk, Samuel A. *(Dept. of Special Education, Univ. of Arizona, Tucson, Ariz. 85721)*

Ethnic differences in psycholinguistic abilities. *Exceptional Children.* Oct., 1972. 39:2:112-118.

This article summarizes the results of a number of research studies on the psycholinguistic abilities of black, Indian, and Mexican-American children as measured by the Illinois Test of Psycholinguistic Abilities. Black children exhibit superior performances in auditory sequential memory, in comparison with both their own performance in other areas and with other ethnic groups in this particular area. Both Indian and Mexican-American children appear to have a superiority in visual sequential memory. It is suggested that these results can be explained in terms of major differences in early childhood training due to cultural differences among ethnic groups.

SOCIOLOGY

62. Levine, David *(Dept. of Psychology, 1132 Oldfather Hall, Univ. of Nebraska, Lincoln, Neb. 68508)*

A cross-national study of attitudes toward mental illness. *J. Abnormal Psych.* Oct., 1972. 80:2:111-114.

The Cohen-Struening Opinions About Mental Illness Scale was administered to samples of students, physicians, nurses, and police in Great Britain, Czechoslovakia, and West Germany. Although there were differences among occupational groups, the differences among countries were much more substantial and suggested that attitudes toward mental illness are part of a person's general orientation to social issues, rather than a narrow function of his concept of mental illness. It was further suggested that in a community climate characterized by an authoritarian social-political structure, authoritarian and socially restrictive attitudes toward the mentally ill can be expected.

SPECIAL EDUCATION—ADMINISTRATION

63. Karnes, Merle B. *(Institute for Research on Exceptional Children, Univ. of Illinois, Urbana, Ill. 61801)*

Flexibility in getting parents involved in the school, by Merle B. Karnes and R. Reid Zehrbach. *Teaching Exceptional Children.* Fall, 1972. 5:1:6-19.

In same issue: Teaching parents to teach their children, by Jo Benson and Linda Ross, p. 30-35.

In order to involve parents of handicapped children in the process of their children's education, it is necessary to utilize a variety of technics, activities, and approaches designed to meet their individual needs and goals. A number of technics for involving parents are described, along with guidelines for obtaining maximum benefit from each approach. These include group meetings with a speaker, small group discussion meetings, individual conferences, and a variety of activities involving direct and indirect approaches to teaching through parents, such as behavior modification, programed materials, and training the parent to teach in the classroom setting.

In the article on p. 30-35, a project to train parent

volunteers as aides for teachers of trainable mentally retarded children is described. The project, which took place at the West Suburban Special Education Center in Cicero, Ill., during 1970-1971, provided the children with more individualized instruction, promoted parental interest and involvement in their children's educational growth, and encouraged community interest and support.

SPECIAL EDUCATION—DIRECTORIES

See 3.

SPECIAL EDUCATION—STUDY UNITS AND COURSES

64. **Glass, Raymond M.** *(Dept. of Special Education, Indiana Univ., Bloomington, Ind. 47401)*

Preparing elementary teachers to instruct mildly handicapped children in regular classrooms: a summer workshop, by Raymond M. Glass and Roy S. Meckler. *Exceptional Children.* Oct., 1972. 39:2:152-156.

As one means of maintaining an interface between regular and special education that would be directed toward keeping mildly handicapped children in regular educational programs, an intensive summer workshop for elementary teachers is described. The major workshop goals were to equip elementary teachers with diagnostic, remedial, and behavior management skills that would increase their ability to successfully instruct mildly handicapped children in their regular classrooms. The workshop, held at Indiana University in the summer of 1971, included 18 teacher-trainees and 39 mildly handicapped children. Workshop procedures are detailed, and an evaluation of the teachers' gains in attitudes and beliefs, diagnostic skills, interpersonal relationship skills, and remediation-intervention skills is presented.

SPEECH CORRECTION

65. **Moore, Mary Virginia** *(Physical Medicine and Rehabilitation Service, Tuskegee Veterans Administration Hosp., Tuskegee, Ala. 36083)*

Binary communication for the severely handicapped. *Arch. Phys. Med. and Rehab.* Nov., 1972. 53:11:532-533.

Binary communication involves 2 people (sender and receiver), 2 messages (yes and no), and 2 possible outcomes (success or failure). The need for such communication between the physician or other caring person and patients with severe speech disabilities is emphasized. An effective and simple binary communication system, by which the patient may transmit information by using prearranged signals for "yes" and "no," is described, along with suggestions for its implementation.

See also p. 19.

SPINA BIFIDA

66. **Austin, Elizabeth S.** *(Univ. of Southern California School of Medicine, Los Angeles, Calif. 90007)*

Spina bifida and myelomeningocele, by Elizabeth S. Austin, W. Dean Lindgren, and Shelby L. Dietrich. *Am. Family Physician.* Oct., 1972. 6:4:105-111.

This article briefly summarizes the general characteristics of spina bifida and myelomeningocele, noting that the development of technics for the management of hydrocephalus and early surgery for the spinal defect have greatly increased the number of children born with these conditions who survive to at least their fourth year. The article reviews etiology and incidence, classification, management, physical therapy, orthopedic management, home care, psychological aspects, education, and parental counseling.

SPINA BIFIDA—EQUIPMENT

67. **Eyring, Edward J.** *(973 E. Broad St., Columbus, Ohio 43205)*

Myelomeningocele: an active approach, by Edward J. Eyring and Robert E. Fannin. *Orthotics and Prosthetics.* Sept., 1972. 26:3:10-23.

The nature, management, and effects of myelomeningocele are discussed, and several aspects of general orthopedic care are reviewed, including evaluation, management programing, morbidity, orthotics, neonatal and infant care, and salvage procedures. Three years of experience at the Columbus, Ohio, Children's Hospital, including 497 surgical procedures performed on 133 patients, are summarized. Modifications of components and materials allowing earlier bracing for the child are discussed, and 2 case reports illustrate the overall concept of bracing described.

SPORTS

See 12.

STUTTERING

68. **Cooper, Eugene B.** *(Dept. of Speech, Univ. of Alabama, University, Ala. 35486)*

Recovery from stuttering in a junior and senior high school population. *J. Speech and Hearing Research.* Sept., 1972. 15:3:632-638.

Recovery from stuttering was studied in the Tuscaloosa, Ala., junior and senior high schools. Of 5,054 students interviewed, 119 active stutterers were observed and another 68 students reported recovery from stuttering. The recovery rate varied from less than ⅓ in the junior high group to approximately ½ in the high school population. Familial incidence of stuttering was negatively related to recovery from stuttering. No relationships were observed among recovery and stuttering severity, participation in therapy, and the nature of initial disfluencies. Further long-term, follow-up, and longitudinal study is urged.

TWINNING

69. **Feldman, Mark H.** *(25180 Lakeshore Blvd., Euclid, Ohio 44132)*

An orthopedic evaluation of 30 sets of identical twins; an exploratory investigation, by Mark H. Feldman and Marcia Z. Wile. *J. Am. Podiatry Assn.* Nov., 1972. 62:11:425-430.

Data were gathered from 30 sets of monozygotic twins for the purpose of analyzing their similarities and differences based on 27 podiatric orthopedic variables. Results indicated that no significant differences existed in any of the variables, and that the presence or development of existing deformities in one twin could be expected to appear in the other.

VOCATIONAL GUIDANCE

70. **Burke, Donald A.** *(Dept. of Special Education, Michigan State Univ., East Lansing, Mich. 48823)*

Measuring the self concept of ability as a worker, by Donald A. Burke and Donald F. Sellin. *Exceptional Children.* Oct., 1972. 39:2:126-132.

In same issue, by same authors: Self concept of ability as a worker scale, p. 145-151.

The relationship of self-concept of ability to performance is discussed, and the need for a measurement device for the self-concept of work ability of educable mentally retarded adolescents is identified. The authors have adapted the General Self-Concept of Academic Ability Scale for this purpose. The rationale and statistical verifications of this adapted scale, the Self Concept of Ability as a Worker Scale, are presented in detail. The Scale employs an interview technic and is intended to be used by teachers and vocational workers as an aid in teaching and counseling educable mentally retarded students.

The 6-part Scale is reproduced on p. 145-151.

71. **Elo, Margaret R.** *(Dr. Hendel, 714 14th Ave., S.E., Minneapolis, Minn. 55414)*

Classification as "mentally retarded": a determinant of vocational rehabilitation outcomes?, by Margaret R. Elo and Darwin D. Hendel. *Am. J. Mental Deficiency.* Sept., 1972. 77:2:190-198.

The purposes of this study were to provide basic normative data to use in evaluating future counseling and testing procedures specifically developed for mentally retarded clients and to expand the number of variables which have been used to compare the rehabilitation outcomes of retarded vs. nonretarded clients. Counseling outcomes for 2,827 nonretarded and 586 mentally retarded rehabilitation clients were compared in 18 variables. The retarded clients were significantly different from the nonretarded clients in work status at closure, occupation at closure, weekly earnings at closure, and length of time in various counseling status categories. Retarded clients were rehabilitated primarily into service occupations, earned less than nonretarded clients, and spent a shorter time in counseling.

VOLUNTEER WORKERS

72. **MacDonald, A. P., Jr.** *(806 Forestry Tower, W. Virginia Univ., Morgantown, W.Va. 26506)*

Characteristics of volunteer subjects under three recruiting methods: pay, extra credit, and love of science. *J. Consulting and Clinical Psych.* Oct., 1972. 39:2:222-234.

All 14 sections of Psychology 1 at West Virginia University were administered an extensive questionnaire package, which included measures of 14 personal characteristic variables presumed to be related to volunteering. The sample included 594 subjects (383 males, 211 females). More subjects volunteered for extra credit than for pay or "love of science." Both sexes volunteered equally for love of science, but females volunteered more than males for extra credit or money. Among other findings, volunteers were higher than nonvolunteers in sociability and ambiguity tolerance, and lower in conformity and authoritarianism. Differences were statistically significant, but not sizable, a result consistent with the volunteer literature in general, which is briefly reviewed.

Events and Comments

Appointment

DEAN PHILLIPS, of Columbus, Ohio, was named national executive director and chief executive officer of Goodwill Industries of America, Inc. *(9200 Wisconsin Ave., Washington, D.C. 20014)*, effective Jan. 1, 1973. The announcement was made by William P. Cooling, president of the board of directors. Mr. Phillips has actively served Goodwill Industries since 1962, in various capacities, including chairman of the planning committee and, since 1971, vice president of the national board of directors. At the time of the appointment he was manager of public affairs for the Columbus, Ohio, division of North American Rockwell.

Association for Care of Children In Hospitals To Hold Conference

MARCH 14 to 17 the 8th Annual Conference of the Association for the Care of Children in Hospitals will be held at the Stouffer Inn in Atlanta, Ga. "Keeping in Touch" is the theme of the conference. Emphasis will be on the behavioral manifestations of stress related to illness and hospitalization in the child, the parents, and the interdisciplinary health team.

Panels of health care experts will present papers and discuss topics related to four major areas of pediatric health care. T. Berry Brazelton, M.D., of Harvard Medical School, the keynote speaker, will discuss behavioral concepts of child development. Tours of selected local health facilities and on-site conferences are planned.

Sponsors of the conference are the Henrietta Egleston Hospital for Children, Grady Memorial Hospital, and the department of pediatrics, Emory University.

President's Committee on Employment of the Handicapped Issues New Publications

A 40-PAGE BOOKLET *Accessibility of Junior Colleges for Handicapped: A Survey by the Education Committee of the President's Committee on Employment of the Handicapped* is now available from the President's Committee on Employment of the Handicapped *(Washington, D.C. 20210)*.

Questionnaires were sent, asking junior colleges about their architectural barriers and accessibility for students with handicapping conditions. Responses were received from 50 percent of those polled. The tabulation reflects improvement, providing a wider choice of schools to the disabled.

The booklet lists the junior colleges alphabetically by state. *Yes* or *No* (sometimes qualified) is indicated for the following features: entrances ramped or ground level; doors wide enough for wheelchair—outside /inside; doors operable from wheelchair; drinking fountains, washrooms, other facilities accessible and useable by handicapped; elevator if multifloors; and students attend in wheelchairs.

The third edition (Sept., 1972) of *A List of Guidebooks For Handicapped Travelers* has been compiled by the Women's

Committee of the President's Committee on Employment of the Handicapped *(Washington, D.C. 20210)* The second edition appeared in 1969. Geographical areas covered include the United States (85 cities or areas), Canada, the United Kingdom, Australia, and some European countries. Listed alphabetically by state and town, the data provide the name of each guidebook and give the address of the distributors. Additional information is given on availability of the *National Park Guide for the Handicapped* and the building standards approved by American National Standards Institute.

National Conference Held on Developmental Disabilities

TWO of President Nixon's top spokesmen underscored the administration's emphasis on integration of services, grant consolidation, and decentralization in human resources programs at a three-day national conference on developmental disabilities ending on Nov. 18.

Richard Mastrangelo, a special assistant in the Department of Health, Education, and Welfare, and Paul O'Neill, assistant director of the Office of Management and Budget, spoke at general sessions highlighting the conference, which attracted nearly 1,000 persons, including members of all Governor's Councils on Developmental Disabilities.

Sponsors of the conference were HEW's Division of Developmental Disabilities and the National Advisory Council on Services and Facilities for the Developmentally Disabled.

O'Neill stated that the waste and inadequacy associated with fragmented services cannot be afforded and that people's problems do not fit into categorical boxes. He predicted that state and local efforts will increase, largely because of the new revenue-sharing program, which will distribute $32 billion to the states in the next 5 years. He added that interested persons will have to work with state and local governments to convince them of the high priority of work with the developmentally disabled.

Mastrangelo spoke of the weedlike growth of programs promoted by vested-interest groups, patterned to meet needs of members of a particular category, all the while failing to meet similar needs of those excluded. He said that the 1970 Developmental Disabilities Facilities and Construction Act "represents a progressive step in programing because it reaches out to embrace disabled individuals with similar needs regardless of traditional labels." He further emphasized that, through the broad use of formula grants to the states and creation of the state Governor's Councils, the legislation has shifted the focal point to the local level, where the handicapped should have his needs met and to where the strength of the program should be.

He said, "We can make it easier for you to pull things together at the delivery level by broadening the forms of assistance, but we cannot make it happen. If this premise is correct, then there must be an integrating mechanism at the state and local levels."

The conference featured sessions on: vocational education programs; recognition of human rights for the developmentally disabled; long-term care; standards for services and facilities; planning residential arrangements for the developmentally disabled; reaching the developmentally disabled among several disadvantaged groups; services for the developmentally disabled in inner cities; and transportation.

Change of Address

NATIONAL ASSOCIATION OF HEARING AND SPEECH AGENCIES. From: 919 18th St., Washington, D.C. 20006. To: 814 Thayer Ave., Silver Spring, Md. 20910.

Rehabilitation Gazette Makes Changes

NOW PUBLISHED at 4502 Maryland Ave., St. Louis, Mo. 63108, *Rehabilitation Gazette* has evolved into an international source of information for both professional and disabled persons. This service is free. Many of the questions from the disabled are answered by referring the queries to those who have solved similar problems. Other questions are answered from the library of information built up over more than 20 years of volunteering with the severely disabled. (Over most of this time the *Gazette* was published under the name *Toomey j Gazette.)*

There is also a new minimum tax-deductible donation per copy of the *Gazette*: $4 from the nondisabled and $2 from the disabled. Back issues are available.

The 1972 *Gazette,* in a new and attractive format, is in Baskerville type face on a larger, two-column page. It contains articles or sections on: a comprehensive rehabilitation center; housing and home services in the U.S.A.; severely disabled "ham" radio operators; disabled artists; keyboard fun for quads; shared activities of worldwide religious groups; friends (readers) around the world (a 15-page section); book reviews; news on equipment; and a section listing sources of information on numerous topics of interest to the disabled.

The editors are Gini and Joe Laurie.

Death

EARL SCHENCK MIERS died at the age of 62 at his home in Edison, N.J. He was best known for his writings on the Civil War and Abraham Lincoln. Mr. Miers wrote and edited over 60 books for adults and young readers, covering American history, biography, fiction, and sports.

Mr. Miers served on the board of trustees of the National Easter Seal Society for Crippled Children and Adults from 1952 to 1965. He also served as editor of the Society's series of pamphlets for parents of handicapped children. Cerebral palsied himself, he is the author of the first pamphlet, *Why Did This Have To Happen?* His book, *The Trouble Bush,* an autobiography published in 1966, was reviewed in the May, 1967, issue of *Rehabilitation Literature.*

OCHAMPUS Gets New Director

COL. JOHN E. HAGGERTY, Medical Service Corps, U.S. Army, on Dec. 1, 1972, assumed command of OCHAMPUS, the headquarters for the Civilian Health and Medical Program of the Uniformed Services *(Denver, Colo. 80240).* Col. Haggerty succeeds Col. Grover C. Kistler, who retired after more than 32 years of active service.

As the new director of OCHAMPUS, Col. Haggerty will oversee the administration of the health benefits program, which pays the major share of the costs of health care that service families receive from civilian doctors, hospitals, and other providers. Last year more than $350 million was expended for health care under the program.

A veteran of over 31 years of service, Col. Haggerty comes to OCHAMPUS from Fort Bragg, N.C., where he was executive officer for Womack Army Hospital. Other recent assignments included duty in the Army Surgeon General's Office, where he handled much of the armed forces special pay and doctor-draft legislation, and a tour in Hawaii as executive officer and director of medical operations for the Surgeon Joint Pacific Command.

Retirement

ROBERT S. BRAY has retired from his post as Chief of the Division for the Blind and Physically Handicapped, Library of Congress, Washington, D.C. Mr. Bray had a 37-year career of public service, nearly half of it with the Division.

Second National Workshop for Rehabilitation Personnel in Sensorimotor Treatment Techniques Slated for June

THE clinical and academic application of sensorimotor treatment technics will be studied at the Second National Workshop for Rehabilitation Personnel in Sensorimotor Treatment Techniques. The workshop will be held June 12 through 16 at the University of Missouri-St. Louis.

Dr. Josephine C. Moore, Ph.D., O.T.R., and Miss A. Joy Huss, M.S., O.T.R., R.P.T., will conduct the workshop.

Further information can be obtained from: Dwight Hafeli, UMSL Extension Division, 8001 Natural Bridge Road, St. Louis, Mo. 63121. Telephone: 314-453-5961.

Author Index

Adams, Ronald C., 6
Agrafiotis, Persephone C., 54
Allen, John C., 15
Am. College of Surgeons. Comm. on Trauma, 5
Am. Found. for the Blind, 20
Am. Neurological Assn. Joint Comm. for Stroke Facilities, 35
Am. School Health Assn., 4
Asma, Fern E., 13
Austin, Elizabeth S., 66

Barad, Cary B., 27; 32
Barton, Keith, 39
Benson, Jo, 63
Bentzen, Billie Louise, 21
Berlá, Edward P., 21
Black, Martha E., p. 19
Boone, Daniel R., p. 19
Bowie, Gaie, 48
Bråttgard, Sven-Olaf, 34
Browder, J. Albert, 31
Brown, Diana L., 2
Brubaker, Warren W., 52
Burdette, Mary E., 33
Burke, Donald A., 70

Cass, James, 3
Catell, Raymond B., 39
Chabot, David, 47
Clark, Julian, 23
Coley, Ida Lou, 18
Cook, John B., 48
Cooper, Eugene B., 68
Czaczkes, J. W., 38

Daniel, Alfred, 6
Daniels, Lucille, 8
David, Oliver, 23
Dean, Russell J. N., 9
De-Nour, A. Kaplan, 38
DeVito, Joseph A., p. 19
Deyoe, Frank S., Jr., 49
Dietrich, Shelby L., 66
Donohue, Joseph C., 37
Du Toit, C. J., 30

Eggert, Raymond L., 13
Ellingson, Careth, 3
Elo, Margaret R., 71
Elting, James J., 15
Engel, Eric, 29
Erickson, Lorraine B., 42
Eyring, Edward J., 67

Fannin, Robert E., 67
Feldman, Mark H., 69
Fordyce, Wilbert E., 22
Fowler, Roy S., Jr., 22
Frieden, Lex, p. 7

Galliers, Julie, 59
Glass, Raymond M., 64
Greene, Margaret C. L., p. 19
Greer, Peter Swartz, 21
Gubrium, Jaber F., 40
Gulkus, Steven P., p. 2
Gumz, Edward J., 40

Hagedorn, R., 60
Hall, Irma, 58
Halpern, Harvey, ed., p. 19
Hamilton, Byron B., 59
Haynes, Beryl S., 50
Hendel, Darwin D., 71
Hilgartner, Margaret W., 36
Hilker, Robert R. J., 13
Höök, Olle, 34

Inskeep, Robert B., p. 11
Internatl. Assn. for the Scientific Study of Mental Deficiency, 10
Internatl. Med. Soc. of Paraplegia, 48
Irwin, John V., p. 19
Isaacs, Bernard, 44

Johnson, Gillian S., 48
Johnson, Ralph H., 48
Jones, H. W. Francis, 48
Jooma, O. V., 34

Karnes, Merle B., 63
Kazi, Z. K., 48
Kennedy, O. George, 59
Kidwell, Ann Middleton, 21
Kirk, Samuel A., 61
Kirschbichler, Theodor, 34
Klappholz, Lowell A., 12
Krieger, George W., 27
Kunce, Joseph T., p. 11

Lawrence, Richard E., 27
Layton, Donald D., Jr., 16
Levine, David, 62
Lewis, Robyn E., 30
Lieberman, Philip, p. 19
Ligouri, Sister, 30
Lilos, P., 38
Lindgren, W. Dean, 66
Loxley, Alice Keating, 17

MacDonald, A. P., Jr., 72
Mair, W. G. P., 1
Martin, Frederick, p. 19
Maskin, Michael B., 47
Maurer, Charles, 57
Meadow, S. R., 28
Meckler, Roy S., 64
Menyuk, Paula, p. 19
Miller, Maurice, p. 19
Milne, J. S., 45
Moore, Mary Virginia, 65
Mulder, Donald W., 16

Niewoehner, Gerald J., p. 11

Olshansky, Simon, p. 15

Potvin, A. R., 51
Primrose, D. A. A., 10

Quigley, John L., 46
Qureshi, Asim, 48

Ramey, Irene G., 35
Reeder, Charles W., p. 11
Reuter, Jeanette, 57
Richterman, Harold, inside front cover
Riklan, Manuel, 47
Rinder, Lennart, 34
Rosenbaum, Robert A., 16
Ross, Dorothea M., 41
Ross, Linda, 63
Ross, Mark, p. 19
Ross, Sheila A., 41
Rullman, Lee, 6
Rusalem, Herbert, rev., inside front cover

Schürmann, Kurt, 34
Sellin, Donald F., 70
Sergis, Elaine, 36
Sharp, John T., 55
Smith, D. A., 30
Smodlaka, Vojin N., 52
Speidel, B. D., 28
Stauffer, E. Shannon, 48
Stein, Julian U., 12
Steinwall, Oskar, 34
Stokoe, William C., Jr., 11
Swan, Evelyn V., 48

Thorson, Jan, 34
Toepfer, Caroline, 57
Toglia, J. U., 34
Tomé, F. N. S., 1

U.S. Natl. Institutes of Health, 25
U.S. Public Health Service, 43
U.S. Public Health Service. Health Services and Mental Health Admin., 7
U.S. Social Security Admin. Office of Research and Statistics, 32, 33

van der Merwe, P. J. (Klasie), 30
Vignos, P. J., Jr., 19
Voeller, Kytja, 23

Walcott, Alexandra, 46
Walls, Richard T., p. 2
Wan, Thomas, 26
Wilcox, N. Elane, 48
Wile, Marcia Z., 69
Wolcott, George J., 24
Worthingham, Catherine, 8
Wright, F. Howell, 56

Zehrbach, R. Reid, 63

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Rehabilitation Literature serves to promote communication among workers and to alert each to the literature on development and progress both in his own area of responsibility and in related areas. As a reviewing and abstracting journal, *Rehabilitation Literature* identifies and describes current books, pamphlets, and periodical articles pertaining to the care, welfare, education, and employment of handicapped children and adults. The selection of publications listed and their contents as reported is for record and reference only and does not constitute an endorsement or advocacy of use by the National Easter Seal Society for Crippled Children and Adults.

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