The Australian Journal of Physiotherapy
Complete electronic copy of abstracts of the 20th Century.

The first volume of the Australian Journal of Physiotherapy was published in 1954. Forty years later the Editorial Board committed to providing an electronic version of the abstracts of the Journal for the 40th year anniversary.

The 40 year index was released at the 12th International Congress of the World Confederation for Physical Therapy in Washington in June 1995. This was the precursor of the AJP foray into electronic publication of the Australian Journal of Physiotherapy.

The release of the extended version of the 40 year index (up to 1999) provides electronic access to all the volumes of the Australian Journal of Physiotherapy. The Australian Journal of Physiotherapy is listed on Medline and abstracts from 1996 are available electronically at PubMed


Readers are directed that manuscripts prior to 1978 (Volume 24) did not have abstracts and keywords at the time of printing. Therefore, for these earlier manuscripts, the abstracts are summaries written by the Editorial Board members in 1994.

It is hoped that the contents of these pages serve as a research and historical resource of the Australian Journal of Physiotherapy.

Dr Garry T Allison

This two part article reviews the history of the earliest understanding of respiration, including those of Empedocles (c 440 BC), Hippocrates (c 410 BC), Erasistratus (c. 280 BC) and Galen (c 160 AD). Primitive and spiritual beliefs, including those of Australian aborigines, Egyptian, Indian and Chinese populations and biblical allusions are also discussed.

Keywords: Respiratory Tract Physiology


The article puts forward a diagrammatic method of depicting signs and symptoms elicited on passive movement of a joint. The reasons for its use and the method whereby such a diagram can be compiled are discussed in detail. A hint is given of the relationships between these joint characteristics and the selection and control of treatment.

Keywords: Joint; Physical Therapy Methods


The argument as to whether or not physiotherapists should manipulate is discussed. The training available in differing countries, various practitioners, objections, possible dangers and tuition available are also reviewed. It is concluded that the facts warrant physiotherapists being able to manipulate whenever they have been properly taught and adequate safeguards conscientiously maintained.

Keywords: Manipulation; Physical Therapy Methods


Photosensitivity and photosensitisers were defined, their results discussed together with their mechanisms. Specific conditions were briefly mentioned in which photosensitivity plays a part. Management of the photosensitivity problem was given. An experiment was described which indicated that infrared irradiation prior to that of ultraviolet light acted as sensitiser.

Keywords: Photosensitising Agents; Photo Sensitivity Disorders; Physical Therapy Methods


This article discusses the need for research in the field of physiotherapy, and the difficulties involved in carrying out this type of research. It describes a factorial trial, and the advantages of using it in physiotherapy. The appendix is a letter from a statistician, and discusses some of these advantages in more detail.

Keywords: Physical Therapy; Research

A neurological assessment chart is described and illustrated. It has been used in various physiotherapy departments in Victoria, and has been found to be adequate in providing a uniform, accurate and concise method of assessing patients with neurological disorders. It has also been found to be useful in providing a basis for planning a treatment programme and a means of re-assessing a patient after a period of time.

Keywords: Neurologic Examination; Neurology; Physical Therapy


The treatment of Parkinson’s disease is described, including the use of stretch stimulus, application of ice and the rhythm technique. Couch work, mat activities and gait training are also important. Treatment of the face breathing and speech are also important components of physiotherapy.

Keywords: Parkinson’s disease; Physical Therapy Methods; Neurology


The cervical spine supports the head and by reason of its mobility allows the head and its contained sensory organ to be placed in the most advantageous position. This review summarises the available published literature on radiological studies of the movements of the cervical spine.

Keywords: Cervical Vertebrae; Neck


The condition of spina bifida cystica is described, and is discussed under the headings of assessment, disability, estimate of treatment likely to be necessary and aims of physiotherapy and how these may be carried out. A table summarising the most associated conditions, treatment, symptoms and common complications is included. The emphasis is on training for maximum independence.

Keywords: Physical Therapy Methods; Spina Bifida Cystica


The results of providing lower limb splints to sixty two cerebral palsied children are given. The aim of the plaster was to encourage a more normal pattern of weight bearing, while abnormal muscle tone is reduced. The results were varied, and conclusions were difficult due to the extreme number of variables and lack of a control group, however, interesting results included an improvement in behaviour increased concentration and better emotion la stability. In children with hemiplegia there was a marked improvement in hand function.

Vibratory motor stimulation is capable of producing the tonic vibratory reflex. This can be used in physiotherapy for the treatment of patients with neurological and non-neurological disorders, as a tool for research into the efficacy of techniques that are considered to facilitate or inhibit muscle action, as an aid in the assessment of certain neurological disorders and as a teaching aid in the training of physiotherapy students.

Key words: Physical Therapy Methods; Neurology


A method of treatment suitable for patients with an acute frozen shoulder has been described in detail. Emphasis is on the relief of acute symptoms and signs rather than early increase of range. Progression of treatment depends on the careful reassessment of constant pain and muscle spasm. The results of sixteen cases treated in this manner have been tabulated showing a definite improvement of symptoms in the majority of cases.

Keywords: Physical Therapy Methods; Shoulder Joint


An outline of the vast and complex connections which our visual systems has with the rest of the brain is given. As a general rule, gross disturbances of movement and posture are not seen with partial or incomplete lesions of this system. With lesions of the optic pathways as they traverse the parietal lobes, one may see associated disturbances of motor function, such as the apraxias. With lesions of the oculomotor system, various types of disturbance of posture and movement can occur, which are confined to movements of the eyes only.

Keywords: Visual Pathways


Forty-five school children with emotionally precipitated asthma were studied for their birth order. Of the thirty three male subjects and twelve female subjects in the sample, a significant number were second-born (0.01 > p > 0.001). Male subjects showed a significant earlier onset than female subjects. Severe periods of asthma were demonstrated in males at pre-school, and puberty and in females at age ten and in early adolescence.

Keywords: Asthma; Birth Order

This article reviews literature on N₂O, considering its history, pharmacological actions, side effects and toxicity, and the precautions and contraindications for its use. A subjective study is described of thirty four patients following thoracic incisions, in respect to the use of gas mixture of N₂O and O₂ as an analgesic in relieving immediate postoperative pain (ie within forty eight hours post-operatively) thus facilitating effective coughing and the removal of bronchial secretions.

Keywords: Analgesia; Physical Therapy Methods; Thoracic Surgery


This article describes a single case study undertaken on a patient immediately post-operative from a coronary by-pass operation. Faradism under pressure was given to the lower limb muscles, while the systolic, diastolic and venous pressures were recorded directly from a cannula. Pulse rate was also recorded. There appeared to be no significant change in the venous or arterial pressures in this patient during faradism under pressure. The authors therefore conclude that faradism can be carried out safely in a patient with a cardiac lesion.

Keywords: Cardiology; Physiotherapy Therapy Methods
Volume 17. 1971


This article details examination of the lumbar spine and emphasises that assessment of the lumbar spine is inadequate if it only includes gross movements. It is described how it is possible to determine accurately the state of movement at each intervertebral level. Without such a foundation, comparison between different kinds of treatment must be open to criticism but an adequate, accurate assessment can help physiotherapy to become a positive science.

Keywords: Lumbar Vertebrae; Physical Examination; Physical Therapy


With the transfer of physiotherapy education in South Australia from a University based course to a College of Advanced Education, the author discusses some relevant issues concerning physiotherapy education and the profession, including responsibility for our own field, the need for a longer, more comprehensive course, the nature of the course, lack of avenues for educational and professional advancement, dangers of overspecialisation and the current shortage of physiotherapists.

Keywords: Education; Physical Therapy


This paper describes a technique which aims to substitute for the damaged or inactive rotator cuff muscle by manually manipulating the head of the humerus to its correct position. The author states that this technique is indicated in any condition where there is impairment of the normal rhythm and range of the glenohumeral and consequently disturbance of the normal scapulo-humeral rhythm. The other muscles can then be progressively retrained.

Keywords: Physical Therapy Methods; Shoulder Joint; Soft Tissue Injuries


As increasing numbers of patients have been sown to survive a second amputation, the rehabilitation of these patients is a challenge calling for the mobilisation of both community and individual resources and for the display of considerable understanding and the highest professional skills. This article describes the management of such patients and discusses such common problems such as oedema, damage to skin, joint stiffness and flexion contracture. The selection of prosthesis and gait patterns employed in this population are also detailed. It is the authors’ belief that physiotherapists are ideally situated to deal with this area of rehabilitation.

Keywords: Amputation; Physical Therapy Methods; Rehabilitation

Many major hospitals are opening specialised coronary care units, and physiotherapists are expected to play a part in this latest area of rehabilitation. The rehabilitation program from management in the acute stage, days 2-21 is described in detail. The patients is usually discharged at three weeks, if there have been no complications. At this point the patient is clinically assessed and graded from 1-4, according to the American Heart Association Classification. Four different exercise tables have been compiled, to suit each grade and the patient is able to continue as an outpatient.

Keywords: Cardiology; Physical Therapy Methods; Rehabilitation


The schismostat is the result of experiments to remove plaster casts quickly and without fear of injury, with the emphasis of safety. The schismostat can be used on plasters as soon as they are applied, and it does not matter whether or not they are padded. Application and removal of the plaster cast are described in detail.

Keywords: Physical Therapy Methods; Plaster of Paris


A brief review is given of the changing role of the physiotherapist in modern medical management. Emphasis is placed on the current trend towards increasing patient activation even in serious acute illness and attention is drawn to the psychological stresses that such patients may suffer. It is suggested that the physiotherapist might accept more direct responsibility for physical treatments, for example, the use of the respirator, and in addition assume the role of a psychotherapist as well.

Keywords: Intensive Care Unit; Physical Therapy


The mechanism of the whiplash injury is described, together with initial treatment, progression and the role of collars. The author stresses the multiplicity of the injury, particularly fractures in the dorsal spine. Milder cases are found to respond to intermittent traction. The psychological impact on the patient is also discussed.

Keywords: Cervical Vertebrae; Physical Therapy Methods; Whiplash Injuries


Bracing of the ankle joint is indicated because of foot drop or spastic plantar flexors which inhibit dorsiflexion. Selection of the brace, types of brace, including those with back stop, limited action brace and the correct shoe, are described. Treatment and bracing should aim as far as possible at restoring and preserving the normal sequence of walking.

Keywords: Physical Therapy; Splints

This article has looked at the development of perceptual-motor learning, and at dysfunctions caused by interference with the normal course of development. Various approaches are presented and the importance of early recognition and assessment of the signs of perceptual-motor problems are emphasised. The authors' recent study investigating the relationship between abnormal head-righting reflexes and the presence of perceptual -motor problems is also presented. A case study is discussed to elucidate the methods of assessment and treatment established and used by the authors.

Keywords: Pediatrics; Physical Therapy Methods


Fifty-four patients between 18-28 years, with injuries ranging between a slight strain, to complete subluxation or dislocation of the clavicle, received a conservative method of acromioclavicular joint treatment, consisting of [1] ice in the acute period; [2] microwave (15 minutes); [3] general loosening up exercises; [4] short wave diathermy (15 minutes); [5] exercises to strengthen the joint and shoulder girdle musculature; and [6] ultrasound (5 minutes at 2.5 watts). The average number of treatments was 7.2, the average recovery time was 10 days, the patients again playing their sport in two weeks.

Keywords: Acromioclavicular Joint; Physical Therapy Methods; Sports


The history of development of physiotherapy education in Australia is outlined. At present the challenge is to successfully continue the course within Colleges of Advanced Education. In future, a further increase in knowledge will lead to a necessary cutting down of the course, whilst keeping abreast of modern educational theories. Student assessment should be reviewed and the best use of clinical education utilised in the limited time available. Professional research is also necessary to advance the profession.

Keywords: Education; Physical Therapy


The need and opportunities for continuing education are discussed. Any plan must give personal satisfaction, freedom of choice and continuity of educational opportunities for participants. At a professional level much can be realised if our ideas of what constitutes true continuing education can be re-examined. It is suggested that a permanent Federal Committee in Continuing Education working with all the branches could make continuing education a more effective process.

Keywords: Education; Physical Therapy Evaluation

An expert panel has been set up by the Committee on Overseas Professional Qualifications to inquire into ways of assisting the physiotherapy profession in Australia in the assessment of overseas qualifications. The panel has been looking at overseas training courses and at prospects for setting up an overseas examination for potential migrants.

Keywords: Education; Physical Therapy


This article discusses whether or not physiotherapy can be regarded as truly professional. The author believes the recent move to Colleges of Advanced education away from degree courses is a retrograde step, one which diminish our standing in the eyes of the medical and other professions. The need to improve the academic excellence of courses is also discussed, in order to allow physiotherapists to move to higher degrees. The difficulty of moving to another profession or course and gaining any exemption of standing from physiotherapy is also seen as a defect.

Keywords: Education; Physical Therapy

Physiotherapy has been involved in preventing disability for many years but this could be extended very much further. The physiotherapist is a teacher of patients. Professional competence encourages respect. The author - a professor of anatomy and President of the Chartered Society of Physiotherapy - shared insights gained from experience as a patient with a painful back who waited far too long before receiving physiotherapy. Highlights the advantages of a specific group practice in Britain in which a physiotherapist was attached to family doctor service. For example problems of muscle imbalance were identified early and treated a case of prevention. Presses the case that general practitioners needed to become more physiotherapy conscious and both physiotherapists and general practitioners have a responsibility to ensure this. Reaffirms the contribution physiotherapists can play in team research of an applied nature.

**Keywords**: Pain; Physical therapy; Rehabilitation


Modified Author’s Summary: Sports medicine may be defined as the interaction of sport and medicine - or more specifically, the applications of sport to medicine and medicine to sport. Physiotherapy has an integral role in the definitive management of athletic injury, which constitutes a major component of medicine applied to sport. It is confidently predicted that the incidence of sports injury in Australia will rise to near epidemic proportions during the seventies. The reasons include the substitution of violence for skill in many contact sports with a large spectator following. In addition, unfit or social participants in contact sports or competitive ball games are liable to injuries, often of major severity, to muscles, joints and bones from a combination of general lack of fitness, years of inactive living and a paucity of motor skill and co-ordination. Modern man's near motionless existence is a major aetiological factor in many diseases particularly those of the cardiovascular and musculo-skeletal systems. To combat this, a prescription ordered with increasing frequency is to commence an exercise programme. Many over-use (or unaccustomed use) syndrome injuries are a major consequence of this advice. Such conditions are now seen with increasing frequency in young teenagers. Modern methods of managing sports injuries are based on intensive therapy, early rehabilitation and the appropriate use of cold, heat and anti-inflammatory agents in conjunction with the maintenance of total body fitness. All physiotherapists should be practised in the treatment of athletic injuries but return to sport or full activity does not complete the functions of the physiotherapist. Appropriate prophylactic advice to prevent further injury by increasing muscle strength and the range of joint movement, the use of graduated levels of activity and protective devices in sport and implicit instructions to “warm up” is mandatory.

**Keywords**: Sports; Sports Medicine

Describes the concept and practical application of the immediate post operative prosthesis (or rigid dressing). Results are discussed and reasons for success and failure of the procedure are debated. Keywords: Prosthesis


Soft tissue lesions are not being given the attention they deserve either because they are associated with sportsmen and therefore "self inflicted" or physiotherapists think that because the patient is not greatly incapacitated their need is not worth their while. the author disagrees with this view and suggests methods that can be used in treatment. Keywords: Muscles; Physical Therapy


Highlights that patients may not be aware of their perceptual problems although these can lead to incapacity despite excellent return of motor function. Aphasia, dyspraxia, Gerstmann's Syndrome, proprioception, cortical discriminative sensation, visual field defects, visual inattention, visual agnosia, dyslexia, anosognosia, unilateral neglect, dressing apraxia, spatial disorientation constructional apraxia are described and illustrated by practical examples. The author suggests that sensory examination with assessment of proprioception and cortical sensory function should be part of a physiotherapist's examination in neurological problems. Keywords: Neurologic Examination; Neurology; Proprioception


A summary of the underlying concepts of the Bobath approach at the time of the XII Biennial Congress of the Australian Physiotherapy Association, 1971. Keywords: Brain; Brain Damage, chronic


The issue of what is an adequate work prescription for a patient or normal person after considering their problems and immediate and long terms needs is raised. The answer is not currently available but it is suggested that if accurate record cards and exercise prescriptions were kept and later collated at State or National level this situation may be reversed. Various methods of measuring mobility, strength and endurance are discussed and problems of measurement of the effects of training identified. A plea is made for physiotherapists to increasingly make use of the instruments mentioned for the accurate appraisal of patients in their care. Keywords: Exercise; Records; Rehabilitation

Management following oesophageal surgery is considered for (i) infants and newborn and (ii) older children and adults. Children undergo this surgery for congenital malformation whereas adults generally require extensive surgery because of malignant obstruction. A small proportion of adults and children require surgery following swallowing corrosive substances. Practical physiotherapy management of the differing problems presented by these groups is discussed in some detail. Psychological factors in management are also stressed.

Keywords: Pharynx; Surgery


Describes in some detail management of acute myocardial infarction in the (i) acute and (ii) convalescent and rehabilitation phase. The physiotherapists contribution is mentioned. More common and important arrhythmias are described. Figures are included relating to the first year of operation of the Sir Charles Gairdner Hospital Coronary Care Unit in which 246 patients were admitted. Figures for the coronary unit at Royal Perth Hospital are also included.

Keywords: Cardiology; Coronary Care Units; Myocardial Infarction


Few physiotherapists are involved in home treatments with the bulk of the work being done by district nurses. This paper describes a 5 day training programme for district nurses developed by the Chartered Society of Physiotherapy at the request of the Queen's Institute of District Nursing in England. The objective of the course was to enable the nurses to assist their patients to regain and maintain as far as possible their mobility and independence. It was not intended to turn district nurses into pseudo-physiotherapists.

Keywords: Home Care Services, domiciliary care; Home Nursing


Author's Summary: Mothers are being discharged from some hospitals earlier than ever before. They are thrown into a most unrelenting 24 hour routine. Thus if we are to become the respected mentors we wish to be, it is imperative that the routine we help establish for these mothers will be practical for them. The basic exercises must be thoroughly taught and explained and good reasons for their performance should be given. The programme is essentially efficient and minimum. The patient must understand that an isolated exercise is useless and that exercise will be of value to her only when it becomes part of an established routine in her way of life.

Keywords: Mothers; Postnatal Care

Author's Summary: Careful early assessment of the child, at birth if possible, is fundamental. This assessment becomes a guide to management both in treatment sessions in the physiotherapy department, and for instruction to the parents for a home approach. The whole child and not one disconnected section is in the hands of each person who deals with him.
Keywords: Child Development Disorders; Child Rearing; Handicapped

Cayzer F (1972): Forty years on, or “Play up! Play up! and play the game!” Australian Journal of Physiotherapy 18: 89-95.

Author's Summary: Concern among orthopaedic specialists and physiotherapists in Hobart at the increasing number of young people requiring treatment for back pain first prompted the writing of this part of our symposium. Further investigation suggested that "back strain" is part of a pattern of strains and sprains in all areas of the musculoskeletal system apparently due to young people today being unable to cope with the stresses encountered in daily activity. Our conviction is that this "lack of fitness" is connected with (i) the neglect in the school curriculum of fundamental physical education in favour of competitive sport: (ii) the fact that the time made available for physical activity is inadequate to combat the effects of prolonged sitting, in school, in cars and at home particularly during periods of rapid growth. Approaches have been made to those involved in organising and presenting the physical education programme, to the high school students themselves, to the Department of Labour and Industry and the Department of Health Services. Possible means of further evaluating the gravity of the situation are suggested. Proposals are made as to the part physiotherapists might play in solving the problem of early physical breakdown.
Keywords: Backache; Musculoskeletal System; Orthopedics


Patients may not be able to attend physiotherapy for numerous reasons. It is up to the physiotherapist to evaluate the true reason and the motivation of the patient, to assess the likely success of a "Home Programme". This paper includes very practical suggestions as to how many everyday objects in the home can be used as "equipment". Effective teaching of a few simple, well chosen exercises is emphasised.
Keywords: Exercise; Home Care Services


Author's Summary: A brief outline of the role of the physiotherapist in the treatment of leprosy is given pointing out that the principles of treatment applicable in other systemic diseases and in lower motor neurone lesions from other causes are also applicable in leprosy.
Keywords: Leprosy; Physical Therapy

Author's Summary: The importance of restoration of function in helping to prevent recurrence of painful states has been suggested, particularly in relation to re-establishment of normal afferent input. A review of some of the present knowledge on afferent receptors and fibres from the skin and joints has been given, with some of the theories on local pain mechanisms. An attempt has been made to correlate some clinical findings with knowledge of the possible effects of physical agents on the control and abolition of pain. Melzack and Wall's theory on the need for a balance between small and large fibre inputs has been recalled and the part that the physiotherapist can play is stressed.

Keywords: Afferent Pathways; Pain


Author's Summary: The development of normal hand function and its importance in attaining independence has been discussed. Abnormalities of hand function and the various causes have been mentioned. The various splints, the materials used and their construction have also been described, and illustrated in the case histories. Case histories and photographs have illustrated the use of the splints, their effectiveness and the gratifying results that can be gained.

Keywords: Hand; Splints


Modified Author's Summary: The treatment of ballet dancers requires a realisation of the effect of the position of one joint upon its neighbours and the knowledge that most strains arise from bad habits, faulty posture and the bad transmission of forces in weight bearing. Unless the injury is diagnosed and treated against this background, failure will occur. During a disability period the dancer must continue those exercises which do not interfere with correct therapy for their injuries. At the very least, all normal joints should be moved through the full passive range daily. It is only by maintenance of all undamaged attributes that a dancer can be truly well and fit when injuries are cured. Maintenance of full range of joint movement and the need for muscle power to be operative throughout the total range of movement of the joints acted upon by these muscles cannot be too frequently emphasised.

Keywords: Joints; Musculoskeletal System


Modified Author's Summary: Cervical syndrome can be the source of a variety of bizarre and widespread symptoms. It is important to differentiate between cervical spondylosis and cervical osteoarthritis in order to rationalise treatment. The onset of cord compression can be insidious and asymptomatic. X-ray changes bear very little relationship to the severity of the symptoms. Support in a collar is the greatest weapon for treating this syndrome. Manipulation which is specifically applied at the appropriate level on one or other side is the next most useful modality. A technique which aims at putting the joints through their full range of movement in all directions is generally not so effective.

Keywords: Cervical Vertebrae; Osteoarthritis

Author's Summary: Zinc ionization for chronic rhinitis is not a new method but the results obtained by those who have tried it indicate that it still has a definite place in the treatment of this condition. It was found that patient who had allergic-type rhinitis with paroxysmal sneezing, and who were not complicated by other respiratory factors such as post-nasal drip and asthma, obtained the best and most lasting effects. An alternative method of packing the nostril with zinc gel instead of impregnated gauze is described.

Keywords: *Allergy and Immunology; Rhinitis*
Volume 19. 1973


The paper reviews the origins and applications of acupuncture in a Western medical context. The author argues that physiotherapists must decide the role of acupuncture in the field of physical medicine.
Keywords: Acupuncture; Physical Therapy


The author argues in favour of an objective-based educational system for physiotherapy. To this end, he feels that there is a need to redefine the outcomes desired and the competencies to be attained by the graduate physiotherapist.
Keywords: Clinical Competence; Education


A brief review is offered of current therapy in haemophilia with respect to overall management by the physician.
Keywords: Hemophilia; Medicine; Pathology


The paper consists of case presentations demonstrating the use of the patella tendon bearing brace. The design is described and the benefits summarised.
Keywords: Braces; Gait; Leg; Orthotic Devices


A review is presented of the pathology associated with midbrain syndrome in head injury, including its clinical presentation. The author describes and discusses techniques to manage patients during the comatose stages.
Keywords: Head Injury; Intensive Care; Neurology; Neurosurgery


The changes associated with ageing into the fourth and fifth decades are summarised. The argument is proposed for the acceptance of health as normal in this age group, and thus the expectation of a return to full function after treatment, rather than being content with limited function.
Keywords: Aging; Pathology; Physiology

A case is presented in which the use of acupuncture as an anaesthetic was employed.
Keywords: Acupuncture; Analgesia; Dentistry; Pain


The role of the obstetric physiotherapist is described and discussed. Particular attention is paid to the management of high risk patients.
Keywords: Medicine; Obstetrics; Physical Therapy


The paper argues that some components of pain during labour are psychological, rather than physiological. There is a need for the physiotherapist to be aware and to use clinical skills to deal with this.
Keywords: Clinical Psychology; Labor; Pain; Physical Therapy.


A survey of patient acceptance of natural childbirth methods was conducted between 1968 and 1970. General opinion was that these techniques were highly beneficial to patients, but patients with increased pain perceived a decreased effect from the exercise programme.
Keywords: Natural Childbirth; Pain; Relaxation Techniques;


A treatment regimen following the principles of conductive education is described. Specific activities are listed and prescribed for use. There is some discussion and analysis of results obtained.
Keywords: Cerebral Palsy; Child Development Disorders; Pediatrics


A number of techniques used in the treatment of painful and/or limited peripheral joints are described. The author illustrates techniques which he has developed and applied to patients. Suggestions are made for the selection of appropriate techniques in specific circumstances.
Keywords: Joints; Manipulation; Pain; Physical Therapy

A study was undertaken into the effect of the head-down posture on diaphragmatic movement in 20 healthy young females. A critical inclination was detected at 45 degrees at which inhibition of diaphragmatic descent was detected.

Keywords: Posture; Respiratory Complications; Respiratory Muscles


An overview is presented of issues relevant to the conduct of research within physiotherapy practices. In particular, the evaluation of treatment effects is discussed. Problems and solutions in clinical research are identified and considered.

Keywords: Physical Therapy; Research Design


The paper presents a descriptive biomechanical analysis of spinal problems including a review of relevant literature. It is suggested that more can be achieved in the field of prevention and total management if the scientific bases for treatment are considered.

Keywords: Biomechanics; Low Back Pain; Rehabilitation; Spine


A survey was undertaken to trace the history of antenatal work and to discover what is being taught to expectant parents. The survey suggested that some resistance would be encountered from physiotherapists currently involved in this field to the suggestion that other health workers could become involved in the educational process.

Keywords: Education; Obstetrics; Pregnancy; Training Support


This paper presents a review of the surgical procedure and indications for Keller’s operation and the treatment following surgery. Discussion includes pathological anatomy and mechanics of the deformity and presents a rationale for physiotherapy management.

Keywords: Foot Deformities; Orthopedics; Surgery


A review of the pathology of chronic bronchitis and emphysema is presented. Pulmonary mechanics and physiology are related to the pathological changes. The role of the physiotherapist is discussed.
and the importance of exercise in treatment is stressed.

Keywords: Pathology; Physiology; Respiratory Disease


A series of short discussions of issues in the treatment by physiotherapy of thoracic disorders is presented. Specific aspects of physiotherapy, such as the use of coughing and care of the acutely distressed patients are described. The importance of increasing the patient’s exercise tolerance is reinforced.

Keywords: Physical Therapy; Rehabilitation; Respiratory Disease


An overview is presented of the clinical issues arising in the rehabilitation of patients following cardiac disease. Realistic goals are described and discussed and the roles of the health care team members are identified. The importance of patient involvement in treatment is stressed.

Keywords: Heart Disease; Physical Therapy; Rehabilitation


A survey was conducted into the prevalence of disability in the city of Brisbane. In particular, disability associated with chronic illness was identified. Disability was found to have a prevalence of 15% with statistically higher values for women than men. Prevalence of disability was highest among the elderly. Some suggestions are presented regarding health planning and the provision of community based services.

Keywords: Epidemiology; Heart Diseases; Preventative Medicine
Volume 20. 1974


Early identification of children with neurological impairment indicates those children who are likely to experience difficulties in coping with their environment. This paper presents a comprehensive assessment procedure based upon a hierarchy of development of sensory systems. Case histories are cited to show how the assessment can be used to define problem areas.

Keywords: Child Development; Neurology; Pediatrics; Physical Therapy;


A review is presented of the process of educational planning for children with disabling neurological conditions. A summary of strategies applicable in the case of children with learning needs is discussed.

Keywords: Child Development Disorder; Education; Neurology; Pediatrics


The importance and applicability of physical education for children with learning disabilities is presented. The author argues that more teachers should become familiar with current methods of physical education and its application to the management of these problems.

Keywords: Education; Neurology; Motor Skill; Pediatrics


A summary is presented of current opinion regarding the pathophysiology of neurological diseases commonly encountered by physiotherapists. The author stresses the importance of understanding the underlying pathological mechanisms in determining treatment programmes.

Keywords: Neurology; Neurophysiology; Pathology


The functional limitations of patients with Multiple Sclerosis can be substantially reduced through the application of a structured treatment plan which addresses the whole problem rather than simply one component of it. Facilitation and coordination therapy needs not only a total approach, but also a total involvement and, because of the nature of the disease, it is not guaranteed any measure of long term success. It is, however, a stimulating and rewarding form of treatment.

Keywords: Coordination; Neurology; Multiple Sclerosis

The community geriatric nurse, with basic nursing skills supplemented by training in public health practice, is in an ideal position to carry out health teaching, assist frail aged individuals to keep as well as possible and to remain safe and independent in their homes, leading to a contented life for as long as possible during the later years of life.

Keywords: Aged; Community Health Services; Nursing


A pilot scheme of domiciliary care in South Australia has shown that home care can be effectively linked with a teaching hospital and that this is economical of both staff and money. The service can neither function nor grow without the steady support of the general practitioner and many other involved and dedicated people.

Keywords: Community Health Services; Home Care Services; Rehabilitation


A brief overview of the role of the social worker in the provision of domiciliary care is offered. The importance of interaction with other health care workers is stressed.

Keywords: Community Health Services; Social Sciences; Social Work


Malignant melanoma can be confidently diagnosed in the majority of cases by close inspection of the tumour. The extent of local surgery necessary is controversial and depends upon the clinical and pathological features of the tumour, its anatomical situation and the age of the patient. The physiotherapist has an important role in rehabilitating patients who have had skin grafts and block dissection. The results of surgical treatment are generally good.

Keywords: Dermatology; Oncology; Pathology


The orthopaedic training programme in Indonesia had made it possible for Australian and Indonesian physiotherapists to meet on common ground, with greater involvement likely in the near future. The Committee for Australian-Indonesian Cooperation in Medicine would be an effective guide in coordinating further developments.

Keywords: Clinical Education; Orthopedics; Physical Therapy

The author presents a brief report of experiences gained while working as a physiotherapist in northern India. 
Keywords: **Health Education; Physical Therapy**


The paper reports the experiences of the author in working in a remote rural location and of attempts to introduce a programme of health education to carers for developmentally disabled children. Progress towards improved function was seen and encouraging trends appeared in the performance of children exposed to active treatment.
Keywords: **Neurology; Pediatrics; Physical Therapy**


The author reports experiences working as a physiotherapist in Korea and makes recommendations for cooperation between Australian physiotherapists and the Korean counterparts.
Keywords: **Education; History; Physical Therapy**


The paper reviews the history and rationale for movement notation and the problems associated with it. A system is presented which records performance both in terms of motor action and quality of movement.
Keywords: **Dancing; Documentation; Kinesics; Movement**


A report is presented reviewing the principles of movement notation using the Benesh system. The author has adapted this movement recording technique to clinical applications and believes that the process forms a useful adjunct to the conventional clinical record.
Keywords: **Documentation; Kinesics; Movement**


Assessment pictography provides a fully diagrammatic and freehand recording system with wide applications in physiotherapy. In its present form it allows recording of results of active and passive movement tests, muscle strength grading, functional ability and passive treatment techniques. The concepts are illustrated and examples are given for clinical practice.
Keywords: **Documentation; Movement; Physical Therapy; Records**

In the highly competitive world of the ballet dancer, it is important to treat all injuries with accuracy and speed. Trivial injuries may become major ones and speedy recovery is essential. The author presents a summary of the more common injuries encountered and suggests preventative strategies based on good educational practice.

Keywords: Dancing; Orthopedics; Wounds and Injuries


The author summarises the legal positions with respect to injury in sport and at work. The responsibilities of the parties involved are reviewed and discussed.

Keywords: Athletic Injuries; Occupational Health; Recreation; Sport


The paper deals with some basic features of accidents in recreation and their economic consequences. The author reports the effect of injury in different sports with respect to their likelihood of prolonged absence from work and leisure pursuits.

Keywords: Physical Therapy; Sports


A brief overview of the role of the physiotherapist in the treatment and prevention of occupational injuries is presented.

Keywords: Occupational Health; Physical Therapy


A brief overview of the role of the physiotherapist in the treatment and prevention of sporting injuries is presented.

Keywords: Athletic Injuries; Physical Therapy; Sport


The author reports the responses of 82 cases treated by surgery of the posterior primary rami. A brief report of the responses to physiotherapy is given.

Keywords: Neurology; Neurosurgery; Spine

A review of the possible applications of acupuncture in physiotherapy is presented. The author believes that the technique can be beneficial in pain relief and is particularly suited to physiotherapy as a discipline.

**Keywords**: Acupuncture; Pain; Physical Therapy


The paper presents the results of a series of investigations into the accessibility of instruments in the cockpit of light aircraft. Standard anthropometric measurements were taken of seated reach in 75 male and 35 female subjects. It was noted that many subjects were unable to reach all controls while firmly restrained by lap and sash harnesses.

**Keywords**: Anthropometry; Human Engineering; Occupational Health


The anatomical and physiological background related to airways obstruction in childhood and its relation to methods of physiotherapy techniques is outlined. Conditions most often encountered and their treatments by the use of physiotherapy measures, including postural drainage of the lungs, oxygen therapy and inhalation therapy are also discussed.

**Keywords**: Pathology; Pediatrics; Physical Therapy; Respiratory Disease


The paper reviews the history of physiotherapy in Queensland and the associations between the profession and the university up to the development of the current physiotherapy course in the university.

**Keywords**: Education; Physical Therapy Education


The paper discusses the uses of passive movement treatment techniques to treat pain and stiffness. This treatment is then related to examples of patients’ conditions for which physiotherapy is commonly requested. These include tennis elbow, supraspinatus tendinitis, chondromalacia patellae and osteoarthritis.

**Keywords**: Manipulation; Orthopedics; Pain; Physical Therapy


A brief overview of the gait patterns of patients walking with above-knee and patellar tendon
bearing prostheses is presented. Factors likely to influence the gait pattern and efficiency such as age, muscle power and joint range are discussed. The importance of a secure, safe gait is stressed. Keywords: Amputation; Gait; Prostheses


The author describes the management of the stump following lower limb amputation. The importance of correct hygiene procedures is stressed. Keywords: Amputation; Nursing; Prosthesis


The background and proposed mechanisms of operation of acupuncture are described. Keywords: Acupuncture; Analgesia; Neurology; Pain


While ultrasound and microwave units can be demonstrated to be safe in use of some types of pacemakers, it is likely that a physiotherapist in practice might be unable to ascertain what particular unit the patient has in situ. Therefore all forms of short wave diathermy and microwave should be regarded as completely contraindicated. Treatment undertaken in the vicinity of a short wave diathermy machine must be regarded as dangerous. Keywords: Contraindications; Electrical Stimulation Therapy; Electromagnetic Fields; Physical Therapy


The author offers a review of the management of hand injuries and explores the physical and psychological problems of such conditions. The importance of the patient in decision making with respect to surgery is stressed and the need for a functionally directed approach is discussed. Keywords: Hand; Rehabilitation; Surgery, plastic; Wounds and Injuries


The paper presents a description of the functional and applied anatomy of the hand and foot. Keywords: Anatomy; Foot; Hand


It is suggested that traditional movement terminology in both kinesiology and anatomy has evolved
in an attempt to facilitate orderly description of movement, rather than to describe natural movements. This paper introduces new terms to describe natural movements which, it is argued, are more relevant in clinical practice.

Keywords: Anatomy; Exercise; Kinesics; Physical Therapy


A method is presented for improving and restoring sensorimotor function based on concentrating input of stimulation at key muscle sites. Discussion focuses on the ability of the central nervous system to regenerate, the interdependence of the central nervous system and the external and internal environment and the factors influencing the control of movement.

Keywords: Neurology; Physical Therapy; Rehabilitation


There are many possible causes for the painful hemiplegic shoulder. We suggest that protection and careful handling of the shoulder should reduce the incidence of pain. The ultimate rehabilitation of the hemiplegic patient will be seriously impaired if a painful shoulder develops.

Keywords: Cerebrovascular Disorder; Neurology; Pain; Physical Therapy; Shoulder
Volume 21. 1975


A summary of relevant anatomy and physiology is presented followed by the identification of problems in which orofacial dysfunction are commonly encountered. A treatment programme, based on the principles of proprioceptive neuromuscular facilitation is provided. The importance of cooperation between speech and physical therapy is stressed.

Keywords: Anatomy; Neurology; Physical Therapy; Rehabilitation


A detailed programme for rehabilitation of the post-myocardial infarction patient is presented. The treatment plan is divided into acute, semi-acute, convalescent and maintenance phases and covers the period following stabilisation of the patient’s medical condition through to long-term management of the condition.

Keywords: Heart Disease; Physical Therapy; Rehabilitation


The paper reports a study undertaken to investigate the feasibility of establishing a pilot clinic for the study and treatment of very young children with minimal cerebral dysfunction. The assessment and treatment processes utilise a neurodevelopmental approach.

Keywords: Education; Educational Measurement; Pediatrics


A modification of a traction table is described in detail to enable the production of an adaptable and inexpensive piece of equipment using an old plinth. Some details of operating technique are mentioned and some advantages and disadvantages are listed.

Keywords: Beds; Manipulation; Orthopedic Equipment; Spine


A study was conducted using 18 male volunteers to examine the effect of strength training of one upper limb on the contralateral limb. It was found that no cross-over effect was detectable under strictly controlled conditions. Previously reported gains in strength in the contralateral limb are ascribed to cross-training, cross-learning or both.

Keywords: Exercise; Muscle; Physical Therapy; Training

The University of Queensland physiotherapy department completed a survey within the physiotherapy departments of the Royal Brisbane and Princess Alexandra Hospitals during 1972. The method of sampling and data collection has been discussed in detail. Results of the survey presented include age, gender and occupation of patients treated by physiotherapy; the diagnoses, the type of physiotherapy received and the method of their discharge from treatment.

Keywords: Demography; Diagnosis-Related Groups; Epidemiology


The paper presents a brief summary of the use and interpretation of spirometry in routine management of respiratory diseases. Results of spirometric tests are related to pathological changes in the cardiopulmonary system.

Keywords: Diagnosis; Physical Therapy; Respiratory Disease


A review of the theory and techniques of crisis intervention is provided. The special relevance for the physiotherapist of cases of loss, illness, accident and first pregnancy is discussed. The physiotherapist’s particular contribution with such patients is delineated.

Keywords: Behavioural Medicine; Psychiatry; Wounds and Injuries


The paper reviews the known causes and presentations of spina bifida and discusses the physical and educational management of such patients.

Keywords: Neurology; Pathology; Pediatrics


The paper summarises the purpose and conduct of home visits to assess the needs of patients prior to their resettlement in the community.

Keywords: Community Health Services; Rehabilitation


This paper is addressed to the effects of experience on the developing nervous system of the very young infant. Particular attention is paid to visual and visual-motor development. Spatial concepts such as distance and depth are also discussed.

Keywords: Neurology; Pediatrics; Vision

The author reviews the current status of trade unions in Australia and argues that professional workers can engage in trade union activity in a way which is compatible with professional standards of behaviour. It is also suggested that greater involvement of professional workers in trade unions can be a creative and constructive force for better trade unions and better trade unionism. Keywords: Institutional Management Teams; Labor Unions; Personnel Management; Professional Practice


The paper reviews legislation for the provision of rehabilitation services in Australia. The author proposes a number of key reforms for the upgrading of rehabilitation within the community. Keywords: Delivery of Health Care; Occupational Health; Rehabilitation


The paper discusses the dilemmas facing the therapist in treating patients who self-refer or who are referred from a wide source base. The paper argues that the practice of referral from only medical practitioners or dentists is no longer appropriate, but that greater awareness of ethical issues is needed by the therapist when such a mode of referral is changed. Keywords: Ethics; Patient Transfer; Physical Therapy


A review is presented of the psychiatric consequences of head injury in terms of intellectual impairment, personality change, psychotic illness, neurotic disability and post-traumatic syndrome. The author stresses the need for an overview of the patient and his environment with its many effects, and argues that such an approach may minimise morbidity following head injury. Keywords: Brain Injury; Neurology; Psychiatry


This paper considers the anatomy of the diaphragm together with its general function in respiration, coughing and pelvic evacuation. The author discusses the effects of dysfunction on ventilation and vital capacity and relates these to specific conditions. Keywords: Anatomy; Pathology; Physiology; Respiration

The paper, which is the text of an address to physiotherapists, considers the history of physiotherapy in Australia, the factors determining the development of the profession and current challenges to the profession.

Keywords: History; Physical Therapy; Professional Competence


The paper reviews the historical development of paediatrics with respect to congenital abnormality. The author discusses the importance of normal neural development, in particular the neural crest, to which is accorded the responsibility for both autonomic and sensory nerves. The effect of abnormality in this structure may influence the development of deformities in the viscera and limbs.

Keywords: Embryology; Pathology; Pediatrics; Physiology


The author presents the argument that developmental physiotherapists, through their involvement in the early assessment and treatment of young children with minimal dysfunction, should have a vital role to play in the prevention of many educational problems in this population.

Keywords: Education; Pediatrics; Physical Therapy


This paper gives a detailed analysis of approaches to management in paediatrics. The author discusses aspects of the prevention of abnormalities of growth and development and also of the enrichment of development. The paper outlines areas in which physiotherapists can work to prevent and treat developmental delay and defects in growth.

Keywords: Child Development; Pediatrics; Physical Therapy


The author stresses the importance of early intervention in stroke management. The argument is proposed that there is a need to survey the outcome of hospitalisation and treatment intervention in stroke patients, to develop specialist stroke rehabilitation units with specialist therapists and to stimulate community concern for the post-stroke patient.

Keywords: Cerebrovascular Disorders; Neurology; Physical Therapy

The paper outlines the incidence and mechanisms of common injuries to the neck and back resulting from sport. A summary is presented of the primary treatment objectives and an outline of some particular treatment modalities and procedures recorded.

Keywords: Athletic Injury; Physical Therapy; Soft Tissue Injuries; Spine
Volume 22. 1976


The paper stresses the importance of research within the clinical environment. The components of the research process are described and a review of the common approaches is given.  
Keywords: Physical Therapy; Research; Research Design


The author presents a brief relaxation routine which can be learned and carried out during everyday activities.  
Keywords: Exercise; Relaxation Techniques; Self-Care


The problems encountered in the infant who has feeding difficulties, with particular reference to the child with cerebral palsy, are described and discussed. The development of orofacial function in the normal infant is traced. An approach to the management of these problems is offered.  
Keywords: Feeding Behaviour; Pediatrics; Physical Therapy


The paper summarises the roles and responsibilities of the physiotherapist in the paediatric intensive care unit. The author discusses treatment procedures and complications. The need for expert input from the therapist is stressed.  
Keywords: Intensive Care; Pediatrics; Physical Therapy; Respiration Disorders


The author advocates an intensive and extensive preventative programme for workers to reduce the incidence of work-related injury. A national programme, using consultant physiotherapists is proposed.  
Keywords: Occupational Health; Physical Therapy


The paper discusses the concept of a team approach to the provision of health care within the community.  
Keywords: Community Health Services; Rehabilitation

The paper reports a survey of patient groups and institutions involved in health care provision within a Sydney suburb. The author stresses the aims of the service and the need for a cooperative effort between all those involved in the process.

Keywords: Community Health Services; Rehabilitation


The author discusses the health and social problems inherent in the immigration policies as they affect people from culturally different backgrounds.

Keywords: Community Health Services; Ethnic Groups; Sociology


A study is presented in which 34 asthmatic patients were subjected to exercise, bronchodilator aerosol and a combination of both and their respiratory function tested. The results obtained suggest that, while exercise alone has a transient bronchodilatory effect, the response is not sustained for periods sufficient to produce therapeutic value. A combination of bronchodilator and exercise would appear to be the most successful therapy.

Keywords: Asthma; Exercise; Physical Therapy; Respiration


The study describes an investigation in which the effect of physiotherapy in the reduction of repeated strain injury was assessed. Results suggest that a significant improvement in symptoms could be ascribed to physiotherapy intervention.

Keywords: Human Engineering; Occupational Health; Physical Therapy


A simple method of examining response to spinning is described and the assessment of a sample of 34 healthy five year old children reported. It is suggested that the method could be useful for paediatric physiotherapists requiring to screen vestibular function of young children.

Keywords: Diagnosis; Neurology; Pediatrics

The paper reports the results of a survey into the durability of polypropylene ankle-foot orthoses. It was found that such a design performed satisfactorily when applied to young active patients over a 12 to 18 month period.

Keywords: Ambulation; Orthotic Devices


The interaction of patient and therapist in the setting of the community Health Care Centre is reviewed. Greater tolerance and acceptance of various behaviours evinced from all involved is urged.

Keywords: Behaviour; Community Health Services; Physical Therapy


The paper reviews the development, physics and therapeutic applications of interferential therapy. Modalities are described and the rationale for use in different clinical presentations is explained.

Keywords: Electromagnetic Fields; Physical Therapy


A trial was conducted to compare two methods of delivery of a bronchodilator substance to patients with chronic obstructive airways disease. No significant differences between the methods were found with respect to the FEV/FVC responses. This suggests that either method could be applied in the clinical setting.

Keywords: Drug Evaluation; Physical Therapy; Respiratory Disease


The author reviews and described the pathology and presentation of paediatric respiratory diseases. The place of physiotherapy in the overall management of these disorders is discussed.

Keywords: Pediatrics; Physical Therapy; Respiratory Disease


This paper suggests that physiotherapists should be changing the form of their thinking on patient referral, from the present medical referral model to a first contact model, encouraging responsible independence. A number of first contact models are discussed and a composite model is suggested. This model allows the physiotherapist to decide which referral method will be acceptable to them.

Keywords: Patient Transfer; Professional Practice; Professional-Patient Relations

A study was conducted in which two groups of healthy volunteers were subjected to noxious stimuli and their tolerances recorded. One group were trained in relaxation techniques while the other groups acted as a control. There were significant differences between the groups with respect to pain threshold and anxiety levels, with the experimental subjects demonstrating a decreased response to the painful stimuli than the controls. It is suggested that relaxation techniques might form a useful adjunct to other pain control processes.

Keywords: Analgesia; Pain; Relaxation


The paper reviews the pathology and treatment of various back pain syndromes. The author describes techniques used to mobilise the spine and cites illustrative cases to demonstrate application of these techniques.

Keywords: Manipulation; Pain; Physical Therapy; Spine


The author describes the pathology of rheumatoid arthritis and gives a summary of current approaches to the treatment of the disease. The benefits and shortcomings of these various management approaches are described and discussed.

Keywords: Joint; Pathology; Physical Therapy; Rheumatology


A trial was conducted into the efficacy of pressure splints in the reduction of peripheral oedema. Forty one patients, with a wide variety of clinical presentations, were recruited to the study. Circumferential measurement was carried out at a variety of sites on the limb before and after treatment. Treatment was applied using a conventional protocol. The pressure unit was found to have beneficial results in all but two subjects. The implications of this finding, and suggestions for an optimal protocol, are discussed.

Keywords: Edema; Physical Therapy


The author reports a study of handgrip strength in 210 normal and 100 cerebral palsied children between five and fifteen years of age. Measurements were taken for power grip, lateral grip and pinch grip. The distribution of mean handgrip strength was similar in the two groups. No gender differences were noted within groups. At ages over seven years the two groups were significantly different for hand grip values, but not under that age.

Keywords: Hand; Muscle; Neurology; Pediatrics

The paper discusses neurological control mechanisms effective in human movement. The author argues for further investigation of the sensorimotor integration of skilled motor tasks. Keywords: Neurology; Motor Skill; Movement


The forces which arise in the knee joint during weight resistance exercise of the quadriceps were investigated. The variation of patella ligament/tibial axis angle with varying degrees of flexion was measured from radiographs. These measurement were applied to a calculation of the patella tendon tension, the tibiofemoral joint reaction force and the patellofemoral force for the knee in different degrees of flexion. The variation in magnitude of each of these forces is presented and implications for therapy discussed. Keywords: Biomechanics; Exercise; Knee; Structural Models


The author discusses the development and use of acupuncture. Some general observations regarding the efficacy of the procedure are recorded and illustrated by means of case studies. Keywords: Acupuncture; Analgesia; Pain; Physical Therapy


The author reports a survey of New South Wales physiotherapists appertaining to their social, educational and professional characteristics and attitudes. A systematic analysis of these characteristics and attitudes was undertaken in order to produce a profile of the corporate body. The implications of the findings are discussed. Keywords: Demography; Physical Therapy; Professional Practice


The need to evaluate the techniques used by physiotherapists is discussed. The results of a small survey of stroke patients who passes through the Royal Adelaide Hospital in 1975 are shown. From these results, further work that could be undertaken is suggested. Keywords: Cerebrovascular Disorders; Neurology; Physical Therapy

Ten patients with Reflex Sympathetic Dystrophy were studied to assess the relative roles of physiotherapy, stellate ganglion blocks and brachial plexus blocks in the management thereof. A method of objective assessment is suggested and treatment regimens suggested. Some results of this pilot study are presented. The possible underlying mechanism of the condition and rationale for choice of treatment are discussed.

Keywords: Neurology; Neurosurgery; Physical Therapy


The use of electrical stimulation in the treatment of pain and hypersensitivity in 19 patients is described. The current used was a unidirectional square wave of 0.1 ms duration at 100Hz applied percutaneously. The treatment was successful with ten subjects, five others showed improvement, two had no change and in two subjects symptoms increased.

Keywords: Analgesia; Electric Stimulation Therapy; Pain; Physical Therapy


The author discusses risk situations within the occupational setting. The argument is presented for the involvement of physiotherapists in the prevention of accidents.

Keywords: Accidents; Occupational Health; Physical Therapy; Prevention and Control


Physiotherapists can help most head injury patients but the selection of techniques and the dosage level used is not clear. This paper discusses pertinent issues to the choice of intervention and the management of such patients.

Keywords: Neurology; Outcome Assessment; Wounds and Injuries


The paper describes the principles of relaxation techniques. These principles are illustrated with examples of the use of such techniques.

Keywords: Relaxation; Stress; Training


The paper presents an overview of cancer, including predisposing and risk factors. The treatment approaches are summarised.

Keywords: Oncology; Pathology; Radiotherapy; Surgery

The author describes the provision of physiotherapy services to athletes at the Olympic Games in Montreal, Canada. The incidences and treatment patterns of injuries are reported.

Keywords: **Athletic Injuries; Physical Therapy**


The author gives a personal overview of contemporary trends in health care delivery. The role of the physiotherapist in preventative health care is explored.

Keywords: **Community Health Services; Preventative Medicine**


The author reviews the processes associated with aging. Approaches taken to minimise functional loss with advancing age are discussed.

Keywords: **Aging; Geriatrics; Health; Physiology**


The paper describes the presenting features of chondromalacia patellae and its predisposing factors. A treatment programme is described and results from a survey of outcomes reported.

Keywords: **Knee; Pain; Pathology; Physical Therapy**


The authors review the links between body segments in problems affecting adolescents. They stress the need for dynamic assessment (eg. gait) and early intervention in the treatment of such a population.

Keywords: **Ankle; Biomechanics; Foot; Gait; Pediatrics; Posture; Spine**


The author discusses issues related to posture-related injury and suggests that such problems can be substantially reduced but only by means of substantial education programmes aimed at the at-risk group.

Keywords: **Human Engineering; Occupational Health; Posture; Wounds and Injuries**

The paper describes the general principles of Piaget’s theory and discusses specific concepts as related to learning. The theory is then applied to the treatment of children with developmental delay.

Keywords: Learning Disorders; Pediatrics; Psychology


The author describes the application of behavioural modification in the education of children with Down Syndrome. Examples of the application of these principles are given.

Keywords: Behaviour; Down Syndrome; Education; Pediatrics


The author describes an intervention programme for young children (<12 months) with developmental delay. The programme also aims to provide a documented assessment procedure for such children.

Keywords: Child Development Disorders; Movement; Pediatrics


The paper reviews the mechanisms and sequelae of injury in sport causing haematoma. The treatment programme described aims to minimise the effects of the haematoma and the risk of myositis ossificans.

Keywords: Athletic Injury; Physical Therapy; Sport; Soft Tissue Injury


The authors report a technique of information storage and retrieval for patients with low back pain. Also presented is an outcome study the results of which indicate a deterioration of the back problem with longer prior duration of symptoms before treatment. The conclusion drawn is that early intervention is necessary in the management of such patients.

Keywords: Low Back Pain; Meta-analysis


The author reviews contemporary changes and challenges in physiotherapy. The argument is proposed for a more balanced approach by physiotherapists and for greater input into preventative
rather than restorative health care.
Keywords: Community Health Services; Health; Delivery of Health Care

The author reviews the political and other influences on Australian secondary education. The argument is proposed that criticism of the contemporary school system is based on ignorance and hypocrisy.

Keywords: Education; History; Sociology


The paper presents a description of a simple, inexpensive measurement device based on a pendulum goniometer design. The authors describe the technique for use of the device for the cervical movements. A report of the validation of the device, presenting results of a preliminary investigation, are given.

Keywords: Cervical Vertebrae; Diagnosis; Kinesics; Movement; Orthopedic Equipment


The paper discusses the problems of amputees with knee flexion contractures. Some prosthetic solutions are described, including their advantages and disadvantages. The author offers some recommendations for the management of this problem.

Keywords: Amputation; Gait; Knee; Prosthesis


A set of twelve heavy resistance exercises is described in which a kitchen chair is the only necessary apparatus. The value of the exercises in rehabilitation and sports training is indicated. There is discussion of the mechanisms involved.

Keywords: Exercise; Muscle; Physical Therapy; Rehabilitation


Recently physiotherapists have shown an increased interest in the application of learning theory to clinical practice. An operant conditioning programme has been used to establish walking behaviour. A case study is used to illustrate the process of application of this theory. Early results suggest that useful outcomes support continued use of the programme.

Keywords: Child Development; Gait; Neurology; Pediatrics; Physical Therapy; Rehabilitation

The author offers a brief review of the use of biofeedback in the treatment of brain injury. It is suggested that there are benefits from the use of such an adjunct to conventional treatment programmes.

Keywords: Head Injury; Neurology; Physical Therapy; Rehabilitation


The paper discusses the main components of clinical competence and describes methods to assess such competence. Stress is placed on the need for sympathetic and supportive approaches from clinical teachers and the need for such people to act as positive role models for students.

Keywords: Education; Physical Therapy; Professional Competence


A concept of specialisation is presented. The needs of the professional and the community are considered and a brief summary of the results of a survey of Queensland physiotherapists is presented.

Keywords: Education; Physical Therapy; Professional Practice


The author reviews the functional anatomy of the shoulder complex. Movement patterns occurring at these joints are described.

Keywords: Anatomy; Movement; Shoulder


The author describes techniques for the treatment of flaccid paralysis due to upper motor neurone lesion.

Keywords: Cerebrovascular Disorder; Neurology; Physical Therapy; Rehabilitation


The authors present a descriptive report of the incidence and nature of recent knee injuries treated in the Brisbane area. Data are presented on age groups most affected, predisposing factors and patterns of injury.

Keywords: Knee; Orthopedics; Physical Therapy; Soft Tissue Injury

The author describes the presentation and likely mechanisms of the condition. The aims of treatment and clinical findings are discussed and treatment techniques are suggested.

Keywords: Cervical Vertebrae; Manipulation; Orthopedics; Physical Therapy


The paper is a report of an evaluative study of the effectiveness of physiotherapy in the treatment of children with minimal cerebral dysfunction. 78 children were assessed and treated for six months. The results presented overwhelming evidence in support of the treatment programme. Conclusions are presented regarding the potential benefits of such an intervention.

Keywords: Neurology; Pediatrics; Physical Therapy; Rehabilitation


A review of the history of cervical whiplash is presented. Some attempt is made to relate experimental and clinical investigations to derive an understanding of the problem. Observations based on the author’s clinical and personal experiences are presented.

Keywords: Cervical Vertebrae; Orthopedics; Soft Tissue Injuries; Whiplash Injuries


The authors discuss the problems of children with developmental delay and the importance of early identification of such problems. The study revealed that problems with sensory integration in such children effectively reduce overall performance of the child and exacerbate secondary problems. The authors stress the need for preventative measures with such children to reduce the effects of the problems and improve overall progress.

Keywords: Neurology; Pediatrics; Physical Therapy


The paper reviews the theoretical aspects and clinical use of relaxation and the problems inherent in its application in a hospital setting. The authors discuss the relative usefulness of relaxation in various procedures and provide some guidelines for practise by physiotherapists.

Keywords: Physical Therapy; Psychology; Relaxation; Stress


A survey to study abdominal and pelvic floor muscle strength in 40 females, six weeks post-partum
and abdominal strength in 40 nulliparous females of similar age and occupation is outlined and the results presented. Suggestions are made to improve the provision of care in the post-natal period. Keywords: Abdomen; Exercise; Muscle; Obstetrics; Rehabilitation


A comparative study of normally active and hyperactive children with observed vestibular and spatial problems demonstrated that the latter group have a reduced duration of post-rotatory nystagmus following spinning. This suggests that such children tend to exhibit depressed vestibular reactions. Keywords: Neurology; Pediatrics


This article discusses the role of relaxation training in psychiatric hospitals. Details of indications and contraindications are given. The interdisciplinary approach is stressed and ways in which the physiotherapist may contribute to this area of patient care are suggested. Keywords: Physical Therapy; Psychiatry; Relaxation; Stress


Of ninety institutions in three countries surveyed by a mail questionnaire, responses were received from 68 baccalaureate programmes in physical therapy. Selection criteria for all programmes were shown to be multiple, with the student’s previous academic achievement used in every instance. A proportion of programmes indicated the use of subjective measures of ability, interest and personality, but rarely were these used in any combination. The majority of programmes use the interview, references, student’s objectives and experience in physical therapy in combination. Keywords: Education; Physical Therapy; Students


The author discusses the advantages of using a temporary prosthesis following below knee amputation. The technique for producing and fitting such a prosthesis is described. Savings, in terms of days spent in hospital by the patients, show clear benefits accruing from the use of such devices. Keywords: Amputation; Prosthesis; Prosthetic Design


The paper reports a study investigating the effect of intermittent positive pressure breathing (IPPB)
on the production of cough in ten male patients with chronic obstructive airways disease. Comparisons were made with simple nebulisation and with the inclusion or otherwise of physiotherapy treatment. Results indicated that there were more spontaneous coughs with IPPB than nebulisation and that the quantity of sputum produced was higher with IPPB than nebulisation alone. The addition of physiotherapy significantly increased the effectiveness of both techniques.

Keywords: Physical Therapy; Respiratory Disorders


The paper reviews the literature related to the anatomy of the vertebral column and the effects of ageing on its structure. The authors discuss the factors which might influence physiotherapy intervention in back pain and injury.

Keywords: Aging; Anatomy; Pathology; Physical Therapy; Spine


The structure and use of the Kaltenborn three dimensional couch is described. The couch is of particular value to therapists practising mobilisation and manipulation of the spine, but would be a valuable adjunct to any physiotherapist. Use of the couch has reduced treatment time and increased efficiency.

Keywords: Manipulation; Orthopedic Equipment; Spine

Six male and six female physiotherapists were videotaped while treating male and female patients. The average duration of the therapist's gaze, smiling, touch and speech, as well as the ratio of therapist's to patient's speech, were computed. It was found that these non-verbal behaviours differed as a function of sex of physiotherapist, sex of physiotherapist, sex of patient and point in the interaction. It was suggested that physiotherapists should increase their awareness of these behaviours in their interactions with patients.

Keywords: Behavior; Nonverbal Communication; Professional-Patient Relations


Seventy-nine first year physiotherapy students from Lincoln Institute were matched for age and sex with a sample of fifty-two trainee teachers from Melbourne State College. The two samples were compared on personality dimensions as measured by Cattell's Sixteen Personality Factor Inventory. Statistical analysis revealed significant differences on five dimensions; Factors I, M, N, O and Q. Compared to the teaching students, the physiotherapy undergraduates were less tender-minded, more practical and conventional, more forthright, more self-assured and more conservative. These results were reasonably consistent with other findings and had implications for professional behaviour and future training of physiotherapists.

Keywords: Behavior; Personality; Personality Inventory


Increasing numbers of males are entering the health sciences, particularly physiotherapy. Fifteen males commencing such courses were compared with 252 female students and 30 male university students. Their backgrounds, career aspirations and attitudes were investigated in an attempt to explain their career choices and consider possible future effects on the health professions. Male health science students were older, came from large families of lower socioeconomic status and were more likely to aspire to leadership positions than female students. None of the characteristics of females who enter male-dominated occupations were found to distinguish males making atypical career choices. It is suggested that the findings have implications for the future of physiotherapy, particularly in regard to leadership positions.

Keywords: Career Choice; Physical Therapy; Sex Ratio


One hundred subjects (50 males and 50 females) were randomly selected from five different
socioeconomic groups within a rural Victorian town. The subjects were asked to indicate from which of four therapy groups they would seek treatment for three specified medical conditions. The subjects indicated a significant preference to seek treatment from a physiotherapist rather than a chiropractor, an osteopath, or a faith healer for all three conditions.

The survey also asked questions about the activities of physiotherapists. In listing these activities many respondents appear to confuse the role of the physiotherapist with those of other health professionals such as nurses, occupational therapists, speech therapists, radiographers and psychologists. Of the sample, 47% responded that they had sought treatment from a physiotherapist. It was found that these subjects had a significantly better knowledge of physiotherapy activities than those subjects who indicated no professional contact.

Keywords: Health Occupations; Physical Therapy; Rural Health


A severely retarded, hemiplegic child who was unable to walk unaided was given a combination of operant conditioning and physiotherapy to teach her the necessary skills for walking. Her progress was assessed daily using operant conditioning equipment and video tape records. The results suggest that behaviour modification offers both viable teaching techniques and methods of objective data collection and evaluation which can contribute to programs of physiotherapy, occupational therapy, and speech therapy.

Keywords: Behavior Therapy; Physical Therapy; Walking


The relative usefulness of various methods of assessment of pain is discussed. It is suggested that keeping an ongoing record of patients' pain is of value both to the patient and to the therapist.

Keywords: Medical Records; Records; Pain


Examination of the cervical spine is discussed briefly in relation to history, neurological examination, vertebrobasilar insufficiency and x-rays. The general principles of examining cervical movements are presented.

Details of the examination are discussed in more detail under the following headings: the upper cervical spine and its examination for cervical headache; the middle cervical spine with its examination being related to spondylosis/arthrosis; the middle and lower cervical spine and its examination related to wry neck, nerve root irritation or compression, and whiplash injury.

Keywords: Cervical Vertebrae; Neck; Vertebral Insufficiency

Memory impairment is a common problem in patients with physical disability of neurological origin. The important features of two types of memory and learning impairment, amnesic syndrome and frontal lobe dysfunction, are briefly summarised. Emphasis is placed on the variability of signs and the possibility of new learning within these two classes of memory disorder. The learning requirements of different physiotherapy techniques are discussed in terms of the difficulties they present for the learning-impaired patient. Some suggestions are made to assist in the identification of those patients with abnormalities of memory and learning. Several ways in which the rehabilitation program can be modified for patients with memory impairment are discussed. The implications for overall management of these "multi-disabled" patients is considered. A final suggestion is made concerning the value of neuropsychological referral within an interdisciplinary approach to the rehabilitation and management of neurological disability.

Keywords: Amnesia; Memory; Memory Disorders


This paper is based on a paper presented at the Combined National Clinical Seminar of the Australian Association of Physical and Rehabilitation Medicine and the Australian Association of Manipulative Medicine, October 1977.

Keywords: History of Medicine; Physical Medicine


The present study was designed to assess community attitudes toward physiotherapy and five other health professions (osteopathy, acupuncture, chiropractic, naturopathy, and medicine). The study surveyed 100 people chosen from the Melbourne public on the basis of a stratified sampling procedure. In general, earlier findings were confirmed in that the community was found to be less than fully aware of the various functions of currently available health services. In addition, data were gathered on more specified issues including respondents' knowledge of their own and available insurance cover for physiotherapy; the effect of insurance cover on usage of physiotherapy; degree of awareness that a doctor's referral is no longer necessary before seeking physiotherapy and other health professions; previous contact with, and degree of satisfaction with physiotherapy and other health professions; and respondents' likely preference among various professions for treatment of each of a wide variety of physical complaints. Overall, the results indicated that the health professions have a major task confronting them if they are to ensure that community attitudes are formulated on the basis of clear and accurate information concerning the total array of available health care.

Keywords: Health Occupations; Health Services


This paper describes the findings of a study tour investigating the provision of physiotherapy services for children with developmental disabilities. It was found that early intervention programs were paramount, particularly in the USA. Major trends, such as the use of transdisciplinary approaches, as well as the specific techniques evolving from them, including task analysis and the use of written behavioural objectives, should be noted and utilised by physiotherapists. Efforts to
improve the lifestyle of the children and of their families were studied, including successful family support services in Norway. Finally, several recommendations relating to early intervention and to pre-school and school services have been suggested.
Keywords: Behavior Therapy; Child Development Disorders


Attitudes and preferences were surveyed in therapists undertaking an introductory education unit in psychology. The findings of the survey indicated clear support for continuing education in the health sciences. The survey also supplied an objective evaluation of how satisfactorily the unit was taught, and how effectively the unit achieved its aims, and provided information valuable for the planning of future continuing education programs.
Keywords: Continuing Health Education; Psychology Education


The pain clinic is any group of medical and/or health professionals who are treating pain symptomatically. These clinics may be "open", where any doctor may refer patients, or "closed", where only specialists may refer patients. The patients are referred because of intractable pain, defined as pain of at least one month's duration, which has not been relieved by conventional techniques. Collaboration between the various specialists involved with patients and between the other specialist clinics is of paramount importance.
Keywords: Pain; Pain, intractable


Conservative management, including an early introduction of pendular exercise to prevent shoulder stiffness, has always been advocated in the treatment of the fractured neck of humerus. However, the problem of glenohumeral joint stiffness can still be present many weeks after the fracture. It was proposed that the inclusion of passive mobilisation in the treatment program could lessen this problem. A method of passive mobilisation which could be begun within the first few days post fracture, was used in a pilot study of 14 patients with fractures of the neck of the humerus. Initial results indicated that with the inclusion of passive mobilisation in an active treatment program, good functional results could be obtained, while the period of rehabilitation and the number of treatments could also be substantially reduced.
Keywords: Humerus; Humerus Fractures; Shoulder


While the trend in Australia is towards earlier compulsory retirement, the United States Government has recently passed legislation which guarantees the rights of the elderly who wish to continue in employment to do so. This paper briefly discusses the concept of early retirement in the light of demographic trends which point to an increase in the proportion of elderly persons in the Australian population in the next few decades. Some of the needs of the elderly, as they themselves
perceive them, are highlighted with special reference to a report commissioned by the Western Australian Council on the Ageing, and to a questionnaire completed by participants in the Western Australian Institute of Technology Activity Program for the Over-60s.

**Keywords**: Aged; Demography; Retirement


Child health physiotherapy services in the ACT have involvement with children in special education placements. The children range in age from birth to 12 years and exhibit neurological and developmental handicaps from minimal to profound. These services are provided to a number of different areas: an early intervention centre; three special schools for intellectually handicapped children; junior assessment classes and learning centres in selected government schools; children with sensory-motor dysfunction from pre-schools and mainstream classes in primary schools. Children cannot be considered in isolation from the community in which they live. Physiotherapy is part of a total interaction to benefit the whole child by the family unit, doctors, other health professionals, teachers and counsellors.

**Keywords**: Child Development Disorders; Child Health Services; Psychomotor Disorders


It is common practice for those concerned with the treatment of patients with the many patterns of pain arising from the vertebral column to assess ranges of intervertebral joint movement and to associate with this assessment that of the behaviour of pain during the test movements. This clinical paper deals with the examination of movement of the pain sensitive structures in the vertebral canal (the dura mater and nerve root sleeves) and the clinical implications of restriction in range together with reproduction of the patient's pain. The possible clinical findings are considered in relation to low back pain, tethering of pain sensitive canal structures in pre and post laminectomy patients, the 'juvenile disc' patients and patients with headaches.

**Keywords**: Backache; Pain; Spine


The aim of this paper is to describe a method of examining the lumbar spine, incorporating the principle of combining movements and relating this to selection of technique. Almost all of the passive movement procedures used in the treatment of the lumbar spine are, in fact, procedures which involve combining or coupling different movements. The importance of relating these movements to range and distribution of pain is considered in detail and the application of techniques, rotation in particular, is described using positions which involve the combining of different movements.

**Keywords**: Lumbar Vertebrae; Lumbosacral Region; Spine

The effectiveness of biofeedback therapy, using the electromyograph, was compared with conventional physiotherapy treatments in 11 hemiparetic patients with severe disability of the upper limb. These were divided randomly into two groups, a group of six patients receiving biofeedback treatments and five receiving physiotherapy treatments with conventional techniques. The results showed greater improvements in the biofeedback group in most fields of testing, and the patients in this group had a greater degree of control over the patterns of movement in the upper limb and the relaxation of spastic muscle groups. It was concluded that a wide range of hemiparetic should benefit in some degree by treatment of this form.

Keywords: Biofeedback (Psychology); Cerebrovascular Disorders


Sensation and movement are seen to be linked together and sensation is often used as a means of improving movement function. The sensory program is an attempt to focus on the sensory side of sensory/motor deficits, and involves the stimulation of touch, pressure, temperature and joint receptors, and also muscle spindles, in an effort to 're-educate' sensation. The program described was tested on 20 patients. Although there was some improvement in sensation, motor improvement was more apparent and occurred earlier in treatment, some patients showing marked improvement in motor function after a relatively long (four to six months) period. The program is seen as a useful technique to use in combination with other forms of treatment for patients with decreased sensation. It has lately been used for patients with hypersensitivity with some encouraging results.

Keywords: Movement; Psychomotor Performance; Sensation


The eventual outcome of a stroke patient's rehabilitation may depend as much upon his experiences following the stroke as upon the actual brain damage.

Positive factors influencing rehabilitation include the early stimulation of the body orienting mechanism in upright positions; the prevention of the development of spasticity; the therapist's understanding of the factors involved in learning a motor skill; the ability to analyse an everyday activity and find its missing or abnormal components and understanding of the current hypotheses about the effect of stimulation upon the recovering brain.

Negative factors include a tendency to be obsessed with techniques of treatment rather than with a detailed analysis of the patient's problems; the perpetuation of certain 'myths' such as proximal to distal recovery of function, and practising movement in a neuro-developmental sequence despite the maturity of the adult patient's brain; a failure to understand the different physiological and behavioural mechanisms underlying apparently similar problems which leads to lack of cortical drive being confused with muscle weakness; the expectations of the therapist who expects a stroke patient will become spastic, will not recover functional use of his upper limb, and will need a quadripod stick in order not to fall over.

Keywords: Cerebrovascular Disorders; Rehabilitation


This paper consists of an introductory review of a limited portion of the literature pertaining to interpersonal relationships. As it placed particular emphasis on therapist-patient relationships, and
their development in physiotherapy clinical affiliations, particular attention has been paid to aspects such as interpersonal communication and perception, observational relationship skills, although providing some positive results, are still far from efficient, and in fact the development of such programs is still in its infancy. However interest in this area is growing and future contributions to its development are anxiously awaited by many.

**Keywords**: Clinical Competence; Interpersonal Relations; Professional-Patient Relations


Two new instruments, a lumbar spondylometer and a rotameter, for the measurement of sagittal and horizontal plane motion in the lumbar spine respectively, are described. They enable the clinician to more accurately measure and chart the progress of patients with low back problems.

**Keywords**: Backache; Lumbosacral Region; Spine


This paper describes an investigation, undertaken at The University of Queensland, into the effect of different ultrasonic frequencies in "therapeutic" dosages on experimental oedema in rats, by means of due leakage estimation. Results indicate that ultrasound is effective in limiting oedema, but further investigation is required to ascertain the means by which this is brought about.

**Keywords**: Edema; Ultrasonic Therapy; Ultrasonography


This article reviews the value and limitations of IPPB as opposed to other treatment methods available to the respiratory physiotherapists. In the treatment of patients with airways obstruction IPPB is presented as having a limited role. Alternative measures such as the use of simple nebulisation, relaxation therapy and manual methods to remove secretions are described as being preferable to IPPB in most cases. IPPB has some value in the early post-operative care of some patients undergoing surgery which results in limitation to spontaneous deep breathing-operatively. However other methods, notably incentive spirometry should also be considered for these patients. In the treatment and prevention of respiratory complications associated with neuromuscular and skeletal disorders IPPB can play a significant role in counteracting the possible effects of hypoventilation. IPPB should be considered as one method among many which is available to the physiotherapist to assist in the treatment of respiratory complications associated with medical and surgical conditions.

**Keywords**: Intermittent Positive-Pressure Breathing; Respiration; Respiratory Therapy


A survey of 72 per cent of final year physiotherapy students at Cumberland College of Health Sciences found that they were very satisfied with their career choice, few considered changing their occupation and changes in students' conceptions of physiotherapy had mostly been in a positive
direction. They said that the most valued aspects of their career choice were the opportunity to accomplish something worthwhile, the friendliness of the people they worked with, and the opportunity to develop skills and abilities. Few students planned to leave the workforce but 69 per cent hoped to be employed part-time during early childrearing. Some implications of such anticipated work patterns are discussed.

Keywords: Career Choice; Physical Therapy


This review examines the biomechanics of flexion-extension injuries of the cervical spine and the resultant pathological and clinical features. In view of rational evidence concerning pathology and clinical features, a treatment regime is designed.

Keywords: Biomechanics; Cervical Vertebrae; Neck


After a minimum period of 11 weeks post cerebrovascular accident and resulting hemiplegia, 100 adult patients were assessed for sensory-motor deficits affecting the function of the paralysed upper extremity. This paper presents only the assessment of muscle tone, the disturbances of tone and its inter-relationship with other clinical manifestations. Kendall rank order correlations were computed for this purpose. A highly significant relationship ($p < 0.001$) was observed between selective spasticity of proximal joints and distal joints and between wrist and finger clonus with selective spasticity of wrist, finger and shoulder muscles. The spasticity in wrist flexors related highly with the inability to perform functional tasks. Inability to perform muscle function was also related to limitation of joint motion.

Keywords: Cerebrovascular Disorders; Muscle Spasticity; Psychomotor Disorders


Some obstetric and gynaecological conditions are examined and measures suggested from preventive and therapeutic angles with a view to alerting specialists to a broad spectrum of patient management in this field.

Keywords: Gynecology; Obstetrics


The ranges of all movements of the lumbar spine for both sexes and all ages are tabulated. The data was obtained by measurement of 200 fresh cadaver specimens within 24 hours of death. A decrease in the range of all movements with increasing age is apparent.

Keywords: Aging; Lumbosacral Region; Spine