PHYSIOTHERAPY PRACTICES ACROSS DIFFERENT PLACES: A REVIEW OF LITERATURE

Mukesh Goyal *1, Salil Jandyal 2.

- *1 Associate Professor, Sriganganagar College of Allied Health Sciences, Tantia Univesity, Rajasthan, India.
- ² Executive Officer, VMSB, India.

ABSTRACT

The present review study is carried out in order to study various practices in physiotherapy across different places. Physiotherapy is the health care profession primarily concerned with the remediation of impairments and disabilities and the promotion of mobility, functional ability, quality of life and movement potential through examination, evaluation, diagnosis and physical intervention. Physical therapy is a professional career which has many specialties including sports, neurology, woundcare, cardiopulmonary, geriatrics, orthopedic and pediatrics. The study concluded different practices in physiotherapy treatment across various places. Some authors mentioned very clearly the under utilization of physiotherapists in providing rehabilitation services and were of the strong opinion that the physiotherapists should be actively involved as they could play an important role in the implementation of a cost-effective rehabilitation service paradigm. One author examined the origin of physiotherapy and particularly its relation with the nursing. Some authors studied the trends and the desirability of specialization in physiotherapy practice, opportunities for individual practitioners to gain recognition as specialists, and the Scope for achieving greater harmonization of specialist practice and recognition across the EU. Few authors were of the view that as a profession integral to health promotion, prevention, acute care and rehabilitation, physiotherapy plays an essential role in the health care system. Some researchers pointed out the lack of evidence of use of tilt tables by physiotherapists in Intensive Care Units (ICUs) in Australian Hospitals. A group of researchers also threw a light on the practice and research of complementary and alternative medicine (CAM) in Canada and few discussed how physiotherapists might respond to the challenges of health care reform which took place in New Zealand some eight to ten years back. A group of authors brought to the limelight a very important observation which stated that the Physiotherapists are known to be prone to Work- related musculoskeletal disorders (WRMDs) but its prevalence among physiotherapists in Nigeria has not been reported.

KEYWORDS: Physiotherapy & Practices, Musculoskeletal, Alternative Medicine, Health Promotion, Complementary Medicine.

Address for correspondence: Dr. Mukesh Goyal, Associate Professor, Sriganganagar College of Allied Health Sciences, Tantia University, Rajasthan, India. Mobile No.: +919414193082. E-Mail: goyalmukesh27@gmail.com

Access this Article online

Quick Response code



DOI: 10.16965/ijpr.2014.697

International Journal of Physiotherapy and Research ISSN 2321- 1822

www.ijmhr.org/ijpr.html

INTRODUCTION

Physical therapy or physiotherapy is the health care profession primarily concerned with the remediation of impairments and disabilities and the promotion of mobility, functional ability, quality of life and movement potential through examination, evaluation, diagnosis and physical intervention. It is carried out by physical therapists (known as physiotherapists in most countries) and physical therapist assistants (known as physical rehabilitation therapists or physiotherapy assistants in some countries). In

addition to clinical practice, other activities encompassed in the physical therapy profession include research, education, consultation, and administration. Physical therapy involves the interaction between therapist(s), patients or clients, other health care professionals, families, care givers, and communities in a process where movement potential is assessed and diagnosed and goals are agreed upon. Physical therapy is performed by a therapist and sometimes services are provided by a physical therapist assistant (PTA) acting under their direction.

PTs are healthcare professionals who diagnose and treat individuals of all ages, from newborns to the very oldest, who have medical problems or other health-related conditions, illnesses, or injuries that limit their abilities to move and perform functional activities as well as they would like in their daily lives. PTs use an individual's history and physical examination to arrive at a diagnosis and establish a management plan and, when necessary, incorporate the results of laboratory and imaging studies. PT management commonly includes prescription of or assistance with specific exercises, manual therapy, education, manipulation and other interventions. In addition, PTs work with individuals to prevent the loss of mobility before it occurs by developing fitness and wellness-oriented programs for healthier and more active lifestyles, providing services to individuals and populations to develop maintain and restore maximum movement and functional ability throughout the lifespan.

Physical therapy is a professional career which has many specialties including sports, neurology, woundcare, cardiopulmonary, geriatrics, orthopedic and pediatrics. PTs practice in many settings, such as outpatient clinics or offices, health and wellness clinics, rehabilitation hospitals facilities, skilled nursing facilities, extended care facilities, private homes, education and research centers, schools, hospices, industrial and this workplaces or other occupational environments, fitness centers and sports training facilities. Physical therapists also practice in the non-patient care roles such as health policy, health insurance, and health care administration and as health care executives. Physical therapists

are involved in the medical-legal field serving as experts, performing peer review and independent medical examinations.

Education qualifications vary greatly by country. The span of education ranges from some countries having little formal education to others having doctoral degrees and post doctoral residencies and fellowships.

Objectives

The present study gives an idea about the physiotherapy practices across different nations and various research studies conducted on the different techniques or methods of physical treatment or physiotherapy. The study is a review of literature related to physiotherapy practices with following objectives:

- 1. To understand the areas of research carried out in connection with various physiotherapy treatments across different places.
- 2. To undertake an in depth study on various types of physiotherapy practices conducted across different places.

METHODOLOGY

This study is based on secondary data. The present study takes stock of the situation as far as physiotherapy practices is concerned through literature review available. Research studies and articles from various sources like books, journals, websites, etc. were referred for the same. However the review has its own limitations in terms of availability and accessibility to available literature.

Review of Literature

Kay, E., Kilonzo, C., & Harris, M. J. (1994)¹ mentioned in their study that the need for rehabilitation services in developing nations is overwhelming. However, the needs of people with disabilities must be balanced against the monetary constraints of their governments. The authors proposed that physiotherapists are currently under-utilized, but could play an important role in the implementation of a cost-effective rehabilitation service paradigm. It is suggested that these more independent physiotherapist practitioners, with an increased need for clinical competencies in the areas of management, assessment and treatment,

should be educated at university degree level. Physiotherapist helpers/assistants could be trained to help provide additional manpower at little cost. Critical to the success of any comprehensive, cost-effective rehabilitation paradigm is the inclusion of community-based rehabilitation workers. These non-medical personnel have been successful in addressing many of the needs of people with disabilities in their communities. It is suggested that physiotherapists do not institutionalize these low-cost community initiatives by attempting to supervise them. Rather physiotherapists should use their expertise within the medical domain which should include out-reach and educational programmes at the local level.

Roberts, P. (1994)² examined the origins of the physiotherapy profession, in particular its relationship to nursing. The rise of medical dominance in society is related to the medical dominance of physiotherapy and the implications of this on the development of physiotherapy theory. Three theoretical models cited in the literature are examined in detail the medical model, the social model, and holism and the implications of their adoption as a basis for physiotherapy practice is discussed. The close relationship between the medical model and physiotherapy is examined and an argument made that before the profession decides to abandon it as a basis for practice the implications of that are understood and debated. The danger inherent in adopting any existing model as an alternative is addressed, and the third option of developing a physiotherapeutic model, unique to the profession, advocated.

Donaghy, M. E., & Gosling, S. (1999)³ reviewed two papers delivered at the third post-basic education conference of the Standing Liaison Committee of Physiotherapists in the European Union held in Estoril, Portugal in April 1998. It considered trends and the desirability of specialization in physiotherapy practice, opportunities for individual practitioners to gain recognition as specialists, and the Scope for achieving greater harmonization of specialist practice and recognition across the EU. The special interest groups, the profession's developing understanding of what constitutes specialist practice, and an increasing commitment

to lifelong learning, are key to achieving these ends. While acknowledging that a range of factors potentially work against a common approach to specialization and specialist recognition in the EU, the author suggested that an outcomes-based framework could offer a promising route to articulating and recognizing specialist practice in a way that promotes harmonization while respecting national difference.

Bithell, C. (2000)⁴ mentioned that the Evidence-based practice is a significant movement of fundamental importance in delivery of healthcare throughout the developed world. The study examined some of the issues for physiotherapy and suggests that some concepts embodied in evidence-based medicine should not be imported uncritically into an evidence-based physiotherapy practice.

Higgs, Kathryn Refshauge, Elizabeth Ellis, J. (2001)⁵ mentioned that as a profession integral to health promotion, prevention, acute care and rehabilitation, physiotherapy plays an essential role in the health care system. This paper explores the nature of physiotherapy, the role of physiotherapy in health care, the practice of physiotherapy internationally, the education of physiotherapy practice and the maintenance of practice standards.

Curry, A., & Sinclair, E. (2002)6 tested the hypothesis as to the applicability of the Servqual model to the public sector. Research was undertaken using the model to assess the quality of three different types of physiotherapy service provision in Dundee, Scotland. The findings indicated that the services were much appreciated by patients in spite of the perceptions minus expectations scores being slightly negative. Information relating to patients' conditions could be improved and, as has been found in previous similar healthcare research, the dimensions of assurance and empathy were highlighted as important. A critique of the Servqual model pinpoints and confirms certain weaknesses that need to be addressed but the study nonetheless confirms the potential usefulness and relevance of Servgual in the public sector context to determine consumer priorities and measure

service performance.

Hemmings, B., & Povey, L. (2002)⁷ mentioned that although research into the psychological aspects of sports injury is increasing and psychological interventions have been identified as important in the rehabilitation process, few studies have focused on how sports medicine practitioners deal with psychological problems. The study investigated the perceptions of English chartered physiotherapists on the psychological content of their practice. The Physiotherapist and Sport Psychology Questionnaire (PSPQ) was adapted slightly from the Athletic Trainer and Sport Psychology Questionnaire and used in this study. A survey package comprising a PSPQ, introductory letter, and self addressed envelope was mailed to 179 chartered physiotherapists registered in the England Eastern Region Sports Medicine Directory. Results indicated that in total, 90 (50% response rate) questionnaires were returned. The sample consisted of 67 women and 23 men with a mean (SD) age of 40.1 (5.4) years and 9.2 (3.1) years of experience as chartered physiotherapists. Descriptive statistical and qualitative analysis showed that physiotherapists believed athletes were often psychologically affected by injury. The physiotherapists also reported often using psychological techniques when treating injured athletes, but few reported having access to a sport psychologist for referral. This research concluded that future physiotherapy education may need more emphasis on the psychological aspect of injury, and seek to increase knowledge on the potential of using psychological interventions within a physiotherapy rehabilitation programme. Furthermore, some form of referral network should be established between chartered physiotherapists and sport psychologists.

Moseley, A. M., Herbert, R. D., Sherrington, C., & Maher, C. G. (2002)⁸ stated that the evidence-based practice involves the use of evidence from systematic reviews and randomized controlled trials, but the extent of this evidence in physiotherapy has not previously been surveyed. They conducted the survey aimed to describe the quantity and quality of randomized controlled trials and the quantity of systematic reviews relevant to physiotherapy.

The Physiotherapy Evidence Database (PEDro) was searched. The quality of trials was assessed with the PEDro scale. The search identified a total of 2,376 randomized controlled trials and 332 systematic reviews. The first trial was published in 1955 and the first review was published in 1982. Since that time, the number of trials and reviews has grown exponentially. The mean PEDro quality score has increased from 2.8 in trials published between 1955 and 1959 to 5.0 for trials published between 1995 and 1999. There is a substantial body of evidence about the effects of physiotherapy. However, there remains scope for improvements in the quality of the conduct and reporting of clinical trials.

Gibson, B. E., & Martin, D. K. (2003)9 discussed the potential contributions of qualitative research to evidence-based physiotherapy practice. Although qualitative research has been discussed previously in the physiotherapy literature, the relationship of qualitative inquiry to evidence-based practice has received little attention. They argued that qualitative research is a valuable source of clinical information that needs to be considered in formulations of best available evidence. If the aim of rehabilitation is to work collaboratively with patients to maximize their integration into the community, then they proposed that the research agenda needs to address the lived experiences of patients within and outside the physiotherapy setting. They begin by briefly reviewing the goals of physiotherapy practice, the historical sources of physiotherapy knowledge and the recent adoption of the evidence-based practice philosophy. They then discussed the relationship of qualitative methods to evidence and argued that qualitative research is under-represented in physiotherapy. Next they reviewed the potential contributions of qualitative approaches to evidence-based physiotherapy practice and recent debates regarding synthesis of qualitative studies. The authors concluded by calling for physiotherapists to collaborate in multi-disciplinary efforts to conduct, review, and disseminate high quality qualitative research.

Struber, J. C. (2003)¹⁰ mentioned that the physiotherapy profession in Australia appears to have been caught unawares by the rapidly

changing demography of health services and now seems to lack a clear identity and vision. Despite being highly competitive professions to enter attrition rates are high. The study reflected on the history of physiotherapy in Australia and the dichotomy of paradigms it now faces, and suggested a possible option for the future, given that existing physiotherapy roles appear difficult to sustain in our current health care climate.

Chang, A. T., Boots, R., Hodges, P. W., & Paratz, J. (2004)¹¹ stated that although tilt tables are used by physiotherapists to reintroduce patients to the vertical position, no quantitative evidence is available regarding their use within intensive care units (ICUs) of Australian hospitals. The purpose of this study was to evaluate the use of tilt tables in physiotherapy management of patients in ICUs across Australia. Ninety-nine physiotherapists working in Australian public ICUs were contacted via mail and asked to complete a questionnaire regarding their use of tilt tables in practice. Reasons for the use of the tilt table, contraindications, commonly used adjuncts, monitoring, and outcome measures were also investigated. Eighty-six questionnaires were returned (87% response). The tilt table was used by 58 physiotherapists (67.4%). The most common reasons for inclusion of tilt table treatment were to: facilitate weight bearing (94.8% of those who tilt); prevent muscle contractures (86%); improve lower limb strength (81%); and increase arousal (70%). The tilt table was most frequently applied to patients with neurological conditions (63.8%) and during longterm ICU stays (43.1%). Techniques often combined with tilt table treatment included upper limb exercises (93.1%) and breathing exercises (86.2%). Standing with assistance of the tilt table is used by the majority of physiotherapists working in Australian ICUs. A moderate level of agreement is demonstrated by physiotherapists regarding indications to commence tilt table treatment and adjunct modalities combined with standing with assistance of the tilt table.

Andrews, G. J., & Boon, H. (2005)¹² threw a light on the practice and research of complementary and alternative medicine (CAM) in Canada. Although certain trends in use, as well as the regulation and integration of CAM, are mirrored in many other developed countries, some are

highlighted as uniquely Canadian with distinct political and economic geographies. Similarly, although like in other countries the research of CAM is growing rapidly; Canadian scholars have been particularly productive in terms of providing unique disciplinary perspectives and the ways in which they have organized their research training and collaborations. CAM is clearly not a fully integrated and researched option in Canadian health care, yet Canada exhibits the foundations for an integrated CAM practice, supported by a growing, wide-ranging and well-articulated research evidence-base.

Nicholls, D., & Larmer, P. (2005)¹³ discussed how physiotherapists might respond to the challenges of health care reform taking place in New Zealand. They begin by outlining the health policy initiatives that are challenging their understanding of physiotherapy practice. They then outline a socio-political history of physiotherapy, using the 'body-as-machine' as a metaphor. They then present four possible responses to New Zealand health reforms: watching and waiting, enhancing the body-asmachine, rejecting the body-as-machine and integration. These are then analyzed for their various advantages and disadvantages. Finally they concluded by appealing to physiotherapists to reflect upon the significance of New Zealand's health care reforms and to begin considering their response.

Nicholls, D. A., & Cheek, J. (2006)14 stated that in 1894 the Society of Trained Masseuses (STM) formed in response to massage scandals published by the British Medical Journal (BMJ). The Society's founders acted to legitimize massage, which had become sullied by its association with prostitution. The study analyzed the discourses that influenced the founders of the Society and reflected upon the social and political conditions that enabled the STM to emerge and prosper. The founders established a clear practice model for massage which effectively regulated the sensual elements of contact between therapist and patient. Massage practices were regulated through clearly defined curricula, examinations and the surveillance of the Society's members. A biomechanical model of physical rehabilitation was adopted to enable masseuses to view the body as a machine rather than as a sensual being. Medical patronage of the Society was courted enabling the Society to prosper amongst competing organizations. Using Foucault's work on power the authors explored the contingent nature of these events, seeing the massage scandals in context with broader questions of sexual morality, professionalization and expertise in the late nineteenth century society. They argued that many of the technologies developed by the founders resonate with physiotherapy practice today and enable us to critically analyze the continued relevance of the profession to contemporary healthcare.

Anaf, S., & Sheppard, L. A. (2007)¹⁵ mentioned that Physiotherapy interventions are provided to patients within Australian emergency departments in selected settings. By describing physiotherapy in the emergency department a contribution is made to understanding the shift in professional roles in emergency department intensive settings. Using an observational, single case design two key data sources were used: researcher observations and features of patient interventions provided by the emergency department (ED) physiotherapist outlined on a purposefully designed data collection sheet. Twenty patients (10 male, 10 female) were observed to have ED physiotherapy management during the data collection period. Physiotherapy interventions were targeted towards relieving pain, improving mobility, increasing joint range of motion and assisting with discharge planning of these patients. The interventions included educating patients about their conditions, providing gait aids, assisting with patient mobility and transfers, and liaising with medical, nursing and pharmacy staff for medication reviews and discharge planning requirements. Physiotherapy can assist with assessing and managing patients to contribute to reducing unnecessary hospital admissions from the ED. Interventions involve targeting features that would normally impede discharge of patients, such as reduced mobility, poor pain management and inadequate community or environmental supports, through interdisciplinary liaison with medical, nursing and allied health ED staff.

Grimmer Somers, K., Lekkas, P., Nyland, L.,

Young, A., & Kumar, S. (2007)¹⁶ noted that the Physiotherapists' use of research evidence with clinical decision-making has interested researchers world-wide since 1980; however, little is known about such practices in Australia. The present survey sought information on Australian physiotherapists' perceptions of the importance of research, and barriers to uptake of evidence in clinical practice, when compared with an international cohort from 2001. An Australian-relevant version of an English (UK) National Health Service (NHS) survey instrument was used to canvass 453 physiotherapists, randomly selected from the South Australian Physiotherapy Registration Board 2004–2005 records. The first survey was mailed in August 2005; a reminder was sent two weeks later to non-responders and a follow-up survey was sent in April 2006 to non-responders whose addresses had changed since 2005. Results showed that there was a 51% response rate. Of the non-responders, 12% were not contactable at their listed address, highlighting the mobility of Australian physiotherapists. respondents had undertaken research as students (59.5%) or as students and clinicians (11.5%). Of these, 37.1% were encouraged to embark on more research, and 20.5% were discouraged. The significant predictors of positive perceived importance of research were: previous research experience; being positive about undertaking further research; working in hospitals and holding a postgraduate degree. Clinicians working privately were significantly less likely than managers to be positive about research importance. The only significant predictor for not perceiving barriers to uptake of evidence was being positive about undertaking future research. The study identified constraints on uptake of evidence into practice that were related to accessing, reading and interpreting published research, and implementing findings. Found consistently across employment categories were barriers relating to lack of time, uncertainty about what the research reported, skepticism about the value of research and being isolated from peer support and literature sources. The responses indicated a positive shift towards evidence uptake since the 2001 NHS survey, suggesting

an influence of increased exposure to information on evidence-based practice. A greater focus on research whilst training, the application of educational strategies for empowerment, better knowledge transfer and up skilling within the workplace, and ensuring dedicated time and organizational support for research activities were indicated.

Kerry, R., Maddocks, M., & Mumford, S. (2007)¹⁷ presented an overview of the philosophy of science and applied such philosophical theory to clinical practice within physiotherapy. A brief history of science is followed by the theories of the four most commonly acknowledged philosophers, introduced in the context of examples from clinical practice. By providing direct links to practical examples, it demonstrates the possibilities of relating the logical basis of this field of study to the clinical setting. The relevance to physiotherapy is that, by relating this theory, clinicians can better understand and analyze the fundamental logic behind their practice. The insight this provides can benefit professional development in several ways. For the clinician, it permits more comprehensive and coherent reasoning and helps to relate evidence with respect to individual patients. On a larger scale, it encourages reflective discussion between peers around the virtues of alternative treatment approaches. Thus, this topic has the potential to guide clinical practice toward being more scientific and may help raise the credibility of the profession as a whole.

Taylor, N. F., Dodd, K. J., Shields, N., & Bruder, A. (2007)¹⁸ summarizes systematic reviews during 2002-2005 on benefit of therapeutic exercise in physiotherapy practice. People with neurological, musculoskeletal, cardiopulmonary, and other conditions who would be expected to consult a physiotherapist were chosen for the study. Therapeutic exercise was defined as the prescription of a physical activity program that involves the client undertaking voluntary muscle contraction and/or body movement with the aim of relieving symptoms, improving function or improving, retaining or slowing deterioration of health. Outcome of the study were measured in terms of effect of therapeutic exercise in terms of impairment, activity limitations, or participatiion restriction. The search yielded 38 systematic reviews of reasonable or good quality. The results provided high level evidence that therapeutic exercise was beneficial for patients across broad areas of physiotherapy practice, including people with conditions such as multiple sclerosis, osteoarthritis of the knee, chronic low back pain, coronary heart disease, chronic heart failure, and chronic obstructive pulmonary disease. Therapeutic exercise was more likely to be effective if it was relatively intense and there were indications that more targeted and individualized exercise programs might be more beneficial than standardized programs. There were few adverse events reported. However, in many areas of practice there was no evidence that one type of exercise was more beneficial than another. The study concluded that the therapeutic exercise was beneficial for patients across broad areas of physiotherapy practice.

Adegoke, B. O., Akodu, A. K., & Oyeyemi, A. L. (2008)¹⁹ stated that the Physiotherapists are known to be prone to Work- related musculoskeletal disorders (WRMDs) but its prevalence among physiotherapists in Nigeria has not been reported. The authors investigated the prevalence and work factors of WRMDs among physiotherapists in Nigeria. A crosssectional survey was administered to physiotherapists in different parts of Nigeria using a 2- part questionnaire with items adopted from questionnaires used for similar studies around the world. Two hundred and seventeen copies of the questionnaire were distributed for self administration but 126 physiotherapists returned completed surveys for a 58.1% response. The data were analyzed and reported 12- month prevalence of WRMDs among Nigerian physiotherapists was 91.3%. Prevalence of WRMDs was significantly higher in female physiotherapists (p = 0.007) and those with lower body mass index (p = 0.045). The low back (69.8%) was the most commonly affected body part, followed by the neck (34.1%). Fifty percent of the physiotherapists first experienced their WRMDs within five years of graduation and the highest prevalence (61.7%) was found among physiotherapists younger than 30 years. Treating large number of patients in a day was

cited by most (83.5%) of the respondents as the most important work factor for their WRMDs. The most commonly adopted coping strategy identified was for the therapists to modify their position and/or the patient's position (64.3%). Majority of the respondents (87.0%) did not leave the profession but 62.6% changed and/or modified their treatment because of their WRMDs. The prevalence of WRMDs among physiotherapists in Nigeria is higher than most values reported for their counterparts around the world. The coping strategies and work factors of WRMDs among Nigerian physiotherapists are mostly similar to those of their counterparts elsewhere.

Rodger, S., Webb, G., Devitt, L., Gilbert, J., Wrightson, P., & McMeeken, J. (2008)20 described the outcomes of extensive discussions surrounding clinical education and practice placement issues undertaken by an international group of allied health educators (in audiology, occupational therapy, physiotherapy, and speech pathology) who have met since 2001 as part of Universities 21 Health Sciences annual meetings. The report outlines key issues associated with clinical education and practice placements from an international perspective and across these four allied health professions. The allied health practice context is described in terms of the range of allied health educational programs in Universities 21 and recent changes in health and tertiary education sectors in represented countries. Some issues and benefits related to supervision during allied health students' practice placements are addressed. A new approach is proposed through partnership such that frameworks for the provision of practice placements can be created to facilitate student learning and educate and support clinical educators. A set of guidelines that can enhance partnerships and collaborative practice for the benefit of clinical education within complex and changing health/human service and educational environments is proposed.

CONCLUSION

The study concluded different practices in physiotherapy treatment across various places. Some authors mentioned very clearly the under utilization of physiotherapists in providing

rehabilitation services and were of the strong opinion that the physiotherapists should be actively involved as they could play an important role in the implementation of a costeffective rehabilitation service paradigm. One author examined the origin of physiotherapy and particularly its relation with the nursing. Some authors studied the trends and the desirability of specialization in physiotherapy practice, opportunities for individual practitioners to gain recognition as specialists, and the Scope for achieving greater harmonization of specialist practice and recognition across the EU. Few authors were of the view that as a profession integral to health promotion, prevention, acute care and rehabilitation, physiotherapy plays an essential role in the health care system. Struber (2003) reported that physiotherapy profession in Australia appears to have been caught unawares by the rapidly changing demography of health services and now seems to lack a clear identity and vision. Some researchers pointed out the lack of evidence of use of tilt tables by physiotherapists in Intensive Care Units (ICUs) in Australian Hospitals. A group of researchers also threw a light on the practice and research of complementary and alternative medicine (CAM) in Canada and few discussed how physiotherapists might respond to the challenges of health care reform which took place in New Zealand some eight to ten years back. Few authors presented an overview of the philosophy of science and applied such philosophical theory to clinical practice within physiotherapy. Few also summarize systematic reviews during 2002-2005 on benefit of the rapeutic exercise in physiotherapy practice. A group of authors brought to the limelight a very important observation which stated that the Physiotherapists are known to be prone to Work- related musculoskeletal disorders (WRMDs) but its prevalence among physiotherapists in Nigeria has not been reported.

Conflicts of interest: None

REFERENCES

1. Kay, E., Kilonzo, C., & Harris, M. J. Improving rehabilitation services in developing nations: the proposed role of physiotherapists. Physiotherapy 1994;80(2):77-82.

- 2. Roberts, P. Theoretical models of physiotherapy. Physiotherapy 1994;80(6):361-366.
- 3. Donaghy, M. E., & Gosling, S. Specialization in physiotherapy: musings on current concepts and possibilities for harmonization across the European Union. Physical therapy reviews 1999;4(1):51-60.
- 4. Bithell C. Evidence-based Physiotherapy: Some thoughts on 'best evidence'. Physiotherapy 2000;86(2):58-59.
- Higgs, Kathryn Refshauge, Elizabeth Ellis, J. Portrait of the physiotherapy profession. Journal of interprofessional care 2001;15(1):79-89.
- Curry, A., & Sinclair, E. Assessing the quality of physiotherapy services using SERVQUAL. International Journal of Health Care Quality Assurance 2002;15(5):197-205.
- 7. Hemmings, B., & Povey, L. Views of chartered physiotherapists on the psychological content of their practice: a preliminary study in the United Kingdom. British journal of sports medicine 2002;36(1):61-64.
- 8. Moseley, A. M., Herbert, R. D., Sherrington, C., & Maher, C. G. Evidence for physiotherapy practice: a survey of the Physiotherapy Evidence Database (PEDro). Australian Journal of Physiotherapy 2002;48(1):43-49.
- 9. Gibson, B. E., & Martin, D. K. Qualitative research and evidence-based physiotherapy practice. Physiotherapy 2003;89(6):350-358.
- 10. Struber, J. C. (2003)¹⁰. Physiotherapy in Australia—where to now. The Internet Journal of Allied Health Sciences and Practice 2003;1(2).
- 11. Chang, A. T., Boots, R., Hodges, P. W., & Paratz, J. Standing with assistance of a tilt table in intensive care: a survey of Australian physiotherapy practice. Australian journal of physiotherapy 2004;50(1):51-54
- 12. Andrews, G. J., & Boon, H. CAM in Canada: places, practices, research. Complementary Therapies in Clinical Practice 2005;11(1):21-27.

- 13. Nicholls, D., & Larmer, P. Possible futures for physiotherapy: an exploration of the New Zealand context. New Zealand Journal of Physiotherapy 2005;33(2):55.
- Nicholls, D. A., & Cheek, J. Physiotherapy and the shadow of prostitution: The Society of Trained Masseuses and the massage scandals of 1894. Social Science & Medicine 2006;62(9):2336-2348.
- 15. Anaf, S., & Sheppard, L. A. Describing physiotherapy interventions in an emergency department setting: an observational pilot study. Accident and emergency nursing 2007;15(1):34-39.
- Grimmer Somers, K., Lekkas, P., Nyland, L., Young, A., & Kumar, S. Perspectives on research evidence and clinical practice: a survey of Australian physiotherapists. Physiotherapy Research International 2007;12(3):147-161.
- 17. Kerry, R., Maddocks, M., & Mumford, S. Philosophy of science and physiotherapy: An insight into practice. Physiotherapy theory and practice 2007;24(6): 397-407.
- 18. Taylor, N. F., Dodd, K. J., Shields, N., & Bruder, A. Therapeutic exercise in physiotherapy practice is beneficial: a summary of systematic reviews 2002–2005. Australian Journal of Physiotherapy 2007;53(1):7-16.
- 19. Adegoke, B. O., Akodu, A. K., & Oyeyemi, A. L. Workrelated musculoskeletal disorders among Nigerian Physiotherapists. BMC musculoskeletal disorders 2008;9(1):112.
- Rodger, S., Webb, G., Devitt, L., Gilbert, J., Wrightson, P., & McMeeken, J. Clinical education and practice placements in the allied health professions: an international perspective. Journal of Allied Health 2008;37(1):53-62.
- 21. http://en.wikipedia.org/wiki/Physical_therapy.

How to cite this article:

Mukesh Goyal, Salil Jandyal. PHYSIOTHERAPY PRACTICES ACROSS DIFFERENT PLACES: A REVIEW OF LITERATURE. Int J Physiother Res 2014;2(6):806-814. **DOI:** 10.16965/ijpr.2014.697